

MILLENNIUM CHALLENGE ACCOUNT SENEGAL
(MCA-SENEGAL)



Close out Monitoring and Evaluation Plan



PSE CLOSE OUT/2015



Main Document and Annexes



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PREAMBLE

This Monitoring and Evaluation (M&E) Plan:

- is part of the action plan set out in the MILLENNIUM CHALLENGE COMPACT (Compact) signed on September 16, 2009 between the United States of America, acting through the Millennium Challenge Corporation (MCC), a United States Government corporation, and the Republic of Senegal, acting through its government;
- to support provisions described in the Compact;
- being governed and following principles stipulated in the *Policy for Monitoring and Evaluation of Compacts and Threshold Programs* (MCC M&E Policy).

This M&E Plan is considered a binding document, and failure to comply with its stipulations could result in suspension of disbursements. It may be modified or amended as necessary following the MCC M&E Policy, and if it is consistent with the requirements of the Compact and any other relevant supplemental legal documents.

ACRONYMS

AGEROUTE:	National Road Management Agency
ANSD:	National Agency for Statistics and Demography
BLS:	Baseline Study
CA /MCA-S:	Support Unit for the Millennium Challenge Account Senegal
CCR:	Compact Completion Report
ITT:	Invitation to Tender
RFP:	Request for Proposal
SB :	Supervisory Board (MCA)
AFD :	Administration and Finance Directorate (MCA)
CD :	Communication Directorate(MCA)
DEEC :	Department of Environment and Classified Establishments
DFRI :	Land Use and Institutional Reforms Directorate(MCA)
GD :	General Director(MCA)
DGD :	Deputy General Director(MCA)
MED :	Monitoring and Evaluation Directorate(MCA)
SGPR :	Strategy for Growth and Poverty Reduction
ERR :	Economic Rate of Return
DESA :	Environment and Social Impact Assessment Directorate(MCA)
GTZ:	German Technical Cooperation
ITT :	Indicator Tracking Tables
JICA :	Japan International Cooperation Agency
LOASP :	Agro-Silvo-Pastoral (agriculture ,forests and pastoral) Guiding Law
MCA-S :	Millennium Challenge Account Senegal
MCC :	Millennium Challenge Corporation
DEF :	Department of Economy and Finance
MDGs:	Millennium Development Goals
DPLB:	Development Plan for the Left Bank of Senegal River
PIWRM:	Project for Irrigation and Water Resources Management
PMO :	Prime Minister's Office
NPRS :	National Program for Rice Self-Sufficiency
RRP :	Roads Rehabilitation Project
MEP :	Monitoring and Evaluation Plan
PAR:	Annual Progress Report
PQR :	Quarterly Progress Report
M&E:	Monitoring and Evaluation
SAED :	National Company for the Development and Exploitation of Land in the Delta of the Senegal River Valley and the Faleme
GIS:	Geographic Information System
UE:	European Union
PMU:	Project Management Unit
WB:	World Bank

1. PRESENTATION OF MCA-SENEGAL

1.1. Introduction

1. Monitoring and evaluation within the framework of the Compact is an essential function for the success of the program in connection with the results-based approach. These are tools that assist decision-making at different levels of monitoring, oversight, supervision and implementation of MCA-Senegal.
2. The monitoring and evaluation plan (MEP), which illustrates this, is intended to satisfy and define the organization and functioning of these functions in order to facilitate MCA-Senegal's monitoring, supervision and implementation missions.
3. MCA-Senegal's monitoring and evaluation plan describes (i) how the objectives and performance indicators will be monitored and evaluated, (ii) how progress reports will be prepared and (iii) how evaluations will be done. The MEP is prepared on the basis of Annex III of the Compact, which describes the approach and monitoring-evaluation methods recommended for the management of the Millennium Challenge Corporation (MCC) funds.
4. MCA-Senegal's Monitoring & Evaluation Plan:
 - explains in detail the terms and conditions of MCA-Senegal's monitoring through tables on the performance indicators of the program and of different projects and a data collection and quality control strategy
 - describes the needs in M&E information on projects which MCA-Senegal should provide to the various stakeholders;
 - serves as a monitoring tool to MCC, the Supervisory Board and the Stakeholders' Committee of MCA-Senegal in order to facilitate the continuing monitoring-control of the implementation of activities, of the framework for the identification of problems and of adjustments to be made during implementation;
 - serves as a guide for the implementation and management of different projects to enable teams and partners to take better ownership of the objectives and evaluate the progress made towards the achievement of the objectives and targets during the implementation;
 - set up a process to warn project teams and other actors about all types of problems emerging during the implementation process, and at the same time provide the bases for identifying and making the necessary adjustments.
5. In view of the the approach adopted by MCA-Senegal to use data from the partners' monitoring and evaluation mechanisms and the need to guarantee the sustainability, quality and reliability of data, MCA-Senegal's M&E Plan is based on the principles of:
 - participation and accountability of all stakeholders, including women and other vulnerable groups, in the process for monitoring, evaluation and control of the program, namely in data collection, processing and analysis;
 - linkage with the evaluation by incorporating the performance indicators listed in the reference documents and the common indicators identified by MCC;
 - diversity of the type of indicators: quantitative indicators and qualitative indicators;
 - utilizing the strengths and capacities of consultants and implementing partners;
 - reliability and accuracy of data and situations retransmitted in the Indicators Tracking Tables¹
 - availability and transparency in the communication of data on the results on MCA-Senegal's website.

1.2. Program intervention logic

6. On 16 September 2009, the United States of America through the Millennium Challenge Corporation (MCC) and the Government of the Republic of Senegal signed a "Compact" contract meant to reduce poverty through economic growth.
7. Pursuant to this agreement, MCC grants the Government of Senegal acting through the Millennium Challenge Account Senegal (MCA-Senegal), a financing program of up to five hundred and forty million US dollars (US \$ 540 million, about 270 billion CFAF) to implement the Compact² over a period of five years.

¹ With the help of the Indicator Tracking Tables (ITT)

² See Annex II : Logic of Roads Rehabilitation Project

8. With a population of about 12 million people, Senegal is bounded to the north by Mauritania, to the east by Mali, to the west by the Atlantic Ocean and to the south by the Republic of Guinea, Guinea-Bissau and the enclave of Gambia that runs through the center and isolates the natural region of Casamance from the rest of the territory. The Republic of Senegal was declared eligible for MCC assistance in 2004.
9. During the period going from February to July 2008 and following the extensive consultations implemented by the Government on the analysis of economic constraints, MCA -Senegal Program decided to focus on reducing poverty in the northern (in the Senegal River Valley) and the southern (in Casamance) regions of Senegal.
10. The northern and southern areas were chosen to promote economic growth in these regions, increase food security in Senegal by tapping the agricultural potential of these areas and encourage the penetration into the sub regional market. The valley region and the region of Casamance are rich in agricultural production, especially rice which is the staple diet of the Senegalese population.
11. The northern zone, very favorable to intensive irrigation, is facing weak area planted and crop yields due to the low capacity of irrigation existing infrastructure and drainage systems (inadequate water availability, high salinity due to lack of drainage).
12. Despite a strong potential for economic development, the natural region of Casamance is one of the poorest in Senegal. Enhancing this potential, characterized by the wealth of its natural resources and the importance of the agricultural production, could significantly contribute to increasing food security at a national level. A primary constraint to the development of this potential is the weakness of the road network which doesn't allow the exportation of products and services produced in the region beyond the national or regional borders.
13. See Annex 2: Program Logics of IWRM Project and Roads Rehabilitation Project.

1.2.1. The Road Rehabilitation Project

14. The Roads Rehabilitation Project (RRP) is to increase beneficiaries' access to domestic and international markets by improving the quality of roads and reducing the travel time and costs³.
15. The RRP will involve the national road no. 2 ("RN2") and no. 6 ("RN6") identified as priorities in the road sector. They will help facilitate the transport of manufactured goods, minerals and agricultural products.
16. The RRP has two activities:
 - Rehabilitation activities (strengthening, widening and replacing associated structures) of both the National Road 2 over 120 km from Richard-Toll to Ndoum and the National Road 6 on a distance of approximately 260 km from Ziguinchor to Kounkané;
 - The RRP also contains environmental and social mitigation measures, which include (i) developing community reforestation plans, (ii) implementing a HIV / AIDS awareness program, (iii) relocating or resettling the families which will be affected by the rehabilitation works, (iv) implementing an environmental awareness program for communities, (v) ensuring environmental monitoring, (vi) carrying out planting alignment, (vii) creating / removing weekly markets, and (viii) supporting the initiatives related to the development of the wood from deforestation caused by communities.
17. The RN2 is the main transportation and exportation road for products generated in the irrigated areas along the Senegal River. It is also a strategic road link with Mauritania and Mali.
18. The RN6 links Senegal with Guinea Bissau, Guinea (Conakry), and Mali. The RN6 is also a strategic road, which makes it possible to transport local agricultural products and other products and services from Casamance region to the rest of Senegal without having to travel through Gambia. The RN6 is the single national road providing land access to the Casamance region from the northern part of Senegal. The rehabilitation of this National Roads (NR) will stimulate the internal and trans-border traffic and facilitate trade by allowing reliable access all year.
19. According to the Compact, the RN # 2 is expected to benefit some 21,000 households or 250,000 people over the next 20 years. Currently there are about 9,290 households, or 111,500 people residing within a 5-km radius, on either side along the RN # 2.

³ About 99% of goods produced in Senegal are transported by road and 95% of national travels are made by road. Compact Sénégal.

20. According to the Compact, the RN # 6 activity is expected to affect some 102,000 households or about 1.1 million people over the next 20 years. Currently there is a population of about 44,000 households or 474,000 people along the road.

21. The traffic results expected are presented in the table below:

Table N° 1: Traffic on sections of roads to be rehabilitated by the Compact

Sections	2009 (*)	Results for 2012 (**)	Targets in 2015 (***)
RN2 Richard-Toll - Ndioum	870	1029	1116
RN6 Lot 1 Ziguinchor - Tanaff	540	181	963
RN6 Lot 2 Tanaff - Kolda	820	23	562
RN6 Lot 3 Kolda - Vélingara	1200	716	1426

N.B.: (*): Objectives and baseline values set in the Compact.

(**): Results of the counting study undertaken in 2012 by AGEROUTE

(***): Revised targets from the Closeout M&E Plan (see Memorandum for justification)

1.2.2. The Irrigation and Water Resource Management Project

22. The Senegal River Valley is conducive to intensive irrigation due to its:

- Long history (over 30 years) of irrigation in the valley;
- Availability of water for irrigation;
- Support from the government, from the National Company for the Development and Exploitation of Land in the Delta of the Senegal River Valley and the Faleme (SAED), from banking institutions such US National Agricultural Credit Institution of Senegal (CNCAS) and from the financial partners (World Bank, JICA, French Cooperation, GTZ, African Development Bank (AfDB), BADEA, Kuwait Funds, etc. ;
- Capacity of farmers' associations to manage irrigation systems.

23. The optimal exploitation of agricultural production potential of the valley could address an important national need in agricultural products, particularly for rice, even without additional improvements which are still needed along the value chain. However, various constraints have led to the abandonment of thousands of hectares of land. This situation is caused by poor agricultural yields due in large part to the low availability of water for agricultural areas and the absence of a proper drainage system and its corollary, namely the soil salinity.

24. The Irrigation and Water Resource Management Project contributes to the poverty reduction strategy paper and agricultural development in the Valley. The project pursues the objective of increasing agricultural productivity by (1) increasing the cropping intensity, (2) increasing (2) the increasing the of agricultural production and farm incomes , (3) increasing investment in agriculture , (4) improving local governance of land resources (4). The project consists of 3 activities: the "Delta Activity", the "Podor Activity", and "Land Tenure Services Activity".

25. The land tenure security activity is intended to provide or maintain a conducive land tenure environment for all beneficiaries directly involved in the project by providing local governments with adapted land registers and records. This is intended to help improve the level of investment in the area. To fulfill such an ambition, the project will support the development and implementation of efficient land allocation conditions and processes for a fair and secured access. This will go through building the capacities of local authorities by developing tools such as manuals of procedures but also through communication and training on land management. This process aims to facilitate the allocation and formalization of rights to use land in accordance with the current legislation and contribute to the considerable reduction of land conflicts in the program area.

26. According to the Compact, the Irrigation and Water Resource Management Project will benefit the households using the perimeters, the owners or the shareholders of agricultural enterprises and the households working in the farms. The total number of beneficiaries is estimated at about 22,390 households or 268,700 people, of which, approximately 52% are women. It is estimated that full development of irrigated areas targeted by the project will provide employment for about 9,000 households (benefits accruing to about 105,000 people).

27. The key results expected from the Irrigation and Water Resources Management Project are presented in the table below:

Table N° 2 : Objectives of IWRM Project

Indicators	2009 (*)	2012 (**)	Targets in 2015 (***)	Long Run Targets (***)
Production of paddy rice (tons)	55,000	101,000	111,000	277,000
Production of Tomatoes (tons)	10,600	21,000	35,500	115,000
Production of Onions (tons)	10,900	10,900	40,000	130,000
Cropping intensity (Delta)	0.6	0.6	1.5	1.5
Cropping Intensity (Ngalenka)	0.0	0.2	1.2	2

N.B.: (*): Baseline value set in the Compact.
 (**): Results of the SAED Agricultural Season
 (***) : Targets from the M&E Plan (Revised in 2014)

1.3. Economic impacts

28. The projects implemented under MCA-Senegal Program have reviewed rates of economic return ranging between 2% and 11% calculated over 20 years. The profits generated by the various projects will benefit most :

- quintiles 2 (<\$2 per day) and 3 (\$2 to \$4 per day) for the proposed rehabilitation of RN 2 and 6;
- quintiles 1 (<\$1.25 per day), 2 (<\$2 per day) and 3 (from \$2 to \$4 per day) activities in the Ngalenka, and quintiles 2, 3 and 4 (>\$4 per day) for activities in the Delta. See table below.
- quintiles 2, 3 and 4 (>\$4 per day) for activities in the Delta⁴.

Table N° 3 : Results of the economic analysis of MCA-Senegal's projects

Activities	Original (ERR)	Date of original ERR	Revised current ERR	Date of current reviewed ERR
Rehabilitation RN#6	11%	Year 2009	-1 - 6%	June 2015
Rehabilitation RN#2	11%	Year 2009	8-11%	June 2015
Irrigation and Water Resources Management	16%	Year 2009	10-11%	March 2013

N.B.: ERR incorporating the Compact management costs. ERR: Economic Rate of Return



Sources: Economic Analysis du MCC, 2009, 2012 and 2013.

See <http://www.mcc.gov/pages/countries/err/senegal-compact> or www.mcasenegal.org

⁴ See beneficiaries study

1.4. Program Beneficiaries

29. The purpose of the Compact MCA-Senegal is to help reduce poverty in Senegal through economic growth. The objective of the program⁵ is to help improve agricultural productivity and access to markets and services by investing in developmental infrastructure in different road sectors and promoting irrigation through two major projects :

-  The Project for the Rehabilitation of national roads 2 and 6 with the objective of improving access to markets and services with a view to reducing the duration and costs of transport.
-  The Irrigation and Water Resources Management Project which seeks to increase the productivity of the agricultural sector through extension and the improvement of the quality of the irrigation system in the North of Senegal.

30. The number of direct beneficiaries of the program is estimated at approximately 1.55 million people through 2029 or 138,600 households including 1.1 million in the Casamance region. In the Casamance, the majority of direct beneficiaries come from households living with less than \$US 2 per person and per day, and 42% of them live on less than \$US 1.25 per person and per day. In the northern area, about 45% of direct beneficiaries are households living on less than \$US 2 per person and per day, 25% of whom live on less than \$US 1.25.

Table N° 4 : Estimation of Program Beneficiaries

Projects	Estimated number of beneficiaries	Estimated number of beneficiary households
Roads Rehabilitation Project	1 350 000 people	123 000 households
Project Irrigation and WR Management	260 000 people	22 390 households
TOTAL	1 550 000 people (*)	138 600 households (*)

N.B.: (*) : Some households in the Northern Zone Nord will benefit from the Roads and Irrigation Projects.

⁵ See Senegal Compact, Annexe 1

2. THE MONITORING COMPONENT

2.1. Monitoring Strategy

31. The Monitoring Component of the Monitoring and Evaluation Plan of MCA-Senegal aims to:
 - measure, through performance indicators ("Program Monitoring function"), the results and performance of the Program during its implementation milestone to ensure that the objectives and the expected economic gains will be made and to allow adjustments during the implementation of activities in order to improve the overall impact of the Program, and;
 - monitor operational risks ("Risk Monitoring function")⁶ linked to identify project results through risk indicators in order to implement risk planning and management processes within the Program and the various projects.
32. Monitoring the results and performances⁷ of the Program. M&E helps:
 - assess the relevance of specific strategies and mechanisms for the implementation and coordination of the different projects and activities of MCA-Senegal;
 - monitor the results and level of achievement of MCA-Senegal's performance indicators as defined by the different agreements, making it possible to report on the achievement (or otherwise) of the objectives assigned to the program with the help of the ITT.

2.1.1. Objectives and organization

33. Program Monitoring and Evaluation is meant to:
 - assess the relevance of specific strategies and mechanisms for the implementation and coordination of the different projects and activities of MCA-Senegal ;
 - monitor the results and level of achievement of MCA-Senegal's performance indicators as defined by the different agreements making it possible to report on the achievement (or otherwise) of the objectives assigned to the program.
34. The main stakeholders of MCA Senegal Monitoring and Evaluation are:
 - **Decision makers:** The Government of Senegal and the Millennium Challenge Corporation
 - **MCA's bodies:** the Supervisory Board and the Stakeholders Committees;
 - **Implementing managers and partners:** the general management and board of directors of MCA Senegal; the implementing partners (AGERROUTE and SAED), the Irrigation and Roads Projects Management Units (PMU);
 - **Partners:** other development actors, local and administrative authorities, etc.
 - **Beneficiaries:** Direct beneficiaries, the general public and the press.
See Annex III Analysis of Stakeholders of MCA M&E.
35. See Annex III on the analysis of Stakeholders of MCA-Senegal's MEP.
36. The roles of key actors involved in the implementation of MCA plan for monitoring and evaluation are:
 - **Implementers of the M&E Plan:** this group of actors (who provide input to the M&E Plan and provide the supporting data) consists of MCA-Senegal's project teams and the Irrigation and Roads PMUs;
 - **First level users (primary users of M&E information):** these actors include MCC, the Supervisory Board, the Stakeholders Committee, MCA Senegal's support unit, MCA Senegal's top management, and the implementing partners (SAED, AGERROUTE);
 - **Second level users:** This group includes other partners (ANSD, DEEC), development partners involved in the same areas of intervention as MCA-Senegal (World Bank, European Union, GTZ, JICA, etc.), projects and programs partners in the same geographic areas, local administrative authorities, professional organizations, and direct beneficiaries (households and enterprises);
 - **Third level users:** this group includes beneficiaries, the General Public and the Press.
37. The organizational chart of MCA-Senegal's M&E is presented in Annex IV.

⁶ The M&E team does not monitor the management risks identified in the risk register of MCA-Senegal by the Staff of MCA-Senegal with the support of various partners

⁷ Also called Project-level

38. M&E includes the following levels of monitoring and evaluation:
- The Project-level, as implemented by project directors;
 - The Internal-level, as implemented by the ME Directorate in collaboration with the other directors and officers in charge of tracking the performance indicators (ITT) ;
 - The Program- and Compact-level, as implemented by the General Management in relation with the Support Unit/MCA-Senegal and other actors (MCC, Supervisory Board).
39. The results and performance of the Program will be monitored through the performance indicators defined by the agreements and especially on the basis of Annex III of the Compact.

2.1.2. Performance Indicators

40. The impact of the program will be measured throughout the five years of the Compact using performance indicators⁸. Performance indicators are measures (quantitative, qualitative or milestones along a scale qualitative or quantitative) of impact, effects, outputs, activities and inputs that are monitored and controlled during the implementation of projects in order to assess progress at any given time. They provide feedback to the management system and measure the expected results.
41. Document 2 "MEP Revision Memorandum /Closeout" presents the performance indicators selected to measure the progress made by MCA-Senegal with baseline values and target values. MCA-Senegal's key performance indicators in terms of targets, objectives and results are presented in Table n° 2, below.
42. See Annex V on the target values of the performance indicators of MCA-S and Annex VII on the key performance of MCA-Senegal with regard to the goals, objectives and results.
43. For each performance indicator, a reference value, a target value, the data collection methodology and frequency as well as the person in charge of data collection are defined. See MEP Revision Memorandum /Closeout on the definition of performance indicators.
44. These indicators make it possible to monitor program performance during the implementation of the Compact, to ensure that the objectives and the expected economic gains will be achieved and make adjustments during the implementation of the activities in order to improve the overall impact of the Program.
45. To each indicator is attributed an indicator tracking sheet to facilitate its collection, monitoring and use. See Annex V.
46. The indicator sheets provide each indicator with:
- The specific definition;
 - The origin (or source) of the data;
 - The frequency of collection and users of results;
 - Baselines and targets per period, and;
 - Analyses and reviews of performances.
47. The table below summarized the MCA-Senegal indicators.

⁸ See Annex III, Description of the Monitoring and Evaluation Plan, Senegal Compact

Table N° 5 : Indicators of goals, objectives, results and operations of MCA-S

Level	Indicator (Code and title)	Unit	Disaggregation of data by			
			Sex	Age	Income	Locality
Goal	Indicator P1. : Rates of variation of beneficiaries' net income drawn from the Irrigation Project	%	YES	NO	YES	NO
Goal	Indicator P.2. : Change in vehicle operating costs per trip/kilometer for the RN2	US\$	NO	NO	NO	NO
Goal	Indicator P3. Change in vehicle operating costs per trip/kilometer for the RN6	US\$	NO	NO	NO	NO
Irrigation and Water Resource Management Project						
Outcome	Indicator IWRM.1. : Rice Paddy Production (Delta / Ngalenka)	Tons	NO	NO	NO	YES
Outcome	Indicator IWRM.2. : Tomato production (Delta and Ngalenka)	Tons	NO	NO	NO	YES
Outcome	Indicator IWRM.3. : Onion production (Delta and Ngalenka)	Tons	NO	NO	NO	YES
Outcome	Indicator IWRM.4. : Cropping intensity (Delta)	%	NO	NO	NO	NO
Outcome	Indicator IWRM.5. : Cropping intensity (Ngalenka)	%	NO	NO	NO	NO
Outcome	Indicator IWRM.6. : Total area with improved irrigation infrastructure (Delta and Ngalenka)	Ha	NO	NO	NO	YES
Outcome	Indicator IWRM.7. : Hectares under production across cropping seasons (Delta and Ngalenka)	Ha	NO	NO	NO	YES
Outcome	Indicator IWRM.8. : Total flow measured (Q) at the Ronkh and G works (Delta)	Rate	NO	NO	NO	NO
Outcome	Indicator IWRM.9. : Number of hectares formalized (having a land allocation title and registered)	Ha	NO	NO	NO	YES
Outcome	Indicator IWRM.10. : Percentage of land disputes resolved	%	NO	NO	NO	YES
Output	Indicator IWRM.11. : Length of rehabilitated hydraulic axes in the Delta	Km	NO	NO	NO	NO
Output	Indicator IWRM.12. : Length of the main drainage canal built in the Delta	Km	NO	NO	NO	NO
Output	Indicator IWRM.13. : Total length of canals and drains built in Ngalenka	Km	NO	NO	NO	NO
Output	Indicator IWRM.14. : Hectares under improved irrigation (with MCC support)	Ha	NO	NO	NO	YES
Output	Indicator IWRM.15. : Stakeholders trained	Number	YES	YES	NO	YES
Output	Indicator IWRM.16. : Number of hectares of mapped land	Ha	NO	NO	NO	YES
Output	Indicator IWRM.17. : Conflicts successfully mediated	Number	NO	NO	NO	YES
Output	Indicator IWRM.18. : Parcels corrected or incorporated in land system	Parcels	NO	NO	NO	YES
Output	Indicator IWRM.19. : Land rights formalized ⁹	Number	NO	NO	NO	YES
Process	Indicator IWRM.20. : Value of signed irrigation feasibility and design contracts	US\$	NO	NO	NO	NO
Process	Indicator IWRM.21. : Percent disbursed of irrigation feasibility and design contracts	%	NO	NO	NO	NO
Process	Indicator IWRM.22. : Value disbursed of irrigation feasibility studies and design contracts	US\$	NO	NO	NO	NO
Process	Indicator IWRM.23. : Value of signed irrigation construction contracts	US\$	NO	NO	NO	YES
Process	Indicator IWRM.24. : Percent disbursed of irrigation construction contracts	%	NO	NO	NO	YES
Process	Indicator IWRM.25. : Value disbursed for irrigation construction contracts	US\$	NO	NO	NO	YES
Process	Indicator IWRM.26. : Number of training sessions on land tenure security tools	Number	NO	NO	NO	NO
Process	Indicator IWRM.27. : Number of man/days of training on land tenure security tools	Number	YES	YES	NO	YES

⁹ This indicator refers to households, businesses and legal entities that have formalized land rights.

Level	Indicator (Code and title)	Unit	Disaggregation of data by			
			Sex	Age	Income	Locality
Process	Indicator IWRM.28. : Number of participants in training modules on land tenure security tools	Number	YES	YES	NO	YES
Process	Indicator IWRM.29. : Temporary employment generated in irrigation	Number	YES	NO	NO	YES
Process	Indicator IWRM.30. : Number of land management committees and commissions set up or improved upon	Number	NO	NO	NO	NO
Roads Rehabilitation Project						
Outcome	Indicator PRR.1. : Average annual daily traffic (AADT) Richard-Toll – Ndium	Number	NO	NO	NO	NO
Outcome	Indicator PRR.2. : Average annual daily traffic (AADT) Ziguinchor – Tanaff	Number	NO	NO	NO	NO
Outcome	Indicator PRR.3. : Average annual daily traffic (AADT) Tanaff – Kolda	Number	NO	NO	NO	NO
Outcome	Indicator PRR.4. : Average annual daily traffic (AADT) Kolda – Kounkané	Number	NO	NO	NO	NO
Outcome	Indicator PRR.5. : Rate of change in the duration of travel time on RN2	%	NO	NO	NO	NO
Outcome	Indicator PRR.6. : Rate of change in the duration of travel time on RN6	%	NO	NO	NO	NO
Outcome	Indicator PRR.7. : Roughness (RN2)	m/km	NO	NO	NO	NO
Outcome	Indicator PRR.8. : Roughness (RN6)	m/km	NO	NO	NO	NO
Outcome	Indicator RRP.9. : Road Traffic Fatalities	Number	YES	NO	NO	YES
Output	Indicator PRR.10 : Kilometers of rehabilitated roads on RN2	Km	NO	NO	NO	NO
Output	Indicator PRR.11 : Kilometers of rehabilitated roads on RN6	Km	NO	NO	NO	NO
Process	Indicator RRP.12. : Kilometers of roads under design	Km	NO	NO	NO	YES
Process	Indicator RRP.13. : Value of signed road feasibility and design contracts	US\$	NO	NO	NO	YES
Process	Indicator RRP.14. : Percent disbursed of road feasibility and design contracts	%	NO	NO	NO	YES
Process	Indicator RRP.15. : Value disbursed of signed road feasibility and design contracts	US\$	NO	NO	NO	YES
Process	Indicator RRP.16. : Value of signed road construction contracts	US\$	NO	NO	NO	YES
Process	Indicator RRP.17.: Percent disbursed of road construction contracts	%	NO	NO	NO	YES
Process	Indicator RRP.18. : Total Value disbursed of road construction contracts	US\$	NO	NO	NO	YES
Process	Indicator RRP.19. : Kilometers of roads under works contracts	Km	NO	NO	NO	YES
Process	Indicator RRP.20. : Temporary employment generated in road construction	Number	YES	NO	NO	YES
Process	Indicator RRP.21. : Kilometers of roads completed	Km	NO	NO	NO	YES

NB : Indicators 11 (Rate of occupancy of Community Day-Care Centers), 12 (Number of children enrolled in Community Day-Care Centers) 32 (Number of “mother” educators who complete the government training curriculum for primary education) and 33 (Number of Community Day-Care centers built and equipped) have been removed following the removal of the activities to which they refer.

2.2. Data Quality Reviews

48. To ensure the accuracy, objectivity and reliability of data used to measure the performance of MCA-Senegal as well as the sources and methods used to collect data on performance indicators, the M&E plan includes a strategy for data quality evaluation and management. This strategy precisely defines the responsibilities of each project team and implementing partners in data collection and information management.

49. Data Quality was reviewed in accordance with the procedures and requirements described by MCC Procedures¹⁰. The strategy included a schedule of internal and external data quality evaluations undertaken with the support of independent consultants. It is a process whose quality needs to be assured at every level, throughout the chain. The objectives of the Data Quality Review were to evaluate the conformity of the monitoring – evaluation data with the standards defined by the MCC M&E procedures. Thus, the data were audited based on the following criteria:

- Validity: Does the data satisfactorily represent the desired results?
- Reliability: Are the data collection procedures stable and consistent over time?
- Timeliness: Is the data current and frequently collected?
- Precision: Does the data have an acceptable margin of error?
- Integrity: Is the data free from manipulation?
- Appropriateness: To what extent do the indicators fully portray the results?
- Practicability: Is the data current and frequently collected?

50. The main sources of data in the MCA-Senegal's ME are:

- (i) Surveys (Households and Businesses, on the roads, etc.) commissioned by MCA-Senegal;
- (ii) Management teams of the Irrigation and Roads Projects
- (iii) Beneficiary organizations and individuals of the intervention area
- (iv) MCA-S directorates (directors, project managers) and MCA-Senegal partners (Procurement Agent and Fiscal Agent) ;
- (v) Consultants responsible for conducting studies for MCA-S ;
- (vi) Secondary sources (ANSD, SAED, AGEROUTE, Development partners intervening in the same areas, other sources).
- (vii) etc.

51. The Monitoring and Evaluation Directorate is responsible for providing data, but the responsibility for data quality lies with the MCA-Senegal technical teams (including the Monitoring Evaluation Directorate (MED) for data concerning it), project teams and consultants. Each data provider will sign a commitment to the quality of data provided. Therefore, the technical teams ensure that the data collection procedures do not include risks for data quality and comply with the basic conditions and factors influencing the quality.

52. To implement the Data Quality Charter, the MED has ensured, on the one hand, that it clearly and transparently incorporates the process of data collection and the monitoring of relevant indicators in the implementing contracts and, on the other hand, that it periodically provides technical assistance to the teams of directorates, projects as well as to consultants and implementing agencies responsible for data collection.

53. Moreover, MCA-Senegal has selected a data quality review firm in accordance with MCC procurement procedures in years 1 and 4. Data quality reviews have also been organized regularly by the team of MCA-S Monitoring-Evaluation Directorate in the field (among the different stakeholders of the system (implementing entities, Engineer, Firms, other consultant) or in the various technical directorates of MCA-S.

2.3. Standard Reporting Requirements

2.3.1. Quarterly Disbursement Request and Narrative Report

54. At the end of each quarter, a narrative report showing the progress status in the implementation of activities is submitted by MCA-Senegal to MCC Washington together with a request for disbursement. The performance indicator tracking tables are annexed to the Quarterly Narrative Report. See Annex VII of the formats for narrative reports, quarterly and annual reports respectively which will be submitted to MCC and the MCC-Senegal Supervisory Board.

55. The indicator tracking table helps summarize, in matrix form, the values of indicators for a given period and calculate the deviations in relation to the target values. It also makes it possible to compare the results of the current

¹⁰ Cf. «ME Policy» and «Policy on Prevention, Detection and Remediation of Fraud and Corruption » www.mcc.gov

quarter with that of the preceding quarter and present the target values of the following quarters and years up to the end of the Compact.

56. The disbursement requests and ITT are submitted to MCC four times a year, 20 days before the end of the quarter, i.e. on March 10th, June 10th, September 10th, and December 10th. A supplementary narrative report is submitted once a year (October 30th) to present the main results and progress achieved, based on evidence from performance indicator tracking.

57. The Narrative Report is presented on the basis of the format approved by MCC. In addition to this report and to meet the national needs in information concerning MCA-Senegal activities, the Monitoring & Evaluation Directorate prepares a Quarterly Progress Report. The format of this report is presented in Annex IX.1. This more detailed version of the report as well as the indicators tracking table are sent to all partners and published on the MCA-Senegal website.

58. The performance indicators tracking tables (ITT) are prepared by the team of the Monitoring and Evaluation Directorate using data collection forms and quarterly reports submitted by the Project Directors. The MED is responsible for verifying data quality and completeness. A first version is submitted to Project Directors for comments and observations before being finalized and submitted to the General Directorate responsible for submitting it to MCC 20 days before the end of the last month of the quarter (March 10th, June 10th, September 10th, and December 10th). The ITT is part of the mandatory documents to be presented by MCA-S for quarterly disbursement requests.

59. An annual report is prepared by the Monitoring-Evaluation Directorate (MED) every fiscal year (October to September) for the Supervisory Board on the basis of the reports of the different projects. The annual report shows the main results and progress made by the different projects and activities during the fiscal year.

60. The schedule for collection and processing of indicators is as follows:

Table N° 6 : Schedule for the collection and use of performance indicators Schedule for the collection and use of performance indicators

Frequency of collection concerned	Deadline	Persons Responsible for the Action	Synthesis deadline	Submission to MCC (*) and to the supervisory board (**)
Quarterly ITT				
▪ Quarter # 1 : October – December	20 January	ME Officers based on the reports from the directors (Roads, Irrigation, ESA, Land Management, Communication) to be received at latest by 15 January, April, July or October	January 31	March 10 (*) (**)
▪ Quarterly # 2 : January- March	20 April		April 30	June 10 (*) (**)
▪ Quarterly #3 : April – June	20 July		July 31	September 10 (*) (**)
▪ Quarterly # 4 : July- September	20 October		October 31	December 10 (*) (**)
Annually ITT (from 1 st October to 30 September)	20 october	From 1 October to 30 September	October 31	October 31 (**)
Annual report (from 1 October to 30 September)	20 october	From 1 October to 30 September	October 31	December 10 (**)

2.3.2. Quarterly Progress Reports

61. To ensure the effective functioning of MCA-Senegal's MEP, a quarterly report including the quarterly work plan (planning of activities for next quarter) and the quarterly activity report (assessment of activities) should be provided by the different Management Units of projects (PMU Irrigation and PMU Roads) and directorates (technical services, financial services). The report should be analytical and be based on products expected from the project or the directorate. See Annex IX.2. on the format of quarterly reports.

62. The table below presents the dates of production of the different reports.

Table N° 7 : Deadlines for production of quarterly progress reports

LEVELS	ENTITY IN CHARGE	DATES
PMU Irrigation	PMU Coordinator	The 20 th day of the last month of the current quarter (for example 20 December)

PMU Roads	PMU Coordinator	The 20 th day of the last month of the current quarter (for example 20 December)
Quarterly Activity Report of Technical and Financial Directorates	Directors DAF	The 25 th day of the last month of the current quarter (for example 25 December)
Draft Quarterly Activity Report	Director Monitoring & Evaluation	The 5 th day of the first month of the preceding quarter (for example 5 January)
Observations of Directorates on the draft	Directors DAF	The 10 th day of the first month of the preceding quarter (for example 10 January)
Finalization of Quarterly Activity Report	Director Monitoring & Evaluation	The 15 th day of the first month of the preceding quarter (for example 15 January)
Transmission to Stakeholders and organs Put on-line	Director General ADG Webmaster	The 20 th day of the first month of the preceding quarter (for example 20 January)

2.3.3. Annual Performance Report

63. The Annual Performance Report makes an assessment of MCA-Senegal activities at the end of the Fiscal Year (October – September) and is prepared on the same basis as the Quarterly Report. The annual stocktaking report is prepared at the end of the fiscal year by the monitoring and evaluation directorate on the basis of the annual reports of the different directorates and project management units. The format for annual reports is identical to that of quarterly reports. See Annexes IX.3. regarding the format of annual progress reports.

64. The Annual Performance Report provides information on the accomplishments and progress of Compact activity implementation, on the participation process, on lessons learnt and on best practices.

65. A sharing and analysis workshop is organized on the Annual Performance Report with a broad range of stakeholders who will have the opportunity to:

- examine the overall progress of the implementation of the Compact ;
- analyze the problems encountered in connection with the implementation and discuss possible actions;
- review and analyze the quality of the construction work in the field and the resulting effects on the ERR and total project lifecycle costs;
- examine the projects and propose the necessary adjustments, and;
- use the results for the planning of activities scheduled during the following year.

Table N° 8 : Schedule for the production of annual performance reports

LEVELS	ENTITY IN CHARGE	DATES
PMU Irrigation	PMU Coordinator	30 September
PMU Roads	PMU Coordinator	30 September
Annual Activity Report of Technical and Financial Directorates	Directors DAF	10 October
Draft Annual Activity Report	Director Monitoring & Evaluation	20 October
Observations of Directorates on the draft	Directors DAF	25 October
Finalization of Annual Activity Report	Director Monitoring & Evaluation	30 October
Transmission to Stakeholders and organs	Director General DGD	30 October
Put on-line	Webmaster	

2.3.4. Compact Completion Report

66. At the end of the Compact in Year 5, the Monitoring-Evaluation of MCA-Senegal should provide answers to several questions including:

- Has the Compact achieved its objectives?
- If yes or if no, why?
- Are the construction projects in conformance with the approved Engineering designs? What are the results and impacts on the ERR and project lifecycle costs?

- What are the lessons drawn from the implementation experience (on the procedures, on the funds, etc.?)

67. To provide answers to all these the MCA-S personnel will, during the last year of implementation, prepare a Compact Completion Report (CCR) to assess the program, indicate the level of outputs and outcomes achieved, and the reasons why these outcomes and outputs were or were not achieved.

68. Following the MCA-S Personnel, the MCC team in charge of monitoring Senegal's Compact, will prepare a Post-Completion Assessment Report (PCAR) within 6 months following the end of the Compact. In addition to the aspects concerning the evaluation of the MCA-S program, the report will give indications of the program's performance.

3. EVALUATION COMPONENT

3.1. Evaluation Strategy

69. Evaluation is an essential component of MCA-Senegal Program and is a major focus of the MCC's approach. This approach incorporates specific methodologies that can provide guidance on the impact of the programs implemented and due to the interventions of the funded projects.

70. The evaluation component of the MCA-S M&E plan aims at:

- analyzing retrospectively (summative evaluation) the results achieved in light of the expected effects and whether these results are due to the interventions;
- assessing the impact of the MCA Senegal's projects on the beneficiaries, including vulnerable groups who may be less likely to equally benefit from program activities;
- analyzing in a formative way (formative evaluation for MCA-Senegal's team) the results of the projects implemented in order to improve their performance and achieve the goals of the Compact

71. The evaluation strategy is based on scientific models with advantages of neutrality, accuracy, objectivity and validity of information. The evaluation methodologies are selected on the basis of the evaluation of these criteria and of their costs.

72. The activities of the evaluation component should focus on: (i) independent impact evaluations, (ii) internal evaluations made by using MCA-Senegal's human resources (Staff MCA-Senegal, Implementing Partners, Project Management Units) according to participatory methods, and (iii) ad hoc evaluations and special studies.

73. Each evaluation will be based on statistical methods using data collected through surveys that are contracted through the MCA. The MCA-Senegal monitoring-evaluation team will work closely with the impact evaluation teams to support the development and implementation of these studies, under MCC guidance.

3.2. Specific Evaluation Plans

74. The activities of the evaluation component will be based on:

- i. Impact evaluation: in accordance with the procedures in force, an independent evaluation of the impact of projects will be undertaken. This in-depth impact evaluation which places an emphasis on results, will help measure the changes registered at the level of individuals, the household or the well-being of the community as a result of the intervention of the Irrigation and Roads projects. MCC is responsible for the selection of one or several independent design firms specialized in impact evaluation, which will be entrusted with designing and implementing the evaluation of the two projects.
- ii. Special studies.

75. See table below on specific evaluation plan.

Table N° 9 : Summary of Specific Evaluation Plans

Name of evaluation	Surveys Concerning	Evaluation Period	Type of evaluation	Evaluator	Methodology	Date of Final Report
Evaluation of IWRM Project	• Baseline Survey of the IWRM Project	March 2012 – January 2013	Impact	To Be Determined	Difference-in-difference	Early 2019
	• Mid-term Survey of IWRM Project	• Ngalenka et Delta : Sept-Dec. 2016				
	• Final Survey of IWRM Project	• Ngalenka et Delta : June 2017-May 2018				
Evaluation of Roads Project	• Baseline Survey of Roads Project	May - December 2012	Performance	To Be Determined	HDM-4	End of 2018
	• Counting Survey and OD initial situation	• September 2012				

	• Counting Survey and OD	• Mid-2015				
	• Counting Survey	• September 2015 (RN2) • November 2016 (RN6)				
	• Counting Survey	• Regularly through 2018				

3.2.1. *Impact Evaluation*

3.2.1.1. *Evaluation of IWRM Project Impact*

76. It is worth noting that the evaluation plan for this project was adopted in 2011 in relation with MCC and its consultant IRIS Centre University of Maryland in charge of the evaluation. The design is based on the estimation of difference-in-difference with matching.

☐ Sample selection

77. Since the IWRM Project beneficiaries were selected on a non-random basis, the sampling methodology for the survey should have identified and selected the survey areas (beneficiaries of interventions) as similar as possible to the comparison communities (i.e. to represent the counterfactual).

78. The methodology proposed is based on the difference-in-difference (DID) method which compares changes before-after the results between households in the intervention areas (treatment group) and households in comparison zones (comparison group).

79. The key assumption of the difference-in-difference methodology is that the trends emerging from the results between the treatment group and the comparison group should be similar. To increase the similarity of the treatment and comparison groups, difference-in-difference with matching will be used.

80. The combined difference-in-difference – matching approach is a merger of the of difference-in-difference method and matching estimation to compare the changes in the results of households belonging to the treatment group with those of households of the comparison group based on observable characteristics.

☐ Survey data collection

81. MCA-Senegal signed an Implementing Entity Agreement for the collection of baseline data in the areas of intervention and control of the IWRM. The survey data are collected during the three passages in both the Delta and the Podor region. The three surveys help collect information on households, achievements and results of the three seasons:

- Hot off-season (wave 1: dry season from December 2011 to March 2012);
- Cold off-season (wave 2: cool season from April to July 2012); and
- Wet season (wave 3: rainy season from August to November 2012).

82. Beforehand and to apply the method of difference-in-difference (DID) with ex-ante matching, a comprehensive census to collect a set of variables used to match the treatment households and control households was carried out.

☐ Selection of samples at the level of households - Delta

83. The census carried out in March 2012 in the Delta, in the departments of Saint-Louis and Dagana, identified a total of about 11,600 households surveyed on the basis of the following criteria:

- Age and sex of head of household;
- Household size;
- Number of male and female workers;
- Number of male workers in agriculture
- Number of female workers in agriculture
- Sex
- Ethnicity
- Literacy
- Socio-administrative status
- Status of land belonging to head of household
- Participation in PO (Peasant Organization)

- Types of roofs, floors, walls

84. These variables were used as distinct variables in the selection of the sample of households to be interviewed during the three passages to comply with the Difference-in-difference and Matching methodology.

85. Thus, 1637 treatment households and 1637 control households were drawn, i.e. 25% more than the required sample size. To identify similar comparison households, we employed a commonly used method of matching: the propensity score method.

☐ Sample selection - Podor

86. In the Ngalenka zone (Podor), the census held in March 2012, helped identify 1617 households in the Podor treatment zone and 585 others in the Podor comparison zone. However, in view of the fact that the households are not yet known, all 1617 households of the treatment zone were sampled. However, for the comparison zone, a random sample of 440 households in the Podor comparison zone was selected.

☐ Evaluation questions:

87. Using the conceptual model adopted for the baseline survey, the key research questions to be addressed are:

- Has access to (or use of) irrigation water increased?
- Has there been an increase in hectares under production?
- Has there been an increase in the volume of agricultural production? If so, how much?
- What is the impact of the project activities on the sources and level of household income?
- Does the impact on the outcomes vary according to gender, age and income group?
- Do the activities of the project bring about a better perception of land tenure security?
- Does the improvement of land tenure security encourage producers to invest?

☐ Other Analyses

88. The evaluation of the IWRM project impact will also include the "Cost-Benefit" analysis, the analysis "by Gender and other sub-groups" and that of unintended consequences.

89. The analysis by Gender and other Sub-groups will be made on the basis of the participation of Beneficiaries by examining the distribution of benefits per sub-groups (for example gender and income category). This analysis seeks to answer the following questions:

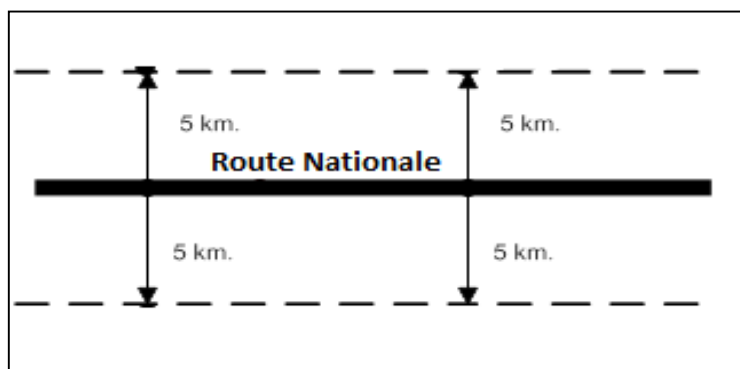
- (1) How many people are expected to benefit from increased household incomes as a result of the project?
- (2) What proportion of the beneficiaries is poor?
- (3) How much on average will each individual beneficiary gain from the project?
- (4) From each dollar invested by MCC, how much will be gained by the poor?

90. The analysis on the "Unintended consequences" will focus on unforeseen obstacles or on unexpected secondary effects of the IWRM project using quantitative data collected from households, businesses and other stakeholders through the following questions:

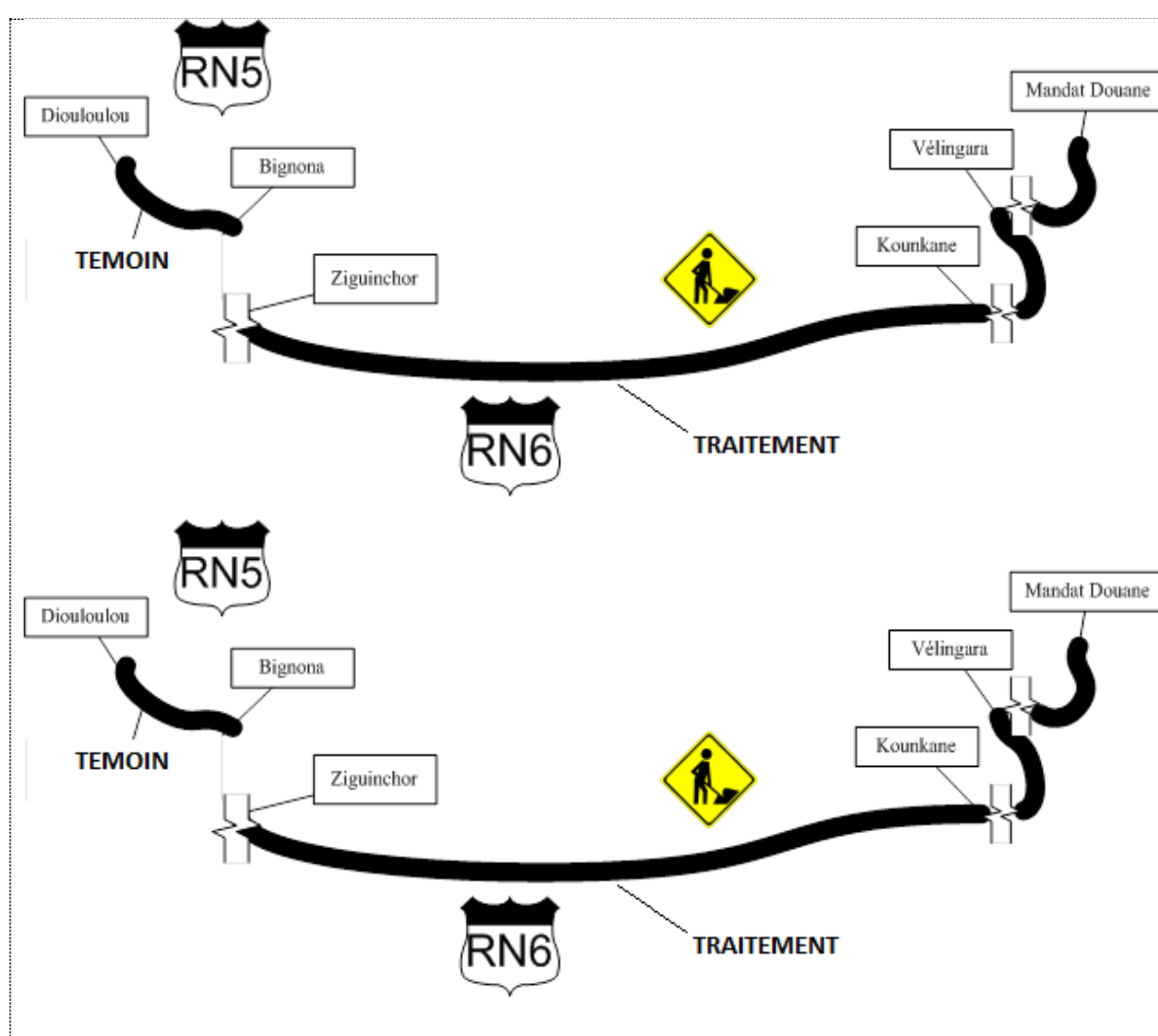
- Were there any unintended consequences of the IWRM project? If so, why did they occur?
- Who was affected by any unintended consequences?
- Could any negative unintended consequences have been mitigated? How?

3.2.1.2. Evaluation of the Roads Project

91. For the Roads Rehabilitation Project, the evaluation seeks to answer the question of how beneficiaries were affected by the implementation of a program.



92. At the beginning of the project, MCC and MCA tried to carry out an impact evaluation based on a difference-in-difference methodology. Eventually, it was decided that the method was not the best for assessing all the project benefits, based on the following reasons.



93. The Roads Rehabilitation Project (RRP) aims to increase incomes for numerous households. However, expected benefits for each individual household are not likely to be large enough to be captured by the difference-in-difference method.
94. Furthermore, it would not be possible with the difference-in-difference methodology to capture the full expected benefits for the roads project. There are many road users who do not live nor are based near the

- road, but who use it regularly. Benefits for these users would not be captured by the difference in difference methodology.
- 95. A review by MCC of former evaluations, with input from transportation experts, identified the HDM-4 model as the most suitable method for estimating road project benefits (especially for primary roads). Consequently, MCC has decided to use the HDM-4 model for estimating the RRP's final benefits.
 - 96. In using the HDM-4 to estimate the benefits of the Roads Project, the evaluation will include an estimate not only of the end-of-project status, but also a second estimation three years after the end (in 2018) of the project. This second estimation will be supported by repeat traffic counting surveys and other studies required under the model over a three-year period following the end of the Compact.
 - 97. The new methodology will address the following questions:
 - a. What is the value of the project benefits?
 - b. Was the project justified based on cost-benefit analysis?
 - c. What was the increase level in traffic on RN2 and RN6?
 - 98. The final evaluation report is expected in late 2018.

3.2.2. Internal evaluations

- 99. Internal evaluations initially planned (assessment of user satisfaction and knowledge, assessment of gender dimension in MCA-Senegal activity implementation, and qualitative process analysis) with a view to preparing for the mid-term and the final evaluations, were not carried out.

4. MANAGEMENT AND ADMINISTRATION OF MONITORING AND EVALUATION

4.1. Responsibilities of Monitoring and Evaluation

100. The development of a Monitoring and Evaluation Plan for MCA-Senegal by the staff of the program was based on a participatory approach involving implementing partners (SAED AGEROUTE), the other partners (ANSD, etc.) and the beneficiaries and according to MCC's monitoring and evaluation procedures. The managing of the M&E plan is assigned to the Monitoring and Evaluation Directorate which is controlled by a Director who is under the direct supervision of the Deputy Managing Director and under the authority of the Director General.

101. The management and coordination of all the Monitoring - Evaluation activities of MCA-Senegal are under the direct responsibility of the M&E Director. He is assisted in these tasks by a team of two M&E officers for the "Irrigation" and "Roads" projects. These Officers are specifically responsible for the collection, compilation, processing and analysis of data on activities and specific indicators.




102. Within the "Irrigation" and "Roads" PMU, the monitoring and evaluation responsibilities are incumbent upon the unit coordinator.

103. The Director General of MCA-Senegal oversees the implementation of the Monitoring and Evaluation Plan. The MCC focal point for monitoring and evaluation provides technical assistance to the monitoring and evaluation team of MCA-Senegal, to facilitate the implementation of the specific activities in accordance with existing procedures.

104. The main tasks of the Monitoring and Evaluation Directorate are:

- ☐ setting up a Monitoring and Evaluation system including the collection, the processing, the analysis, the verification / validation and the centralization of information on MCA-Senegal's performance indicators on the one hand and reporting on these quarterly performance indicators on the other one;
- ☐ developing procedures manuals for Monitoring and Evaluation indicators which are to be implemented by the Project Management Units under the supervision of implementing partners ;
- ☐ developing training manuals and delivering training modules on procedures for data monitoring and verification for the technical directorates of MCA-Senegal, the PMU and implementing partners¹¹;
- ☐ Disseminating information and results related to the performance and impact of the program in order to ensure transparency in relation to the Directorate of Communication through the website and / or any other medium.
- ☐ facilitating participation in M&E activities and arousing interest of different stakeholders involved directly or indirectly in the conduct of activities and the success of MCA-Senegal;
- ☐ setting up and conducting an audit strategy for data quality, incorporating internal and external controls;
- ☐ developing, in partnership with the other directorates, an annual the Monitoring and Evaluation work plan to be submitted to approval to the Director General of MCA-Senegal and MCC;
- ☐ preparing terms of reference and managing the selection and work of consultants for surveys, studies, reviews of data quality and any other relevant and specific studies in the field;
- ☐ managing partnership agreements with governmental entities in the field of monitoring and evaluation;
- ☐ ensuring the inclusion of responsibilities for collecting data on performance indicators in Terms Of Reference (TOR) for individual contractors and consultants and agreements with implementing entities;
- ☐ monitoring and supporting the collection of data on performance indicators for the focal points designated by the PMU of the various projects;
- ☐ facilitating the work of the mid-term and final Evaluation team, particularly through mission planning support and considering the recommendations relating to the M&E.

105. The other Directorates of MCA-Senegal, in their specific field of intervention, will perform the following tasks:

-  Collecting, processing and entering data in the M&E application for the indicators relating to their sector;
-  Consolidation and transfer of the data collected by the Consultants and the "Road Rehabilitation" PMU and the "Irrigation and Water Resources Management" PMU;
-  Reporting, internal dissemination of outputs and capitalizing on best practices and case studies (Success stories);

¹¹ Manuals and trainings should integrate gender considerations such as data collection techniques for diverse beneficiary groups including women.

- ✚ Adapting data collecting and processing tools and methods;
- ✚ Controlling the quality of the data drawn from their area of intervention in relation to the Monitoring and Evaluation Directorate and the Quality Specialist of MCA-Senegal

106. MCA-Senegal Supporting Unit performs the following tasks:

- ✚ Collecting and reporting on the data from the other partners in the areas of intervention the projects;
- ✚ External dissemination of the data on MCA-Senegal's indicators, particularly among government agencies;
- ✚ Optimizing experiences/lessons learned from MCA-Senegal's implementation process ;
- ✚ Work with MCC to collect data to update the economic rate of return on the basis of field data.

4.2. M&E Information and Management System

107. To ensure the proper implementation of the M&E Plan, several computer software systems are set up at the Monitoring and Evaluation Directorate's level as well as at the level of the other directorates and PMU. The main acquisitions are:

- For software: ArcView GIS, Arc Info, SPSS, Stata and EVIEWS;
- For logistics: acquisition of printers for printing maps and GPS;

108. MCA-Senegal's computerized monitoring and evaluation system (SISE) was designed in 2012 and set up and made accessible at the following address: <http://41.214.31.186:8090/SESAME-MCASENEGAL/> . This system will help decentralize data capture tasks (by the directorates, PMU concerned) and the consultation, analysis and processing of data (by MCC, the Supervisory Board, the MCA-S Staff, Stakeholders).

109. In view of the actors' different locations and the optimization objectives, the SISE will adopt the web architecture. This will help centralize the database in a single location and provide an interface to this base via a web page accessible to all users. Since the application never resides on the user's computer, the maintenance operation is greatly simplified since it only involves the central server in which the application is hosted. Thus a reliable and rapid internet access for all users will be required.

110. See diagram below on the Global architecture of the MCA-Senegal M&E information system.

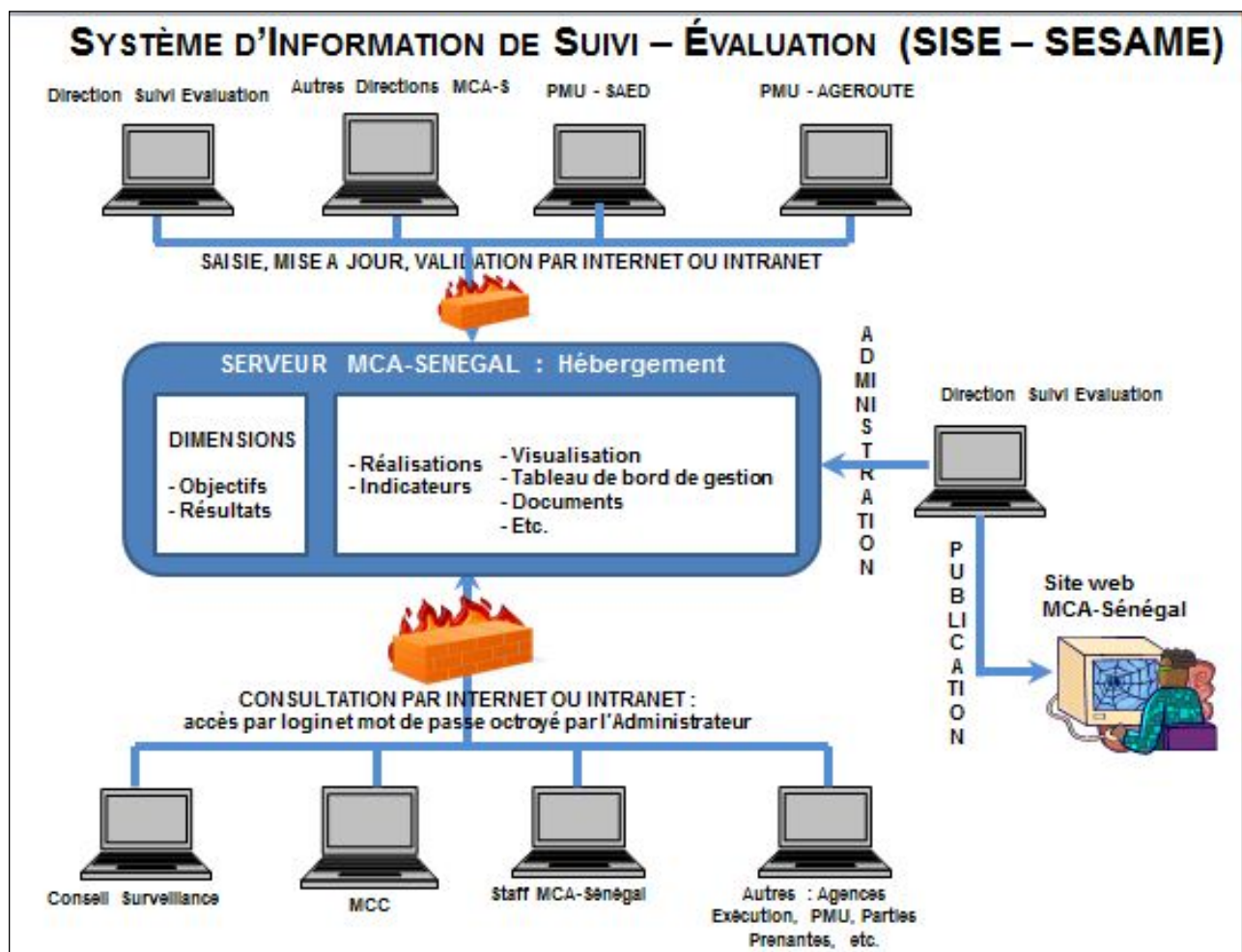


Figure N° 1 : Global architecture of the MCA-Senegal M&E information system

111. The system has the following characteristics:

- Adjustable: break down the modules in such a way that a new module can be easily integrated during future MEP revisions;
- Flexible: provide advanced administration functionalities to make it highly configurable and possible to modify parameters at any time;
- Scalable: opt for n-tier architecture to separate the presentation, business logic and data layers in order to easily change one of the layers if the need arises. This reinforces security;
- Efficient: provide for measures guaranteeing the rapid loading of screens and reports and ensuring a permanent availability rate except in emergency situations;
- Secured: make provision for security measures (data base, interface, communication channel, servers) by hosting the components on the different servers in order to preempt data loss and illegal copies, protect confidential data, guarantee data integrity and prevent all forms of intrusion;
- Simple: Develop a user-friendly system that can be configured and administered by the MED with the support of the MCA-Senegal and the consultant through a support and maintenance contract.

4.2.1. Monitoring and Evaluation Disseminating system

112. Disseminating the results of MCA-Senegal Monitoring and Evaluation Plan is structured around the following products:

- ☐ Annual and long-term work Plans: these are the triggers of the Monitoring and Evaluation Plan (M&EP) and the the tools that facilitate annual reviews;
- ☐ Quarterly Performance reports: they are developed by the Project Management Unit (PMU), the projects' Directorates and the other technical directorates. The final quarterly report is prepared by the Monitoring and Evaluation Directorate (MED) on the basis of the various contributions;
- ☐ Indicator Tracking Tables (ITT), which present the level of periodic and cumulative achievement of performance indicators of MCA-Senegal;
- ☐ Annual Performance Report: it presents MCA-Senegal's annual results and it is developed based on the annual reports of various projects and Directorates;
- ☐ Special Reports: These are updates developed upon request, survey reports, specific studies and mid-term and final reports.

113. The Annex No. X shows the schedule of various MEP products development and levels of responsibility.

4.2.2. Monitoring and Evaluation Communications Strategy

114. MCA-Senegal has put in place a communication strategy in which monitoring and evaluation will play a vital role. In accordance with the M&E procedures defined by MCC Washington and the principles of transparency and accountability, M&E products will be provided to implementing partners, the administrative authorities of the intervention areas, the stakeholders, the press and the general public in the proper format for each case: distribution of documents and reports published on the website of MCA-Senegal, conferences, etc.).

115. The M&E Directorate is considering organizing a one-day symposium to present results to the press and the general public at the end of each year. In addition, the quarterly and annual reports as well as the ITT will be posted after their approval by the MCC.

116. Semi-annual stakeholder workshops will also be organized to disseminate the progress results and conduct participative self-assessments.

4.3. Review of the Monitoring and Evaluation Plan

117. MCA-Senegal's M&E Plan has undergone adjustments and revisions by adapting to the information needs of the different stakeholders in order to better support the decision making process.

118. The M&E Directorate is planning an annual review of M&E procedures and management during the first quarter of each fiscal year. Also, the M&E plan may be subject to exceptional review according to the following cases:

- ☐ adding an indicator;
- ☐ deleting an indicator;
- ☐ changing a baseline value;
- ☐ changing targets
- ☐ changing the collection method or calculation of an indicator;
- ☐ changes in sources and means of verification

119. This review must:

- ✓ Improve procedures for collecting, storing, processing, analyzing and disseminating information on activities and ensure that all changes are properly reflected at the monitoring and evaluation level.
- ✓ show whether the logical causal links occur;
- ✓ verify whether the definitions of indicators are accurate, current and timely;
- ✓ verify whether the M & E indicators accurately reflect the performance of the program;
- ✓ update the indicators targets, and;
- ✓ add indicators, if necessary, to measure results

120. In particular, this annual review has determined whether the sequence of outcomes as described by the tables of indicators monitoring meet the schedule of activities implementation, if the implementing agencies responsible for collecting are able to provide the information on schedule, if the definitions of indicators are appropriate and unambiguous, and so on.

121. It has also helped to assess performance at the four basic elements of the M&E Plan:

- (i) data and information relating to activities;
- (ii) the actors (those who produce and/or use the information);
- (iii) the procedures that help identify the relationships between actors and data;
- (iv) Tools developed for the analysis, evaluation and dissemination of data.

122. Identifying indicators of progress or milestones to be reported over the year has also happened during this review on the basis of annual work plans.

123. If the annual review identifies changes in the Monitoring and Evaluation Plan, a revised Plan, accurately documenting the changes and their justifications, is submitted to the Supervisory Board for validation and to the MCC for approval.

5. M&E BUDGET

124. The overall cost of MCA-Senegal's MEP is estimated over the period of 5 years of the Compact at US\$ 5.152 million. See table below.

125. The budget items must be revised in collaboration and agreement with MCC through a formal review process.

126. The M & E budget does not include the wages and benefits of the staff of MCA-S M&E Directorate who are integrated in the Program Administration budget.

127. The impact evaluations are financed directly by MCC.

Table N° 10 : Costs of MCA-Senegal M&E Plan

Activities	Sub-Activities	Budget (MEP 1 st draft)	Budget (MEP revised)	Budget (close out MEP)	Justification
Baseline situation	<ul style="list-style-type: none"> - Implementing Entity Agreement with ANSD - Setting up an Project Management Unit - Recruitment and training of investigators - Surveys in the Irrigation zones (3 passages) and in the Roads Project zone (1 passage) - Entering and Finalizing the surveys data base 	\$ 590 000	\$ 1 642 200	\$ 1 572 682	Change in the sampling and collection methodology (3 passages in the IWRM project zone)
MEP Planning	<ul style="list-style-type: none"> - Preparation and update of the M&E Plan - Development of a ME Information System - Additional equipment for the ME - Acquisitions of software and training - Data acquisition 	\$ 600 000	\$ 300 790	\$ 316 620	Suppression of equipment and data acquisition, Resorting to partnership, preparation by the MEP Directorate staff
Training ME	<ul style="list-style-type: none"> - Monitoring-Evaluation Directorate Team - Teams of MCA-Senegal Projects - M&E Focal Points of PMU Roads and Irrigation 	\$ 500 000	\$ 127 795	\$103 223	Training sessions delayed by the study on "skills evaluation"
Performance indicators tracking	<ul style="list-style-type: none"> - Data collection missions - Data quality review studies 	\$ 300 000	\$ 457 672	\$ 278 602	Under-estimation of data quality review studies Cancellation of study on the third data quality review in 2015
ME studies and surveys	<ul style="list-style-type: none"> - Surveys Impacts of roads on economic activities - Roads survey: Traffic, Origin and Destinations 	\$ 1 350 000	\$ 1 750 000	\$190 000	Cancellation of final surveys of IWRM and Road Projects; Cancellation of surveys of road impacts on economic activities

	- Final survey				
Evaluation	- Mid-Term evaluation - Final evaluation	\$ 450 000	\$ 375 000	0	Cancellation of mid-term and final evaluations
Communication	- Study and exchange tours - Half-yearly workshops for information of Stakeholders - Annual information workshop with the Press - Printing the annual report, Reproduction - Workshop with ME Focal Points	\$ 457 500	\$ 140 000	\$ 82 284	Difficulties to undertake communication activities and study tours Cancellation of annual information workshops with the media
Miscellaneous/ Contingencies		\$ 100 000	\$ 333 936	\$ 2 548 219	Contingencies
TOTAL		\$ 4 547 500	\$ 5 127 393	\$ 5 091 633	
▪ 609(G)		\$ 590 000	\$ 1 369 893	\$ 1 334 131	
▪ COMPACT		\$ 3 757 500	\$ 3 757 500	\$ 3 757 500	

ANNEXES

6. ANNEXES

6.1. Annex I: Glossary

Accomplishment: is the physical or no-physical state that results from products and services deriving directly from the implementation of project activities.

Activity: Actions taken or work performed through which inputs, such as funds, technical assistance and other types of resources are mobilized to produce specific outputs. As a general rule, several activities make up a Project and contribute to achieving the Project Objective.

Assumptions: explicit and reasonable suppositions about the behaviors of variables or factors exogenous to the project (background information) likely to have an impact on the progress or success of this project. They are expressed in the form of permissive conditions in the program logic and relating to conditions considered as necessary to fully achieve the set objectives.

Baseline (starting point): the situation before a development action that serves as a reference point against which the progress achieved can be assessed or compared. It is the description of the state in which, prior to the intervention, the project's action zone, the beneficiaries, the main stakeholders are in, as well as the key parameters for the realization, outcome and impact indicators. All this information will serve as a benchmark to measure the progress accomplished.

Baseline survey or baseline study: a survey or study conducted at the start of a project/program and prior to the development intervention in order to obtain information that could establish a reference situation including data on each category of actors and beneficiaries. It will serve as a reference point against which the progress made (results and accomplishments) can be assessed and as an important reference for the final evaluation.

Beneficiary: a person whose standard of living is improved through an increase in income deriving from the economic gains generated by projects financed by MCC.

Common indicator: indicators used by MCC to pool the results of different countries in some sectors and provide an external report on key stakeholders.

Compact – the agreement referred to as *Millennium Challenge Compact*, concluded between the United States, acting through the *Millennium Challenge Corporation*, and the Government of countries benefitting from the assistance of the *Millennium Challenge Account* pursuant to which, the MCC provides this assistance to the country.

Counterfactual situation: the situation or conditions which, according to assumptions, would have occurred for some people or groups of people, in the absence of the MCC program.

Critical condition: condition which belongs to the project environment and which is out of control and outside the responsibility of the project manager.

Outcomes: changes, intended or unintended, that derive directly or indirectly from a development intervention.

Economic Rate of Return (ERR): an analysis of growth at micro-economic level which measures the increases expected in household incomes or the added value of different firms to compare them with the costs linked to income increases. The economic rate of return is expressed in terms of percentage and represents the interest rates for which the discounted net benefits is equal to the net discounted costs.

Efficiency: correlation between the results obtained and the means deployed (human, material, financial, time, etc.).

Effectiveness: the extent to which a project achieves desired changes for its target population.

Entry Into Force: date with effect from which the Compact comes into force, i.e. the beginning of its lifespan. The Compact duration is 5 years.

Evaluation: systematic and objective assessment of an ongoing or completed program, of its development, its implementation and its results. The purpose of the evaluation is to provide responses to specific questions, make an overall judgment on an operation and draw lessons meant to improve the actions, planning and future decisions. The evaluation is generally meant to determine the efficiency, effectiveness, impact, sustainability and relevance of the objectives of the project or the organization.

Final evaluation: an evaluation performed at the end of the project or of the period of implementation of an action in order to identify the performances, results and impacts in comparison to the baseline and its objectives.

Goal – the ultimate objective of a development action. As far as the Compacts go, the purpose has always been to reduce poverty through economic growth.

Goal indicator: indicators that measure developments in economic growth and poverty reduction observed during and after the program's implementation.

Impact evaluation: a study that appraises the evolution of the income of individuals, households or the community as well as other welfare aspects as a result of the action of a given project or program. The distinctive feature of the Impact Evaluation is the use of the counterfactual scenario, which identifies what would have become of beneficiaries if the project or program did not exist.

Impact: the effect a Compact is expected to have on the beneficiaries. The impact of MCC Compacts is poverty reduction through economic growth.

Indicator: a quantitative or qualitative variable, which provides simple and reliable means of measuring the performance of a development action.

Inputs: the financial, human and material resources used for development interventions.

Integrated Management System: a system designed to collect, process, and store and disseminate data to help in the management of programs.

Mid-term review: evaluation performed mid-way of the program's intervention period in order to identify the performance and results of the project in relation to the reference situation and the initial objectives.

Relevance: measurement in which the objectives of a project correspond to the priorities of the target group and the policies of borrowers and donors.

Results-based management: a management philosophy and approach that focuses more on the achievement of results with respect to planning, implementation and monitoring-evaluation. It is based on the principle of the commitment made to achieve results and serves as a guide for the definition of activities, the evaluation of means deployed and the management strategy of the project / program. It is meant to compare the expenditure on the activity and the activity of beneficiaries and to ensure traceability and accountability.

Result: the outcome or impact of a development intervention, it is a measurable and describable change that results from the performance of a certain number of activities or derives from a cause-and-effect relationship.

Risk management: comprises the entire processes of the project's risk management planning, identification and analysis, responses as well as its monitoring and control. Most of these processes are updated throughout the project's lifespan. The objectives of risk management are to increase the likelihood and impact of positive events and reduce the likelihood and impact of events unfavorable to the project.

Risks: threat to the internal or external environment, likely to delay or prevent the accomplishment of the project objectives, hamper its timely commencement or continuation. It involves the possibility that an event with undesirable consequences may occur.

Stakeholders: the people and organizations actively involved in the project or program, or whose interests may be positively or negatively impacted by the implementation or completion of the project.

Sustainability: probability that the positive effects of a project or a program continue after the termination of funding.

Target – the result that a specific indicator is expected to achieve at a given time.

6.2. Annex II: Program logic

6.2.1. Logic of the Irrigation and Water Resources Management Project

	Problem	Activity/Sub-Activities	Outputs (Years 1-5) 2010 - 2015	Short-term Outcomes (Year 5) 2015	Medium/Long-term Outcomes (Years 6-10) 2016 - 2020	Impacts (Years 10-20)
Activity in the Delta (\$159.4m)	Poor agricultural yields have led to the abandon of several hectares of land, Poor agricultural yields have always been a problem due to the poor irrigation quality and existing drainage infrastructure, insufficient supply of water available in the agricultural zones and the non-existence of an appropriate drainage system (leading to soil salinity).	- Construction in the Delta	- Creation of temporary jobs - 17 water control structures created - 149 km of channels rehabilitated - 36 km of new channels - 8 km of protection dykes constructed	- Land area developed (37,941 hectares) - Increase in hectares under production - 23.160 ha cultivated - Increase in water flow (65m3 per second) - Setting up a satisfactory drainage system (number of ha drained)	<ul style="list-style-type: none"> - Increase in cropping intensity (CI Delta, CI Ngalenka) - Increase in Agricultural Production - 277,000 tons of paddy rice - 115,000 tons of tomatoes - 130,000 tons of onions - Increase in farmer income - Job opportunities in the agricultural sector reinforced - Access to land improved - Investments security - Upkeep and maintenance of infrastructure - Contribution to the increase in investments in the agricultural sector 	<ul style="list-style-type: none"> - 268,000 project beneficiaries - 35% increase in the income of households - Self-sufficiency/Food Security
Activity in the Ngalenka (\$159.4m)		- Environmental and social mitigation - Social and gender integration	- Implementation of the RAP - Implementation of social and gender aspects			
		- Construction of a new 450ha irrigated area of cultivable land	<ul style="list-style-type: none"> - Creation of temporary jobs - 6 km of protection dykes built - 25 km primary and secondary channels built - 14 km of access routes built - 2 pumping stations created 	- 440 ha under production		
Land tenure security activity (\$3.9m)	<ul style="list-style-type: none"> Unattractive investment climate due to uncertain property rights and an increased potential for land disputes because of the growing demand for irrigated land following the IWRM project land conflicts recurring low formalization of land tenure rights lack of tools for land management misunderstanding by the actors the tools and institutional framework for land management unreachable judiciary 	<ul style="list-style-type: none"> Clarification of the land situation Land allocation and formalization of titles establish and apply land tenure security tools Capacity building Set up land dispute management committees 	<ul style="list-style-type: none"> Landed property known or land rights clarified 41.862 ha mapped Land rights formalized (3,440 ha formalized) Land rights of vulnerable groups strengthened 9 Support Technical Committees reinforced and operational 7 land registers and 2 land registries, updating the POAS, land information system and creation of manuals of procedures for land allocation 600 individuals trained in land tenure security tools Creation of 33 Organizations of Water Users 	<ul style="list-style-type: none"> Local governance of land resources improved Understanding of management and land tenure security tools improved Reduction of land disputes Technical capacities of Local Governments and decentralized Technical Services strengthened Land disputes managed and resolved 		

	Problem	Activity/Sub-Activities	Outputs (Years 1-5) 2010 - 2015	Short-term Outcomes (Year 5) 2015	Medium/Long-term Outcomes (Years 6-10) 2016 - 2020	Impacts (Years 10-20)
Social Safeguards						

*The figures cited in this program logic have not been updated to correspond with any new targets set in this M&E Plan revision. Though the outcome logic remains the same, the figures may have changed.

6.2.2. Logic of Roads Rehabilitation Project

	Problem	Activity/Sub-Activities	Outputs (Years 1-5) 2010 - 2015	Short-term Outcomes (Year 5) 2015	Medium/Long-term Outcomes (Years 6-10) 2016 - 2020	Impacts (Years 10-20)
Rehabilitation of RN2	The Roads Rehabilitation Project is designed to increase beneficiaries' access to domestic and international markets thanks to better quality roads and a reduction in travel time and costs. The road sector plays a key role in Senegal. About 99% of goods produced in Senegal are transported by road and 95% of domestic travels are done by road.	Rehabilitation of RN2 - Construction of the Ndioum Bridge	Creation of temporary jobs related to the works - 120km of roads are rehabilitated on RN2	<ul style="list-style-type: none"> - Improved quality of roads - Increased traffic on RN2 and RN6 - Reduction of travel times - Reduction of transportation costs - Improved accessibility to basic social services - Improved accessibility to domestic and international markets 	<ul style="list-style-type: none"> - Increased economic opportunities for households - Increased trade flows and opportunities - Increased turnover for businesses 	<ul style="list-style-type: none"> - 260,000 project beneficiaries - Increase in beneficiaries' income/ Beneficiary consumption
		Social and Environmental Mitigation ² - Social and Gender Integration ³	Implementation of RAP ⁵ -Implementation of social and gender aspects			
Rehabilitation of RN6		Rehabilitation of RN6 -Construction of Kolda Bridge	Creation of temporary jobs related to works -256km of roads are rehabilitated on RN6			
		Social and Environmental Mitigation ² - Social and Gender Integration ³	Implementation of RAP -Implementation of social and gender aspects			

*The figures cited in this program logic have not been updated to correspond with any new targets set in this M&E Plan revision. Though the outcome logic remains the same, the figures may have changed.

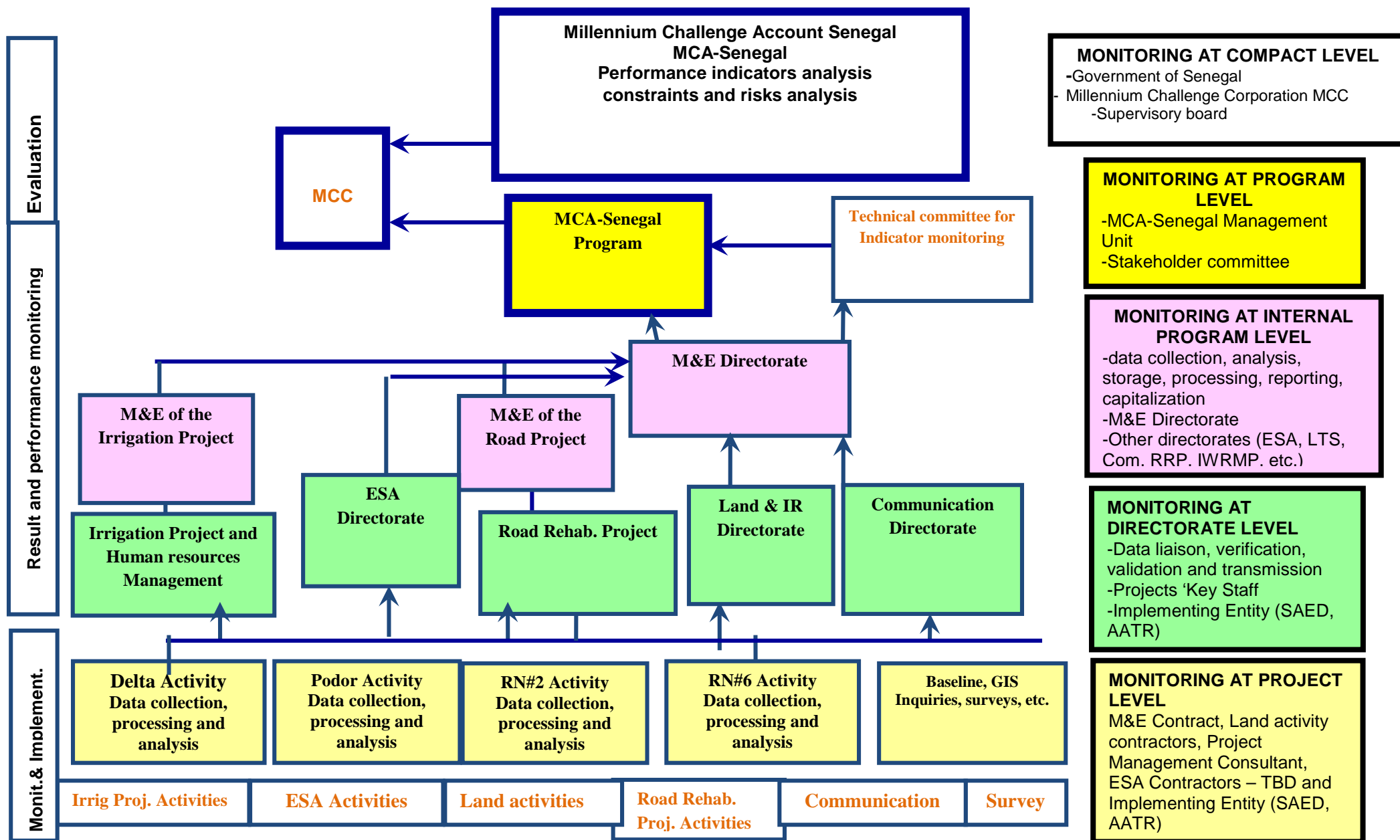
6.3. Annex III: Monitoring-Evaluation Stakeholders Analysis

Key stakeholders	Objectives pursued or interests in relation to MCA-S Monitoring-Evaluation (expressed or not)	Power / capacity (key strengths and weaknesses) in relation to ME	Relational position (objective)	Strategies / actions envisaged (for the benefit of MCA-S's ME)
1 Government of Senegal	Monitoring and Evaluation of Compact implementation Monitoring the contribution to the fight against poverty and to other planning documents or strategies Building structuring infrastructure Capitalizing on the process	Represented by member institutions of the Supervisory Committees	Decision-makers, represented by structures members of the MCA-S Supervisory Board	<ul style="list-style-type: none"> • <u>Observe</u>: the directives, policy amendments, strategies, other ME mechanisms; • <u>Communicate</u> : formal (correspondences, briefing notes, reports) and informal (restitution of studies, organization of missions, participation in forums / workshops / seminars) on indicators, performance, analyses of MEP; • <u>Satisfy</u>: all identified and new information needs; • <u>Collaborate</u> : direct and formal collaboration
2 Millennium Challenge Corporation MCC	Monitoring and evaluation of Compact implementation Monitoring Compact performance through the performance indicators referred to in the agreements Monitoring the consistency of the MEP with the directives	Putting the ME procedures in place Approval of work plans, budgets, management actions Approval of the Monitoring & Evaluation Plan Ensuring compliance with the MEP, the quality and reliability of ME data Control and Approval of MEP products	Donors, Observer in the Supervisory Board Approval of products deriving from the MEP Evaluation of the performance of the ME mechanism Updating the MEP (revisions of MEP)	<ul style="list-style-type: none"> • <u>Observe</u>: the directives, policy amendments, strategies, other ME mechanisms; • <u>Communicate</u> : formal (correspondences, briefing notes, reports) and informal (restitution of studies, organization of missions, participation in forums / workshops / seminars) on indicators, performance, analyses of MEP; • <u>Satisfy</u>: all identified and new information needs; • <u>Collaborate</u> : direct and formal collaboration
3 Supervisory Board	Monitoring and Evaluation of Compact implementation Identification of implementation constraints Monitoring and evaluation of the performance of the program management unit Evaluation of implementing partners' participation	Validation of the M&E Plan Identification of new information needs for ME	Validation of products deriving from the MEP Evaluation of the performance of ME mechanism Updates (revisions of MEP)	<ul style="list-style-type: none"> • <u>Observe</u>: the directives, policy amendments, strategies, other ME mechanisms; • <u>Communicate</u> : formal (correspondences, briefing notes, reports) and informal (restitution of studies, organization of missions, participation in forums / workshops / seminars) on indicators, performance, analyses of MEP; • <u>Satisfy</u>: all identified and new information needs; • <u>Collaborate</u> : direct and formal collaboration
4 Stakeholders' Committee	Monitoring Compact implementation Providing information on MCA-S activities and the level of performance Identification and implementation of axes of synergy and convergence	Consultation in the implementation and development of MEP		<ul style="list-style-type: none"> • <u>Observe</u>: the directives, policy amendments, strategies, other ME mechanisms; • <u>Communicate</u> : formal (correspondences, briefing notes, reports) and informal (restitution of studies, organization of missions, participation in forums / workshops / seminars) on indicators, performance, analyses of MEP; • <u>Satisfy</u>: all identified and new information needs; • <u>Collaborate</u> : direct and formal collaboration

Key stakeholders	Objectives pursued or interests in relation to MCA-S Monitoring-Evaluation (<i>expressed or not</i>)	Power / capacity (key strengths and weaknesses) in relation to ME	Relational position (<i>objective</i>)	Strategies / actions envisaged (<i>for the benefit of MCA-S's ME</i>)
5 MCA-Senegal Support Unit	Monitoring and Evaluation of the implementation of MCA-Senegal Identification of implementation constraints Monitoring and evaluation of the performance of the program management unit Evaluation of the implementing partners' participation	Consultation in the implementation and development of the MEP Support-advice in the functioning of MEP Intermediation with other ME mechanisms among development partners	Support-advice in the implementation and functioning of MEP	<ul style="list-style-type: none"> • <u>Observe</u>: the directives, policy amendments, strategies, other ME mechanisms; • <u>Communicate</u> : formal (correspondences, briefing notes, reports) and informal (restitution of studies, organization of missions, participation in forums / workshops / seminars) on indicators, performance, analyses of MEP; • <u>Satisfy</u>: all identified and new information needs; • <u>Collaborate</u> : direct and formal collaboration
6 Project Teams and Directorates of MCA-Senegal	Monitoring the performance of activities conducted under the supervision or control of the team Evaluation of the team's performance Identification of implementation constraints	Providing information on the implementation and indicators, update Analysis and interpretation of results Reporting	Update, provide information about indicators Coordination, planning, implementation, monitoring and functioning of MEP	<ul style="list-style-type: none"> • <u>Communicate</u>: formal (correspondences, briefing notes, reports) and informal (restitution of studies, organization of missions, participation in forums / workshops / seminars) on indicators, performance, analyses of MEP; strengthen capacities in ME of activities carried out under their supervision; • <u>Satisfy</u>: all identified and new information needs; if it does not entail additional costs • <u>Collaborate</u> : direct and formal and informal collaboration
7 MCA-Senegal Monitoring & Evaluation Directorate	Monitoring the performance of activities conducted under the supervision or control of the team Identification of implementation constraints Providing information on the performance and indicators Organization, functioning and management of PE mechanism	Providing information on the implementation and indicators Analysis and interpretation of results Reporting on the activities and their performance Ensuring the quality and reliability of ME data	Lead facilitator, Manager, Information System Controller Implementation of changes (MEP update and revision)	
8 Direct Beneficiaries (Households and Firms in the intervention zone)	Obtaining information on MCA-S activities and on the level of performance	Providing information and data on their appreciation of the implemented activities Identification of constraints	Beneficiaries of MEP products (information)	<ul style="list-style-type: none"> • <u>Observe</u>: their interest on the data provided (format or type of medium used) ; • <u>Communicate</u> : formal and informal (restitution, organization of meetings, participation in activities) on the indicators, performances, analyses of the MEP ; strengthen capacities in ME ; • <u>Satisfy</u> : all identified and new information needs, if this does not entail any additional costs; • <u>Collaborate</u> : indirect, formal collaboration (through communication media) and informal collaboration (personal communication).
9 Implementing Partners (SAED and AGERROUTE)	Benefiting from the support and opportunities offered by the project Supporting tertiary development and guidance of producers' organizations	Providing primary and secondary data to the MEP of MCA-S Providing secondary data for the MEP of MCA-S	Intervene (provide information) in the data collection process Beneficiaries of support for capacity building in ME; capitalization	<ul style="list-style-type: none"> • <u>Observe</u>: their ME mechanisms; the observations and proposals for improvement on the MEP and the products; • <u>Communicate</u> : formal (correspondences, briefing notes, reports) and informal (restitution of studies, organization of missions, participation in forums / workshops / seminars) on indicators, performance, analyses of MEP;

Key stakeholders	Objectives pursued or interests in relation to MCA-S Monitoring-Evaluation (<i>expressed or not</i>)	Power / capacity (key strengths and weaknesses) in relation to ME	Relational position (<i>objective</i>)	Strategies / actions envisaged (<i>for the benefit of MCA-S's ME</i>)
			Provide resources (PMU), data and information (ME internal arrangements)	<ul style="list-style-type: none"> • <u>Satisfy</u>: all identified and new information needs; if it does not entail any additional costs; • <u>Collaborate</u> : direct, formal and informal collaboration between ME mechanisms; identify axes of convergence and synergy.
10 Partners (ANSD, DEEC)	Data exchanges and collaboration between their ME mechanisms and that of MCA-S Obtaining information on MCA-S activities and level of performance	Providing secondary data for MCA-S' MEP	Partner in the institution of the data quality strategy(ANSD)	<ul style="list-style-type: none"> • <u>Observe</u>: their requirements on ME data quality; the observations and proposals for improvement on the MEP and the products; • <u>Communicate</u> : formal (correspondences, briefing notes, reports) and informal (restitution of studies, organization of missions, participation in forums / workshops / seminars) on indicators, performance, analyses of MEP; • <u>Satisfy</u> /all identified and new information needs; if it does not entail any additional costs ; • <u>Collaborate</u> : direct, formal and informal collaboration, through a cooperation agreement.
11 Consultants, Service Providers	Benefiting from business opportunities offered by MCA-S' ME Providing data on MCA-S activities	Providing secondary data for MCA-S's MEP	Intervene in the collection of data on the activities, through surveys or studies Actor in the institution of the data quality strategy	<ul style="list-style-type: none"> • <u>Observe</u>: the quality of data provided, compliance with the terms of reference, the methodologies used, etc.; • <u>Communicate</u>: formal (correspondences, notes, letters, mailing) and informal (meeting, restitution, etc.); • <u>Collaborate</u> : direct, formal and informal collaboration.
12 Media	Obtaining information on MCA-S activities and the level of performance	Power of influence, partner in the dissemination of information on MCA-S Providing information and data on the appreciation of the implemented activities	Power of influence Beneficiaries of MEP products (information)	<ul style="list-style-type: none"> • <u>Observe</u> : their interests in the data provided (format or type of medium used), use of data and the publications of articles on the activities ; • <u>Communicate</u> : formal (workshops, organization of visits, providing MEP products, workshops to present results) on the indicators, performances, analyses of the MEP; • <u>Satisfy</u> : all identified and new information needs; if it does not entail any additional costs; • <u>Collaborate</u> : direct and formal collaboration.
13 General Public	Obtaining information on MCA-S activities and the level of performance	Providing information and data on the appreciation of the implemented activities Identification of constraints	Beneficiaries of MEP products (information)	<ul style="list-style-type: none"> • <u>Observe</u>: their interests in the data provided (format or type of medium used); • <u>Communicate</u>: formal through the Press, MEP and Web Site productions; • <u>Satisfy</u>: all information needs.

6.4. Annex IV: M&E organization Chart



6.5. Annex V: Performance indicators targets

Indicator	Units	Indicator Classification Type	Baseline	Baseline Year	Year 1	Year 2	Year 3	Year 4	Year 5	Long Term (for outcome indicators)
					Oct. 2010 - Sept. 2011	Oct. 2011 - Sept. 2012	Oct. 2012 - Sept. 2013	Oct. 2013 - Sept. 2014	Oct. 2014 - Sept. 2015	
PROGRAM										
Indicator P1. Rate of variation of beneficiaries' net income drawn from the Irrigation Project	Percentage	Level	0	2011-12		0			N/A	35
Indicator P.2. Change in vehicle operating costs per trip/kilometer for the RN2	US\$	Level	0	2010		0			0.05	N/A
Indicator P3. Change in vehicle operating costs per trip/kilometer for the RN6	US\$	Level	0	2010		0			0.16	N/A
IRRIGATION AND WATER RESOURCES MANAGEMENT PROJECT										
Indicator IWRM.1. : Rice Paddy Production (Delta/ Ngalenka)	Tons	Level	102 000	2010-11	102 000	107 000	107 000	107 000	111 000	277 000
Indicator IWRM.2. : Tomato production (Delta and Ngalenka)	Tons	Level	12 700	2010-11	12 700	14 200	14 200	14 200	35 500	115 000
Indicator IWRM.3. : Onion production (Delta and Ngalenka)	Tons	Level	10 900	2010-11	10 900	16 000	16 000	16 000	40 000	130 000
Indicator IWRM.4. : Cropping intensity (Delta)	Percentage	Level	60%	2011-12	60%	60%	60%	60%	70%	150%
Indicator IWRM.5. : Cropping intensity (Ngalenka)	Percentage	Level	20%	2011-12	20%	20%	0	100%	120%	180%
Indicator IWRM.6. : Total area with improved irrigation infrastructure (Delta and Ngalenka)	Ha	Level	34 848	2010-11	34 848	36 541	37 554	38 381	38 381	42 721
Indicator IWRM.7. : Hectares under production across cropping seasons (Delta and Ngalenka)	Ha	Level	21 400	2010-11	20 300	20 300	20 300	20 300	23 600	56 600

Indicator	Units	Indicator Classification Type	Baseline	Baseline Year	Year 1	Year 2	Year 3	Year 4	Year 5	Long Term (for outcome indicators)
					Oct. 2010 - Sept. 2011	Oct. 2011 - Sept. 2012	Oct. 2012 - Sept. 2013	Oct. 2013 - Sept. 2014	Oct. 2014 - Sept. 2015	
Indicator IWRM.8. : Total flow measured (Q) at the Ronkh and G works (Delta)	Rate	Level	20	2010-11	20	20	20	20	65	N/A
Indicator IWRM.9.: Number of hectares formalized (having a land allocation title and registered)	Ha	Cumulative	0	2010-11	0	0	0	748	3 440	N/A
Indicator IWRM.10. : Percentage of land disputes resolved	%	Cumulative	0	2010-11	0	0	0	30	50	50
Indicator IWRM.11. : Length of rehabilitated hydraulic axes in the Delta	Km	Cumulative	0	2010-11	0	0	0	40	144,5	N/A
Indicator IWRM.12. : Length of the main drainage canal built in the Delta	Km	Cumulative	0	2010-11	0,0	0,0	0,0	0,0	40,8	N/A
Indicator IWRM.13. : Total length of canals and drains built in Ngalenka	Km	Cumulative	0	2010-11	0,0	0	25	25	25	N/A
Indicator IWRM.14. : Hectares under improved irrigation (with MCC support)	Ha	Cumulative	0	2011-12		0	0	35 480	35 480	42 721
Indicator IWRM.15. : Stakeholders trained	Number	Cumulative	0	2010-11	0	0	200	400	600	N/A
Indicator IWRM.16. : Number of hectares of mapped land	Ha	Cumulative	0	2010-11	41 862	41 862	41 862	41 862	41 862	N/A
Indicator IWRM.17. : Conflicts successfully mediated	Number	Cumulative	0	2011-12		0	0	N/A	N/A	N/A
Indicator IWRM.18. : Parcels corrected or incorporated in land system	Parcels	Cumulative	0	2011-12		0	5 694	5 787	5 787	N/A
Indicator IWRM.19. : Land rights formalized ¹²	Number	Cumulative	0	2011-12		0	0	600	2500	2500
Indicator IWRM.20. : Value of signed irrigation feasibility and design contracts	US\$	Cumulative	0	2010-11	2 560 950	3 658 398	11 494 547	11 494 547	11 494 547	N/A

¹² This indicator refers to households, businesses and legal entities that have formalized land rights.

Indicator	Units	Indicator Classification Type	Baseline	Baseline Year	Year 1	Year 2	Year 3	Year 4	Year 5	Long Term (for outcome indicators)
					Oct. 2010 - Sept. 2011	Oct. 2011 - Sept. 2012	Oct. 2012 - Sept. 2013	Oct. 2013 - Sept. 2014	Oct. 2014 - Sept. 2015	
Indicator IWRM.21. : Percent disbursed of irrigation feasibility and design contracts	%	Level	0	2010-11	12	32	54	77	100	N/A
Indicator IWRM.22. : Value disbursed of irrigation feasibility studies and design contracts	US\$	Cumulative	0	2010-11	1 379 345	3 678 255	6 207 055	8 850 801	11 494 547	N/A
Indicator IWRM.23. : Value of signed irrigation construction contracts	US\$	Cumulative	0	2010-11	0	19 153 347	130 883 874	130 883 874	130 883 874	N/A
Indicator IWRM.24. : Percent disbursed of irrigation construction contracts	%	Level	0	2010-11	0	0	37	80	100	N/A
Indicator IWRM.25. : Value disbursed for irrigation construction contracts	US\$	Cumulative	0	2010-11	0	0	48 427 033	104 707 099	130 883 874	N/A
Indicator IWRM.26. : Number of training sessions on land tenure security tools	Number	Cumulative	0	2010-11	0	0	30	54	72	N/A
Indicator IWRM.27. : Number of man/days of training on land tenure security tools	Number	Cumulative	0	2011-12		0	2400	4800	6400	N/A
Indicator IWRM.28. : Number of participants in training modules on land tenure security tools	Number	Cumulative	0	2011-12		0	600	1200	1600	N/A
Indicator IWRM.29. : Temporary employment generated in irrigation	Number	Cumulative	0	2011-12		N/A	N/A	N/A	N/A	N/A
Indicator IWRM.30. : Number of land management committees and commissions set up or improved upon	Number	Cumulative	0	2010-11	9	9	9	9	9	N/A
ROADS REHABILITATION PROJECT										
Indicator PRR.1. : Average annual daily traffic (AADT) Richard-Toll – Ndium	Number	Level	1 029	2011-12		1 029			1155	N/A

Indicator	Units	Indicator Classification Type	Baseline	Baseline Year	Year 1	Year 2	Year 3	Year 4	Year 5	Long Term (for outcome indicators)
					Oct. 2010 - Sept. 2011	Oct. 2011 - Sept. 2012	Oct. 2012 - Sept. 2013	Oct. 2013 - Sept. 2014	Oct. 2014 - Sept. 2015	
Indicator PRR.2 : Average annual daily traffic (AADT) Ziguinchor – Tanaff	Number	Level	571	2007		181			963	N/A
Indicator PRR.3. : Average annual daily traffic (AADT) Tanaff – Kolda	Number	Level	301	2007		23			562	N/A
Indicator PRR.4. : Average annual daily traffic (AADT) Kolda – Kounkané	Number	Level	798	2007		716			1426	N/A
Indicator PRR.5. : Rate of change in the duration of travel time on RN2	%	Level	0	2011-12		0			-15	-15
Indicator PRR.6. : Rate of change in the duration of travel time on RN6	%	Level	0	2011-12		0			-50	-50
Indicator PRR.7. : Roughness (RN2)	m/km	Level	3,2	2011-12		3,2			2,4	N/A
Indicator PRR.8 : Roughness (RN6)	m/km	Level	13,0	2011-12		13,0			2,5	N/A
Indicator RRP.9. : Road Traffic Fatalities	Number	Level	43	2013-14				N/A	N/A	N/A
Indicator PRR.10 : Kilometers of rehabilitated roads on RN2	Km	Cumulative	0	2010-11	0	0	0	0	120	N/A
Indicator PRR.11 : Kilometers of rehabilitated roads on RN6	Km	Cumulative	0	2010-11	0	0	0	0	252	N/A
Indicator RRP.12. : Kilometers of roads under design	Km	Cumulative	0	2010-11	406	406	406	406	406	N/A
Indicator RRP.13. : Value of signed road feasibility and design contracts	US\$	Cumulative	0	2010-11	2 345 311	2 345 311	9 794 690	9 794 690	9 794 690	N/A
Indicator RRP.14. : Percent disbursed of road feasibility and design contracts	%	Level	0	2010-11	9	21	52	81	100	N/A
Indicator RRP.15. : Value disbursed of signed road feasibility and design contracts	US\$	Cumulative	0	2014-15	881 522	2 056 884	5 093 238	7 933 698	9 794 690	N/A

Indicator	Units	Indicator Classification Type	Baseline	Baseline Year	Year 1	Year 2	Year 3	Year 4	Year 5	Long Term (for outcome indicators)
					Oct. 2010 - Sept. 2011	Oct. 2011 - Sept. 2012	Oct. 2012 - Sept. 2013	Oct. 2013 - Sept. 2014	Oct. 2014 - Sept. 2015	
Indicator RRP.16. : Value of signed road construction contracts	US\$	Cumulative	0	2010-11	0	0	258 924 397	258 924 397	258 924 397	N/A
Indicator RRP.17.: Percent disbursed of road construction contracts	%	Level	0	2010-11	0	0	22	66	100	N/A
Indicator RRP.18. : Value disbursed of road construction contracts	US\$	Cumulative	0	2014-15	0	0	56 963 367	170 890 102	258 924 397	N/A
Indicator RRP.19. : Kilometers of roads under works contracts	Km	Cumulative	0	2010-11	0	0	372	372	372	N/A
Indicator RRP.20. : Temporary employment generated in road construction	Number	Cumulative	0	2011-12		0	N/A	N/A	N/A	N/A
Indicator RRP.21. : Kilometers of roads completed	Km	Cumulative	0	2010-11	0	0	12	234	372	N/A

6.6. Annex VI: Performance Indicators Tracking Sheet

Indicator Sheet				
<i>Project title:</i>		<i>Responsible for the Indicator :</i>		
<i>Objective :</i>		<i>Level:</i>		
<i>Name of indicator:</i>		<i>Definition (scope, specificity, etc.) :</i>		
<i>Measured values (compared) :</i>		<i>Origin of data (source) :</i>		
<i>Units :</i>	<i>Baseline :</i>	<i>Target at the end of the Compact :</i>	<i>Frequency of collection:</i>	<i>Indicator Classification Type :</i>
<i>Users of the monitoring results (and collected data) :</i>				
Period	Annual Target	Real Value	% implemented during the year	Deflection
Year 1				
Year 2				
Year 3				
Year 4				
Year 5				
<i>Type of representation (graphic or other):</i>				
<i>Use, analysis, interpretation, recommendations, decisions, actions :</i>				
- What does ...represent (compare the graph) ?				
- What interpretation can be made?				
- What can be recommended following these observations?				
- What decisions should be taken?				
- What are the actions that need to be taken?				
Note on monitoring:				

6.7. Annex VII: Time Chart of the establishment and operation of the Monitoring-Evaluation Plan

	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Planning																				
Validation and Approval of the Monitoring-Evaluation Plan																				
Development of the Monitoring-Evaluation Plan																				
Preparation and update of work plans																				
Instituting management procedures and tools at the level of projects, directorates and PMU																				
Establishing an Information System																				
Establishing an integrated GIS																				
Annual reviews of MEP and revisions																				
Study on data quality																				
Training																				
Team Monitoring & Evaluation Directorate																				
Teams of other MCA-S Directorates																				
Focal Points PMU, implementing agencies																				
Implementation																				
Monitoring																				
Compilation and analysis of indicators																				
Submission of indicators tracking tables																				
Submission of annual reports																				
Surveys:																				
Household and Business Survey																				
Roads Impact Surveys																				
Road & International Roughness Index Study																				
Evaluation																				
Mid-term evaluation																				
Final evaluation																				
Data quality review (external)																				
Coordination impact evaluation																				

6.8.1. Framework of Quarterly Narrative Report

PROJECT NAME

- ☐ Content / Introduction :
 - Summary of key activities of the preceding quarter and those of the following quarter in terms of deliverables, review, management of project, planning update, etc.
 - A. Activity 1**
 - a. Sub-Activity 1
 - b. Sub-Activity 2
 - B. Activity 2**
- ☐ Progress / Performance:
 - Explain the progress of the project's activities, the delays and measures taken or to be taken to compensate for these delays, if appropriate. Describe how these delays affect the quarterly disbursement request.
 - A. Activity 1**
 - a. Sub-Activity 1
 - b. Sub-Activity 2
 - B. Activity 2**
- ☐ Costs :
 - Explain all the savings and expenditure overruns of more than the quarter during the preceding quarter and the remedial actions (if they had been taken).
 - A. Activity 1**
 - a. Sub-Activity 1
 - b. Sub-Activity 2
 - B. Activity 2**
- ☐ Problems/ Difficulties:
 - Provide a brief update of the progress of projects by Activity, all the potential and specific problems and measures to be taken to reduce their effects.
 - A. Activity 1**
 - a. Sub-Activity 1
 - b. Sub-Activity 2
 - B. Activity 2**
- ☐ Risks :
 - Provide a brief update of the project risks during the quarter and the measures to be taken to mitigate them. The risks should also include the key risks described under the risk register.
 - A. Activity 1**
 - a. Sub-Activity 1
 - b. Sub-Activity 2
 - B. Activity 2**


6.8.2. Framework of the Quarterly Progress Report for MCA-S' target public

LETTER HEAD WITH THE NAME OF THE DIRECTORATE OF ORIGIN

☐ INTRODUCTION

- Recall the objectives of the quarter for the PMU, the Directorate, the service responsible for General Observations on the progress of activities during the quarter (executive summary of the quarter for the PMU, the Directorate, the service)

☐ STATE OF IMPLEMENTATION OF THE QUARTERLY WORK PLAN

 Outcome or Result N°..... : "Entitled"

- Quarterly balance sheet and analysis
- Reminder of planned activities (qualitative objectives:
- The accomplishments during the quarter per activity and tasks:
- Name of activity:
 - Accomplishments
 - Performance Analysis
 - Specific difficulties
- Name of activity:
 - Accomplishments
 - Performance Analysis
 - Specific difficulties

Table: Level of success of Product Performance Indicators during the quarter/20....

Outcome XX : "Entitled"	Indicators	Targets	Accomplishment	Efficiency rate	Observations justification of variances
	Indicators du product				
Code according to the logical framework and name of Activity	Indicators	Targets	Accomplishment	Efficiency rate	
AXX1.	Indicators			....	....
AXX2.	Indicators			....	....
AXX3.	Indicators			....	....
	Indicators			....	....

- Lessons
- Analysis of main constraints experienced and lessons in the implementation of the Product.

☐ DIFFICULTIES ENCOUNTERED AND SOLUTIONS PROPOSED

☐ PERSPECTIVES

- Key focus areas of the project, the PMU, the service or directorate during the next quarter

☐ ANNEXES

- Summary table of level of achievement of activities
- Etc.


6.8.3. Framework of the MCA-S Annual Progress Report

LETTER HEAD WITH THE NAME OF THE DIRECTORATE OF ORIGIN

☐ INTRODUCTION

- Recall the objectives of the quarter for the PMU, the Directorate, the service responsible for General Observations on the progress of activities during the quarter (executive summary of the year for the PMU, the Directorate, the service)

☐ STATE OF IMPLEMENTATION OF THE QUARTERLY WORK PLAN

 Outcome or Result N°..... : "Entitled"

- Quarterly balance sheet and analysis
- Reminder of planned activities (qualitative objectives:
- The accomplishments during the year per activity and tasks:
- Name of activity:
 - Accomplishments
 - Performance Analysis
 - Specific difficulties
- Name of activity:
 - Accomplishments
 - Performance Analysis
 - Specific difficulties

Table: Level of success of Performance Indicators of product..... during the quarter /20

	Indicators	Targets	Accomplishment	Efficiency rate	Observations justification of variances
Outcome XX. : "Title"	Indicators du product				
Code according to the logical framework and name of Activity	Indicators	Targets	Accomplishment	Efficiency rate	
AXX1.	Indicators			....	....
AXX2.	Indicators			....	....
AXX3.	Indicators			....	....
	Indicators			....	....

- Lessons
- Analysis of main constraints experienced and lessons in the implementation of the Product.

☐ DIFFICULTIES ENCOUNTERED AND SOLUTIONS PROPOSED

☐ PERSPECTIVES

- Key focus areas of the project, the PMU, the service or directorate during the next year

☐ ANNEXES

- Summary table of level of achievement of activities during the year
- Table on annual progress against Compact objectives
- Etc.

6.9. Annex IX: Schematic presentation of the M&E Plan tools

Functions	Sources	Key tools	Prime Contractor	Key products
<u>Monitoring component</u> : Monitoring Progress of Projects	<ul style="list-style-type: none"> Budget and Work Program Consultants' activities reports Field mission reports Study reports Procurement plan (PPM) 	<ul style="list-style-type: none"> Audits of costs Audit of schedules S curve Audit of Geotechnicals Deflections per course IRI per segment 	<ul style="list-style-type: none"> Directors des Projects Directors Techniques Direction Monitoring and Evaluation Administrative and Financial Directorate General Management 	<ul style="list-style-type: none"> ✓ Updated and maintained work plan ✓ State of progress of works ✓ Scoreboard of management indicators and operation
<u>Monitoring component</u> : Monitoring Outcomes and Performance	<ul style="list-style-type: none"> Consultants' activity reports Activity reports of teams of directorates, Irrigation and Road Project management Units Surveys Studies Reports of Field Missions Etc. 	<ul style="list-style-type: none"> Performance Indicators Indicator Tracking Table Report on the Progress of Activities (quarterly, year) at the level of PMU, directorates and MCA-S 	<ul style="list-style-type: none"> Monitoring & Evaluation Directorate Irrigation and Roads Project Directorates Technical Directorates General Management 	<ul style="list-style-type: none"> ✓ Report on the Progress of Activities (quarterly, year) ✓ Closing Report ✓ Performance Indicators Tracking Tables
<u>Monitoring component</u> : Risk Monitoring	<ul style="list-style-type: none"> Report on the Progress of Activities Work Plan Procurement Plan State financial implementation 	<ul style="list-style-type: none"> Risk Indicators Tracking Sheet Risk analysis 	<ul style="list-style-type: none"> Projects Directorate Monitoring & Evaluation Directorate General Management 	<ul style="list-style-type: none"> ✓ Risk Indicators Tracking Table ✓ Risk analysis
<u>Evaluation Component</u>	<ul style="list-style-type: none"> Reports on the Progress of Activities (quarter and year) Visits, meetings, surveys Consultants' reports Etc. 	<ul style="list-style-type: none"> Internal Evaluation Mid-Term Evaluation Final Evaluation Ad Hoc Evaluation Special Studies Household and Business Surveys Surveys of the Impact of roads on the economic activities Counting, Origin and Destination Surveys 	<ul style="list-style-type: none"> Monitoring and Evaluation Directorate General Management Supervisory Board Stakeholders' Committee MCC Washington Government of Senegal 	<ul style="list-style-type: none"> ✓ Annual Report ✓ Closing Report ✓ Mid-term and Final Evaluation Reports ✓ Reports on studies, surveys ✓ Surveys data base

6.10. Annex X: Communication Matrix of the M&E Plan

Phases	Start Implementation of the MEP	End of Quarter	End of Year	End of Compact
Communication objectives	<ul style="list-style-type: none"> - Experience sharing, exchange - Sharing the elements of analysis of the baseline surveys 	<ul style="list-style-type: none"> - Communication on the results achieved during the quarter 	<ul style="list-style-type: none"> - Communication on the results achieved during the quarter 	<ul style="list-style-type: none"> - Inform about the Compact results, the level of performance achieved
Body in charge	<ul style="list-style-type: none"> ✓ Communication Directorate ✓ Monitoring and Evaluation Directorate 	<ul style="list-style-type: none"> ✓ General Management ✓ Projects Directorate ✓ M&E Directorate 	<ul style="list-style-type: none"> ✓ M&E Directorate ✓ General Management ✓ Supervisory Board ✓ MCC 	<ul style="list-style-type: none"> ✓ General Management ✓ Supervisory Board ✓ MCC
Type of key message	<ul style="list-style-type: none"> • The participatory process for the implementation of the MEP • Content and products to be generated 	<ul style="list-style-type: none"> • Level of accomplishment of the activities and indicators during the quarter • Overall performance of the quarter • Implementation constraints 	<ul style="list-style-type: none"> • Level of accomplishment of the activities and indicators during the year • Overall performance of the year • Implementation constraints 	<ul style="list-style-type: none"> • Level of accomplishment of the activities and indicators during quarter • Overall performance of the quarter • Implementation constraints
Tools / Media	<ul style="list-style-type: none"> ✓ MCA-S Web Site ✓ Workshop with Stakeholders ✓ Media Day ✓ Validated MEP 	<ul style="list-style-type: none"> ✓ MCA-S Web Site ✓ Workshop with Stakeholders ✓ Quarterly Progress Report 	<ul style="list-style-type: none"> ✓ MCA-S Web Site ✓ Workshop with Stakeholders ✓ Media Day: presentation of the annual assessment ✓ Annual Progress Report 	<ul style="list-style-type: none"> ✓ Capitalization Report ✓ Completion Report ✓ Media Day: presentation of the annual assessment
Targets	<ul style="list-style-type: none"> • Stakeholders' Committee • General Public • Media • Development Partners 	<ul style="list-style-type: none"> • Supervisory Board • Stakeholders' Committee • General Public • Media • Development Partners 	<ul style="list-style-type: none"> • Supervisory Board • Stakeholders' Committee • General Public • Media • Development Partners 	<ul style="list-style-type: none"> • Supervisory Board • Stakeholders' Committee • General Public • Media • Development Partners



CLOSE OUT Monitoring and Evaluation Plan

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## Memorandum Close out MEP/2015

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With the support of the:



|                                                     |           |
|-----------------------------------------------------|-----------|
| N° Version :                                        | N° 03     |
| Date :                                              | 12/2/2015 |
| Date d'approbation par le Conseil de Surveillance : | 9/18/2015 |
| Date d'approbation par MCC :                        | 10/5/15   |

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## ACRONYMS

|       |                                           |
|-------|-------------------------------------------|
| IWRM: | Irrigation and Water Resources Management |
| NA:   | Not Applicable                            |
| RRP:  | Roads Rehabilitation Project              |
| TBD:  | To Be Determined                          |

## DOCUMENTATION

Guidance on Common Indicator, May 2012, MCC  
 Lettre SAED N° 1959-12 du 12-12-2012  
[Méthode d'estimation des carrés de rendement du Riz](#)  
[Méthode d'estimation des rendements des cultures de diversification](#)  
 Plan de Travail du Projet Réhabilitation Routes  
 Plan de travail du Projet IWRM  
[Rapport à mi-parcours de la CNCE et Enquêtes O/D AGEROUTE, Janvier 2013](#)  
[Rapport d'Orientation Méthodologique de l'Enquête de référence](#)  
[Rapport mesure de débit du 12 Mars 2012"](#) SAED, mars 2012)  
 Rapport Plan d'Action de Réinstallation de Ngalenka Rapport PAR Ngalenka (Direction ESA).  
[Rapport Technique d'orientation Version Finale de la CNCE de l'AGEROUTE, avril 2012](#)  
[Résultats d'enquête Trafic et Origine – Destination – AGEROUTE, Sept. 2012 :](#)  
 RN2 Model, MCC  
 Statistiques de Campagne 2011 de la SAED  
[TD-37 – ERR Indicators – IRI data collection, traffic counts and calculation of VOC and TTC with sensitivity analysis](#) Principe de calcul de l'IRI, AGEROUTE, 2012

PERFORMANCE INDICATORS  
AT THE COMPACT GOAL LEVEL

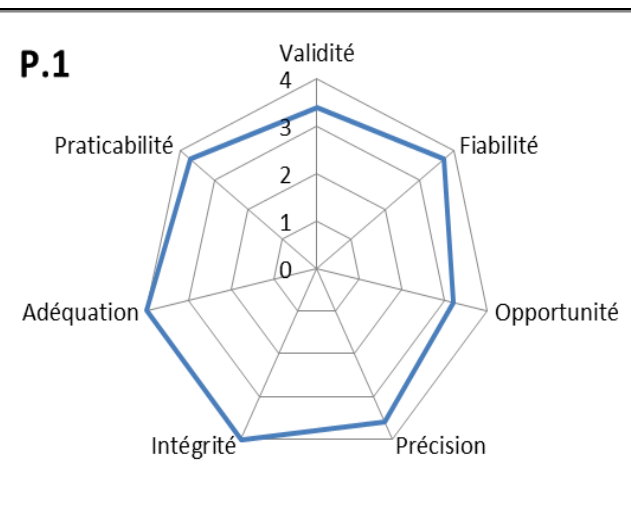
1. Performance Indicators and Compact Targets

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## 1.1. Indicator P.1. Rate of variation of beneficiaries' net income drawn from the Irrigation Project

| INDICATOR BASIC DETAILS                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                             |                          |                                |                                                                  |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                               | Rates of variation of beneficiaries' net income drawn from the Irrigation Project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                             |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                      | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Current Indicator Number                                                                                    | P.1.                     | All Previous Indicator Numbers | P.1.                                                             |
| Level                                                        | Goal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Classification                                                                                              | Level                    | Unit of Measure                | Percentage                                                       |
| Detailed Definition                                          | Variation of beneficiaries' net income, in real terms (according to gender), drawn from the Irrigation Project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                             |                          |                                |                                                                  |
| Frequency of Reporting                                       | AT THE END OF THE COMPACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                             | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregation                                               | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | YES                                                                                                         |                          |                                |                                                                  |
|                                                              | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | NO                                                                                                          |                          |                                |                                                                  |
|                                                              | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | YES (Quintile 1 (<1.25 \$/d), Quintile 2 (<2 \$/d), Quintile 3 (between 2 and 3\$/d), Quintile 4 (>4 \$/d)) |                          |                                |                                                                  |
|                                                              | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | NO                                                                                                          |                          |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                             |                          |                                |                                                                  |
| Justification for Including Indicator                        | The goal of the MCA-Senegal Compact is to help reduce poverty in Senegal through economic growth by improving agricultural productivity and access to markets and services thanks to investments in developmental infrastructure in the roads and irrigation sectors. Thus, in the IWRM project area, this objective will be assessed by the variation in the beneficiaries' income. Indicator P.1 will therefore provide elements of response with regard to the variation of the populations' income and the cause of this variation; this will help assert or not, whether the program contributed to it or not. |                                                                                                             |                          |                                |                                                                  |
| How does the indicator link to the ERR?                      | The income drawn from irrigation is highly correlated with the production and marketing of products of the irrigated areas. By addressing the factors limiting this production and, primarily the "Water" and "Land or land capital" factors, the program contributes to land tenure security and income increase. Additionally, any increase in income drawn from irrigation will help improve the economic viability of the program's activities.                                                                                                                                                                 |                                                                                                             |                          |                                |                                                                  |
| How does the indicator link to the BA?                       | The increase in income drawn from irrigation will step up the purchasing power of the beneficiary populations and will also impact on the other activities upstream or downstream of the agricultural production.                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                             |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?        | The project is anticipated to increase the hectares under production and cropping intensity. These factors are expected to lead to an increase in income drawn from irrigation, which will be measured in the evaluation. To measure the impact of the project on income, the evaluation will include measurement in comparison zones in which the the program's activities have not been implemented. The comparison between the initial and final situations of the two groups will represent the program's contribution to income variation.                                                                     |                                                                                                             |                          |                                |                                                                  |
| Justification for Disaggregation                             | The indicator shall be disaggregated by gender in order to note the share of the different sexes in the variation of income observed thanks to irrigation. While income variation is assigned to the household, it will be difficult to breakdown the figures according to gender; in this context, the results will be presented in a heading entitled "Unspecified".                                                                                                                                                                                                                                              |                                                                                                             |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                             |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                | Monitoring - Evaluation Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                             |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA: | Sidiki Diomana DIOP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Phone                                                                                                       | 221.78. 637 02 32        | E-mail                         | <a href="mailto:sddiop@mcasenegal.org">sddiop@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data        | PMU-ANSD collected the data for the baseline survey in 2012 through an Implementing Entity Agreement between ANSD and MCA-S. To collect data for the final survey MCA-S will seek the services of a consultant in 2015.                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                             |                          |                                |                                                                  |

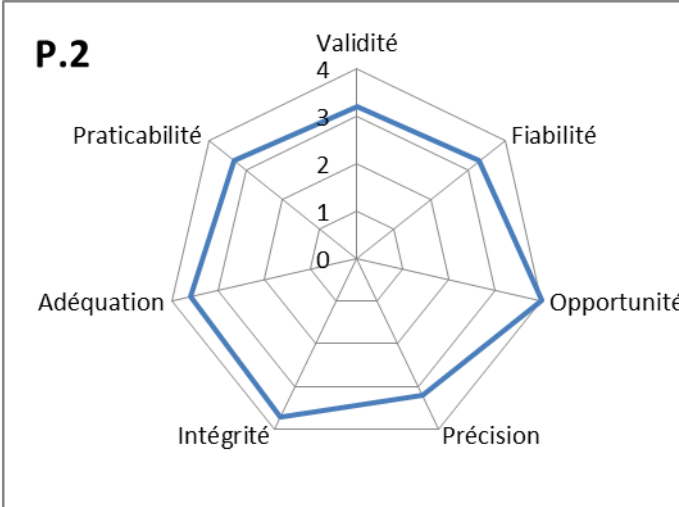


|                                                                                                     |                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                        |                                                                                                        |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Detailed description of data collection methodology (including any calculations computed by source) | The survey is conducted using a representative sampling of agricultural producers' households identified in the Irrigation Project's impact zone. During the 3 passages at the end of the identified baseline periods (1/12/2011-31/03/2012; 01/04/2012-31/07/2012; 01/08/2012-30/11/2012). The follow-up survey will be undertaken in 2015. |                                                                                                                                                                                        |                                                                                                        |
| If survey data, verbatim question(s) posed to respondent                                            | Refer to Questionnaire Irrigation household:<br>- Section D3: production per crop<br>- Section D4 : marketing per crop<br>- Section G : Non-agricultural income                                                                                                                                                                              |                                                                                                                                                                                        |                                                                                                        |
| Detailed description of how data is transmitted from source to MCA                                  | Data is kept in the form of data base for the initial survey and the follow-up survey.                                                                                                                                                                                                                                                       |                                                                                                                                                                                        |                                                                                                        |
| Frequency and timing of data acquisition                                                            | Twice: at the start and after project completion                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                        |                                                                                                        |
| Names of verification sources                                                                       | Means of verification                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                        |                                                                                                        |
| Base surveys: Report and data bases                                                                 | Pivot table drawn on the data base                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                        |                                                                                                        |
| Final surveys: Report and data bases                                                                | Pivot table drawn on the data base                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                        |                                                                                                        |
| Location of Data Storage                                                                            | MCA-Senegal                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                        |                                                                                                        |
| INDICATOR DATA QUALITY                                                                              |                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                        |                                                                                                        |
| Date of Data Quality Review                                                                         | November 2014                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                        |                                                                                                        |
| Main findings of data quality review                                                                | Average Score (out of 4)                                                                                                                                                                                                                                                                                                                     | Recommendations                                                                                                                                                                        | <p><b>P.1</b></p>  |
| 1. VALIDITY – Does the data clearly represent the desired results?                                  | 3,4                                                                                                                                                                                                                                                                                                                                          | N/A                                                                                                                                                                                    |                                                                                                        |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time?                | 3,7                                                                                                                                                                                                                                                                                                                                          | N/A                                                                                                                                                                                    |                                                                                                        |
| 3. TIMELINESS- Are the data current and frequently collected?                                       | 3,2                                                                                                                                                                                                                                                                                                                                          | N/A                                                                                                                                                                                    |                                                                                                        |
| 4. PRECISION – Does the data have an acceptable margin of error?                                    | 3,6                                                                                                                                                                                                                                                                                                                                          | N/A                                                                                                                                                                                    |                                                                                                        |
| 5. INTEGRITY- Is the data free from manipulation?                                                   | 4,0                                                                                                                                                                                                                                                                                                                                          | N/A                                                                                                                                                                                    |                                                                                                        |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?                    | 4,0                                                                                                                                                                                                                                                                                                                                          | The growth rate of agricultural income would measure the impact of the project more accurately. Otherwise, at the level of the household, consumer spending would be more appropriate. |                                                                                                        |
| 7. PRACTICABILITY- Is the data current and frequently collected?                                    | 3,7                                                                                                                                                                                                                                                                                                                                          | N/A                                                                                                                                                                                    |                                                                                                        |
| Overall assessment                                                                                  | 3,7                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                        |                                                                                                        |
| Action taken in response to data quality review                                                     | - Apart from the agricultural income, the survey gathered data on the consumption and assets of households                                                                                                                                                                                                                                   |                                                                                                                                                                                        |                                                                                                        |
| Known data limitations and significance                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                        |                                                                                                        |
| Actions taken to address data limitations                                                           | Not Applicable                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                        |                                                                                                        |
| INDICATOR BASELINE INFORMATION                                                                      |                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                        |                                                                                                        |

|                                                                             |                                                                                                                                                                                                                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                           |                                |
|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| Old Baseline                                                                | 0%                                                                                                                                                                                                                                                                                                                                                         | Old Baseline Year | 2009-2010                                                     | Source of old Baseline                                                                                                                                                                                    | MCA-S Work plan                |
| New Baseline                                                                | 0%                                                                                                                                                                                                                                                                                                                                                         | New Baseline Year | 2011-2012                                                     | Source of New Baseline                                                                                                                                                                                    | Data Bases of baseline surveys |
| Justification for Baseline Change (if any)                                  | The baseline survey initially scheduled in 2010-2011 was delayed following the termination of the Contract with the selected consultant. The survey was entrusted to ANSD through an Implementing Entity Agreement signed in September 2011. The baseline survey was conducted for the December 2011 – November 2012 period, i.e. prior to the works phase |                   |                                                               |                                                                                                                                                                                                           |                                |
| INDICATOR TARGET CALCULATIONS                                               |                                                                                                                                                                                                                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                           |                                |
|                                                                             | Target                                                                                                                                                                                                                                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                           |                                |
| YEAR 1                                                                      | Old                                                                                                                                                                                                                                                                                                                                                        | New               | Justification for changes to targets or calculations (if any) | The baseline survey was finally conducted in the December 2011 – November 2012 period, i.e. prior to the works phase.                                                                                     |                                |
| Oct. 2010 - Sept. 2011                                                      | N/A                                                                                                                                                                                                                                                                                                                                                        | N/A               |                                                               |                                                                                                                                                                                                           |                                |
| Explanation of assumptions and inputs to target calculations                |                                                                                                                                                                                                                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                           |                                |
| YEAR 2                                                                      | Old                                                                                                                                                                                                                                                                                                                                                        | New               | Justification for changes to targets or calculations (if any) | The baseline survey was conducted in the December 2011 – November 2012 period, i.e. Prior to the works phase. Thus, the Year 2 figure for Oct 2011-Sept 2012 is fixed as the baseline, which would be 0%. |                                |
| Oct 2011 - Sept. 2012                                                       | 0%                                                                                                                                                                                                                                                                                                                                                         | 0%                |                                                               |                                                                                                                                                                                                           |                                |
| Explanation of assumptions and inputs to target calculations                |                                                                                                                                                                                                                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                           |                                |
| YEAR 3                                                                      | Old                                                                                                                                                                                                                                                                                                                                                        | New               | Justification for changes to targets or calculations (if any) |                                                                                                                                                                                                           |                                |
| Oct 2012 - Sept. 2013                                                       | N/A                                                                                                                                                                                                                                                                                                                                                        | N/A               |                                                               |                                                                                                                                                                                                           |                                |
| Explanation of assumptions and inputs to target calculations                |                                                                                                                                                                                                                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                           |                                |
| YEAR 4                                                                      | Old                                                                                                                                                                                                                                                                                                                                                        | New               | Justification for changes to targets or calculations (if any) |                                                                                                                                                                                                           |                                |
| Oct 2013 - Sept. 2014                                                       | N/A                                                                                                                                                                                                                                                                                                                                                        | N/A               |                                                               |                                                                                                                                                                                                           |                                |
| Explanation of assumptions and inputs to target calculations                |                                                                                                                                                                                                                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                           |                                |
| YEAR 5                                                                      | Old                                                                                                                                                                                                                                                                                                                                                        | New               | Justification for changes to targets or calculations (if any) |                                                                                                                                                                                                           |                                |
| Oct 2014 - Sept. 2015                                                       | N/A                                                                                                                                                                                                                                                                                                                                                        | N/A               |                                                               |                                                                                                                                                                                                           |                                |
| Explanation of assumptions and inputs to target calculations                |                                                                                                                                                                                                                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                           |                                |
| Long Term Target                                                            | Old                                                                                                                                                                                                                                                                                                                                                        | New               | Justification for changes to targets or calculations (if any) |                                                                                                                                                                                                           |                                |
|                                                                             | 35%                                                                                                                                                                                                                                                                                                                                                        | 35%               |                                                               |                                                                                                                                                                                                           |                                |
| Explanation of assumptions and inputs to target calculations                | The 35% target for post-compact change was set in the compact                                                                                                                                                                                                                                                                                              |                   |                                                               |                                                                                                                                                                                                           |                                |
| COMMENTS :                                                                  |                                                                                                                                                                                                                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                           |                                |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required)         |                                                                                                                                                                                                                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                           |                                |
| <a href="#">Report on Methodological Orientation of the baseline survey</a> |                                                                                                                                                                                                                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                           |                                |

## 1.2. Indicator P.2. Change in vehicle operating costs per trip/kilometer for the RN2

| INDICATOR BASIC DETAILS                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                          |                                |                                                                  |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                               | Change in vehicle operating costs per trip/kilometer for the RN2                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                      | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Current Indicator Number | P.2.                     | All Previous Indicator Numbers | New Indicator                                                    |
| Level                                                        | Goal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Classification           | Level                    | Unit of Measure                | US\$                                                             |
| Detailed Definition                                          | Calculated using the HDM-4 model, the change in vehicle operating costs will be calculated and then averaged across vehicle trips on the road as well as by the number of kilometers to arrive at an average change in vehicle operating costs per trip/kilometer                                                                                                                                                                                                                                                                          |                          |                          |                                |                                                                  |
| Frequency of Reporting                                       | AT THE END OF THE COMPACT, POST COMPACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          | Reporting Period Covered | POST COMPACT                   |                                                                  |
| Disaggregation                                               | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | NO                       |                          |                                |                                                                  |
|                                                              | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | NO                       |                          |                                |                                                                  |
|                                                              | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | NO                       |                          |                                |                                                                  |
|                                                              | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | NO                       |                          |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| Justification for Including Indicator                        | The goal of the MCA-Senegal Compact is to help reduce poverty in Senegal through economic growth by improving agricultural productivity and access to markets and services thanks to investments in developmental infrastructure in the road and irrigation sectors. Thus, in the RRP project area, this goal will be assessed by the rate of variation in the incomes of households. The P2 indicator will therefore provide some answers as to the change in vehicle operating costs on the RN6.                                         |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                      | In addition to increasing mobility, the roads facilitate access to services. Thus, by seeking to improve the quality of the network and reduce transportation costs and duration, the program will help reduce the operating costs of vehicles along the rehabilitated roads, which will result in increased traffic of goods and people who are key to the economic benefits, and consequently, by improving the economic viability of program activities                                                                                 |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                       | The improvement of the network's quality and the reduction of transportation duration and costs will be felt by beneficiaries located within a radius of 5 km of the RN to be rehabilitated, through better access to basic social services as well as economic opportunities.                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?        | The indicator will determine the increase in the income of beneficiary households of the Roads Rehabilitation Project. The roads project is expected to increase income of household and businesses along the roads. To measure the impact of the project on income, the evaluation will include measurement in comparison zones in which the the program's activities have not been implemented. The comparison between the initial and final situations of the two groups will represent the program's contribution to income variation. |                          |                          |                                |                                                                  |
| Justification for Disaggregations                            | The indicator will not be disaggregated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                | Monitoring & Evaluation Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA: | Sidiki Diombana DIOP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Phone                    | 221.78. 637 02 32        | E-mail                         | <a href="mailto:sddiop@mcasenegal.org">sddiop@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data        | MCC collected the data for the baseline using the HDM4 Modeling in 2015.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |

|                                                                                                     |  |                                                                                                                                                                                                                  |                   |           |                                                                                                            |                   |
|-----------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------|------------------------------------------------------------------------------------------------------------|-------------------|
| Detailed description of data collection methodology (including any calculations computed by source) |  | the figures will be pulled from the HDM-4 models conducted by MCC and/or its consultants, based on changes in road measures (IRI, deflections, etc) as well as other model parameters (including traffic counts) |                   |           |                                                                                                            |                   |
| If survey data, verbatim question(s) posed to respondent                                            |  | Refer to Questionnaire Road Project Household                                                                                                                                                                    |                   |           |                                                                                                            |                   |
| Detailed description of how data is transmitted from source to MCA                                  |  | The data are collected by the PMU-AGEROUTE with the support of MCC and transmitted to MCA-S.                                                                                                                     |                   |           |                                                                                                            |                   |
| Frequency and timing of data acquisition                                                            |  | Twice: at the end of compact and during the post compact                                                                                                                                                         |                   |           |                                                                                                            |                   |
| Names of verification sources                                                                       |  | Means of verification                                                                                                                                                                                            |                   |           |                                                                                                            |                   |
| Baseline surveys : Data base                                                                        |  | Data base analysis table                                                                                                                                                                                         |                   |           |                                                                                                            |                   |
| Final surveys: Data base                                                                            |  | Data base analysis table                                                                                                                                                                                         |                   |           |                                                                                                            |                   |
| Location of Data Storage                                                                            |  | MCA-Senegal.                                                                                                                                                                                                     |                   |           |                                                                                                            |                   |
| INDICATOR DATA QUALITY                                                                              |  |                                                                                                                                                                                                                  |                   |           |                                                                                                            |                   |
| Date of Data Quality Review                                                                         |  |                                                                                                                                                                                                                  | November 2014     |           |                                                                                                            |                   |
| Main findings of data quality review                                                                |  | Average Score (out of 4)                                                                                                                                                                                         | Recommendations   |           | <div><b>P.2</b></div>  |                   |
| 1. VALIDITY – Does the data clearly represent the desired results?                                  |  | 3,2                                                                                                                                                                                                              | N/A               |           |                                                                                                            |                   |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time?                |  | 3,3                                                                                                                                                                                                              | N/A               |           |                                                                                                            |                   |
| 3. TIMELINESS- Are the data current and frequently collected?                                       |  | 4.0                                                                                                                                                                                                              | N/A               |           |                                                                                                            |                   |
| 4. PRECISION – Does the data have an acceptable margin of error?                                    |  | 3.2                                                                                                                                                                                                              | N/A               |           |                                                                                                            |                   |
| 5. INTEGRITY- Is the data free from manipulation?                                                   |  | 3.7                                                                                                                                                                                                              | N/A               |           |                                                                                                            |                   |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?                    |  | 3.6                                                                                                                                                                                                              | N/A               |           |                                                                                                            |                   |
| 7. PRACTICABILITY- Is the data current and frequently collected?                                    |  | 3.3                                                                                                                                                                                                              | N/A               |           |                                                                                                            |                   |
| Overall assessment                                                                                  |  | 3,4                                                                                                                                                                                                              |                   |           |                                                                                                            |                   |
| Action taken in response to data quality review                                                     |  | - Apart from the agricultural income, the survey gathered data on the consumption and assets of households                                                                                                       |                   |           |                                                                                                            |                   |
| Known data limitations and significance                                                             |  | N/A                                                                                                                                                                                                              |                   |           |                                                                                                            |                   |
| Actions taken to address data limitations                                                           |  | N/A                                                                                                                                                                                                              |                   |           |                                                                                                            |                   |
| INDICATOR BASELINE INFORMATION                                                                      |  |                                                                                                                                                                                                                  |                   |           |                                                                                                            |                   |
| Old Baseline                                                                                        |  | N/A                                                                                                                                                                                                              | Old Baseline Year | 2009-2010 | Source of old Baseline                                                                                     | Workplan of MCA-S |
| New Baseline                                                                                        |  | 0                                                                                                                                                                                                                | New Baseline Year | 2010      | Source of New Baseline                                                                                     | MCC HDM4 Modeling |
| Justification for Baseline Change (if any)                                                          |  | This indicator was changed to align more directly with the HDM-4 model and the expected economic benefits.                                                                                                       |                   |           |                                                                                                            |                   |
| INDICATOR TARGET CALCULATIONS                                                                       |  |                                                                                                                                                                                                                  |                   |           |                                                                                                            |                   |
|                                                                                                     |  | Target                                                                                                                                                                                                           |                   |           |                                                                                                            |                   |

|                                                                     |     |      |                                                               |                                                                                                            |
|---------------------------------------------------------------------|-----|------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| YEAR 1                                                              | Old | New  | Justification for changes to targets or calculations (if any) | This indicator was changed to align more directly with the HDM-4 model and the expected economic benefits. |
| Oct 2010 - Sept. 2011                                               | N/A | N/A  |                                                               |                                                                                                            |
| Explanation of assumptions and inputs to target calculations        |     |      |                                                               |                                                                                                            |
| YEAR 2                                                              | Old | New  | Justification for changes to targets or calculations (if any) | This indicator was changed to align more directly with the HDM-4 model and the expected economic benefits. |
| Oct 2011 - Sept. 2012                                               | 0%  | N/A  |                                                               |                                                                                                            |
| Explanation of assumptions and inputs to target calculations        |     |      |                                                               |                                                                                                            |
| YEAR 3                                                              | Old | New  | Justification for changes to targets or calculations (if any) |                                                                                                            |
| Oct 2012 - Sept. 2013                                               | N/A | N/A  |                                                               |                                                                                                            |
| Explanation of assumptions and inputs to target calculations        |     |      |                                                               |                                                                                                            |
| YEAR 4                                                              | Old | New  | Justification for changes to targets or calculations (if any) |                                                                                                            |
| Oct 2013 - Sept. 2014                                               | N/A | N/A  |                                                               |                                                                                                            |
| Explanation of assumptions and inputs to target calculations        |     |      |                                                               |                                                                                                            |
| YEAR 5                                                              | Old | New  | Justification for changes to targets or calculations (if any) | This target is based on the HDM-4 model completed in 2015.                                                 |
| Oct 2014 - Sept. 2015                                               | N/A | 0.05 |                                                               |                                                                                                            |
| Explanation of assumptions and inputs to target calculations        |     |      |                                                               |                                                                                                            |
| Long Term Target                                                    | Old | New  | Justification for changes to targets or calculations (if any) |                                                                                                            |
|                                                                     | 13% | N/A  |                                                               |                                                                                                            |
| Explanation of assumptions and inputs to target calculations        |     |      |                                                               |                                                                                                            |
| COMMENTS :                                                          |     |      |                                                               |                                                                                                            |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |     |      |                                                               |                                                                                                            |
|                                                                     |     |      |                                                               |                                                                                                            |

## 1.3. Indicator P.3. Change in vehicle operating costs per trip/kilometer for the RN6

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                  |                          |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Change in vehicle operating costs per trip/kilometer for the RN6                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                  |                          | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Current Indicator Number                                                                                                                                                                                         | P.3.                     | All Previous Indicator Numbers | P.3.                                                                    |
| Level                                                                                               | Goal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Classification                                                                                                                                                                                                   | Level                    | Unit of Measure                | US\$                                                                    |
| Detailed Definition                                                                                 | Calculated using the HDM-4 model, the change in vehicle operating costs will be calculated and then averaged across vehicle trips on the road as well as by the number of kilometers to arrive at an average change in vehicle operating costs per trip/kilometer                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                  |                          |                                |                                                                         |
| Frequency of Reporting                                                                              | AT THE END OF THE COMPACT, POST COMPACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                  | Reporting Period Covered | POST COMPACT                   |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | NO                                                                                                                                                                                                               |                          |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | NO                                                                                                                                                                                                               |                          |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | NO                                                                                                                                                                                                               |                          |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | NO                                                                                                                                                                                                               |                          |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                  |                          |                                |                                                                         |
| Justification for Including Indicator                                                               | The goal of the MCA-Senegal Compact is to help reduce poverty in Senegal through economic growth by improving agricultural productivity and access to markets and services thanks to investments in developmental infrastructure in the road and irrigation sectors. Thus, in the RRP project area, this goal will be assessed by the rate of variation in the incomes of households. The P3 indicator will therefore provide some answers as to the change in vehicle operating costs on the RN6.                                         |                                                                                                                                                                                                                  |                          |                                |                                                                         |
| How does the indicator link to the ERR?                                                             | In addition to increaseing mobility, the roads facilitate access to services. Thus, by seeking to improve the quality of the network and reduce transportation costs and duration, the program will help reduce the operating costs of vehicles along the rehabilitated roads, which will result in increased traffic of goods and people who are key to the economic benefits , and consequently , by improving the economic viability of program activities                                                                              |                                                                                                                                                                                                                  |                          |                                |                                                                         |
| How does the indicator link to the BA?                                                              | The improvement of the network's quality and the reduction of transportation duration and costs will be felt by beneficiaries located within a radius of 5 km of the RN to be rehabilitated, through better access to basic social services as well as economic opportunities.                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                  |                          |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               | The indicator will determine the increase in the income of beneficiary households of the Roads Rehabilitation Project. The roads project is expected to increase income of household and businesses along the roads. To measure the impact of the project on income, the evaluation will include measurement in comparison zones in which the the program's activities have not been implemented. The comparison between the initial and final situations of the two groups will represent the program's contribution to income variation. |                                                                                                                                                                                                                  |                          |                                |                                                                         |
| Justification for Disaggregations                                                                   | The indicator will not be disaggregated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                  |                          |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                  |                          |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Monitoring - Evaluation Directorate                                                                                                                                                                              |                          |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Sidiki Diombana DIOP                                                                                                                                                                                             | Phone                    | 221.78 637 02 32               | E-mail <a href="mailto:sddiop@mcasenegal.org">sddiop@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | MCC collected the data for the baseline using the HDM4 Modeling in 2015.                                                                                                                                         |                          |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | the figures will be pulled from the HDM-4 models conducted by MCC and/or its consultants, based on changes in road measures (IRI, deflections, etc) as well as other model parameters (including traffic counts) |                          |                                |                                                                         |

|                                                                                      |                                                                                                            |                                                                                                            |                                                                                              |                        |                              |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------|------------------------------|
|                                                                                      |                                                                                                            |                                                                                                            |                                                                                              |                        |                              |
| If survey data, verbatim question(s) posed to respondent                             |                                                                                                            |                                                                                                            | Refer to Questionnaire Road Project Household                                                |                        |                              |
| Detailed description of how data is transmitted from source to MCA                   |                                                                                                            |                                                                                                            | The data are collected by the PMU-AGEROUTE with the support of MCC and transmitted to MCA-S. |                        |                              |
| Frequency and timing of data acquisition                                             |                                                                                                            |                                                                                                            | Twice: at the end of the Compact and during the post compact                                 |                        |                              |
| Names of verification sources                                                        |                                                                                                            |                                                                                                            | Means of verification                                                                        |                        |                              |
| Baseline surveys                                                                     |                                                                                                            |                                                                                                            | Data base analysis table                                                                     |                        |                              |
| Final surveys                                                                        |                                                                                                            |                                                                                                            | Data base analysis table                                                                     |                        |                              |
| Location of Data Storage                                                             |                                                                                                            |                                                                                                            | MCA-Senegal.                                                                                 |                        |                              |
| INDICATOR DATA QUALITY                                                               |                                                                                                            |                                                                                                            |                                                                                              |                        |                              |
| Date of Data Quality Review                                                          |                                                                                                            |                                                                                                            | November 2014                                                                                |                        |                              |
| Main findings of data quality review                                                 |                                                                                                            | Average Score (out of 4)                                                                                   | Recommendations                                                                              |                        | <div><p><b>P.3</b></p></div> |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |                                                                                                            | Score Moyen (note sur 4)                                                                                   | N/A                                                                                          |                        |                              |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |                                                                                                            | 3,5                                                                                                        | N/A                                                                                          |                        |                              |
| 3. TIMELINESS- Are the data current and frequently collected?                        |                                                                                                            | 3,6                                                                                                        | N/A                                                                                          |                        |                              |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |                                                                                                            | 3,2                                                                                                        | N/A                                                                                          |                        |                              |
| 5. INTEGRITY- Is the data free from manipulation?                                    |                                                                                                            | 3,6                                                                                                        | N/A                                                                                          |                        |                              |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |                                                                                                            | 3,8                                                                                                        | N/A                                                                                          |                        |                              |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |                                                                                                            | 1,6                                                                                                        | N/A                                                                                          |                        |                              |
| Overall assessment                                                                   |                                                                                                            | 3,7                                                                                                        |                                                                                              |                        |                              |
| Action taken in response to data quality review                                      |                                                                                                            | - Apart from the agricultural income, the survey gathered data on the consumption and assets of households |                                                                                              |                        |                              |
| Known data limitations and significance                                              |                                                                                                            | N/A                                                                                                        |                                                                                              |                        |                              |
| Actions taken to address data limitations                                            |                                                                                                            | N/A                                                                                                        |                                                                                              |                        |                              |
| INDICATOR BASELINE INFORMATION                                                       |                                                                                                            |                                                                                                            |                                                                                              |                        |                              |
| Old Baseline                                                                         | N/A                                                                                                        | Old Baseline Year                                                                                          | 2009-2010                                                                                    | Source of old Baseline | MCA-S work plan              |
| New Baseline                                                                         | 0                                                                                                          | New Baseline Year                                                                                          | 2010                                                                                         | Source of New Baseline | MCC HDM4 Modeling            |
| Justification for Baseline Change (if any)                                           | This indicator was changed to align more directly with the HDM-4 model and the expected economic benefits. |                                                                                                            |                                                                                              |                        |                              |



**INDICATOR TARGET CALCULATIONS**

| INDICATOR ON TARGET CHANGES                                  |        |      |                                                               |                                                                                                            |
|--------------------------------------------------------------|--------|------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|                                                              | Target |      |                                                               |                                                                                                            |
| YEAR 1                                                       | Old    | New  | Justification for changes to targets or calculations (if any) | This indicator was changed to align more directly with the HDM-4 model and the expected economic benefits. |
| Oct 2010 - Sept. 2011                                        | N/A    | N/A  |                                                               |                                                                                                            |
| Explanation of assumptions and inputs to target calculations |        |      |                                                               |                                                                                                            |
| YEAR 2                                                       | Old    | New  | Justification for changes to targets or calculations (if any) | This indicator was changed to align more directly with the HDM-4 model and the expected economic benefits. |
| Oct 2011 - Sept. 2012                                        | 0%     | N/A  |                                                               |                                                                                                            |
| Explanation of assumptions and inputs to target calculations |        |      |                                                               |                                                                                                            |
| YEAR 3                                                       | Old    | New  | Justification for changes to targets or calculations (if any) |                                                                                                            |
| Oct 2012 - Sept. 2013                                        | N/A    | N/A  |                                                               |                                                                                                            |
| Explanation of assumptions and inputs to target calculations |        |      |                                                               |                                                                                                            |
| YEAR 4                                                       | Old    | New  | Justification for changes to targets or calculations (if any) |                                                                                                            |
| Oct 2013 - Sept. 2014                                        | N/A    | N/A  |                                                               |                                                                                                            |
| Explanation of assumptions and inputs to target calculations |        |      |                                                               |                                                                                                            |
| YEAR 5                                                       | Old    | New  | Justification for changes to targets or calculations (if any) | This target is derived from the HDM-4 model completed in 2015.                                             |
| Oct 2014 - Sept. 2015                                        | N/A    | 0.16 |                                                               |                                                                                                            |
| Explanation of assumptions and inputs to target calculations |        |      |                                                               |                                                                                                            |
| Long Term Target                                             | Old    | New  | Justification for changes to targets or calculations (if any) |                                                                                                            |
|                                                              | 9%     | N/A  |                                                               |                                                                                                            |
| Explanation of assumptions and inputs to target calculations |        |      |                                                               |                                                                                                            |

COMMENTS :

**SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required)**



PERFORMANCE INDICATORS  
IRRIGATION AND WATER RESOURCES MANAGEMENT PROJECT

2. Performance Indicators and targets of the Irrigation Project

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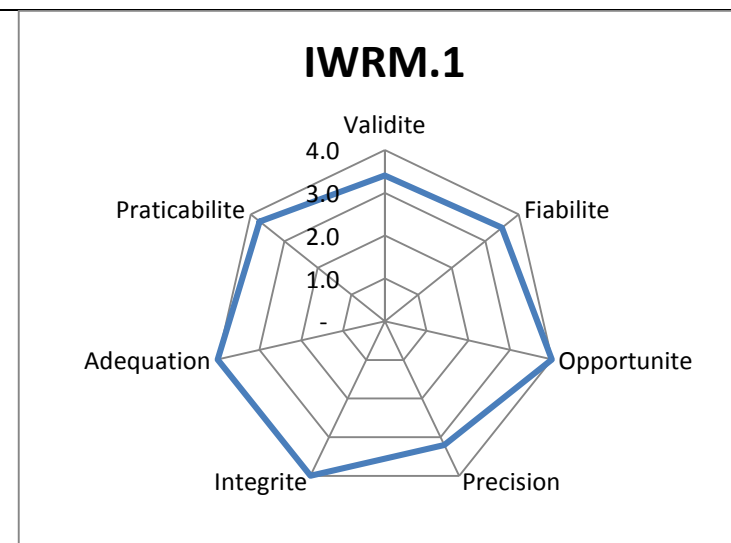
## 2.1. Indicator IWRM.1. Rice Paddy Production (Delta / Ngalenka)

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Rice Paddy Production (Delta/ Ngalenka)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Current Indicator Number | IWRM.1.                  | All Previous Indicator Numbers | IWRM.1.                                                          |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Classification           | Level                    | Unit of Measure*               | Tons                                                             |
| Detailed Definition                                                                                 | Total quantity of paddy rice produced per annum in the project's intervention areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | ANNUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | NO                       |                          |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | NO                       |                          |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | NO                       |                          |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | YES (Delta / Ngalenka)   |                          |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the attainment of the IWRM project objective, which is to increase agricultural production and the productivity of the agricultural sector. Actually, the construction of the water infrastructure, the improvement of the drainage systems and the land tenure security activities will help increase rice production, one of the key crops of the irrigation zones. Such production increase will help assess the progression of production and productivity.                                                                                                                                                                                                                                         |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | The indicator will provide information on the increase in production resulting in the increase in cultivable hectares, cropping intensity and yields, all of which increase under the with-project case, creating the economic benefits. The ERR was set on the basis of 3 crops (Rice, Tomatoes, Onions).                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | The increase in rice production resulting from the conduct of activities will have an impact on employment and the allocation of recovered land and/or extension to new beneficiaries. Thus, one expects close to 22,336 beneficiary households i.e. 268,029 people.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | The impact evaluation survey lays emphasis on the rice production of households in the processing areas and test zones. The data obtained with test zones may be compared with those obtained in the processing areas with a view to evaluating the impact of infrastructure built in the processing areas.                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | The data will be disaggregated by locality or zone (Delta and Ngalenka). This disaggregation shows the contribution of each of the components and zones in agricultural production and productivity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Irrigation Project Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Cheikh T. SENE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Phone                    | 221.77.333.15.80         | E-mail                         | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | SAED - Monitoring – Evaluation Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | <p>Done on the basis of results published by SAED on the yield plots and the situation on the hectares cultivated according to the season (rainy season, cold dry season, and hot dry season).</p> <p>On arrival on the edge of the plot, the Agricultural Adviser makes a rough estimate of the width and length of the plot. Depending on which of these two estimations he is calculating, the Agricultural Adviser randomly draws from his random table 2 numbers (of 1, 2 or 3 figures depending on the estimations made of the length and width). To raise the square, the Agricultural Adviser walks lengthwise counting as many steps as the first number drawn, then, when he gets to his destination, he walks along the plot's</p> |                          |                          |                                |                                                                  |

|                                                                                      |                                                                                                                                                                                                                                                                   |                                                                                                              |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
|                                                                                      | width and takes as many steps as the second number drawn. And he raises the square on the point at which he stops.<br>Formula = Average yield X total cultivated hectares                                                                                         |                                                                                                              |
| If survey data, verbatim question(s) posed to respondent                             | These are survey data obtained through the methodology of yield plots installed by SAED                                                                                                                                                                           |                                                                                                              |
| Detailed description of how data is transmitted from source to MCA                   | The data is transmitted to MCA-S through official correspondence by SAED. Besides, a mission of the M&E Directorate is scheduled to meet the Monitoring and Evaluation team with a view to collecting all raw data required for the calculation of the indicator. |                                                                                                              |
| Frequency and timing of data acquisition                                             | ANNUAL                                                                                                                                                                                                                                                            |                                                                                                              |
| Names of verification sources                                                        | Means of verification                                                                                                                                                                                                                                             |                                                                                                              |
| SEAD Annual Report, Letter from SAED                                                 | Annual production statistics                                                                                                                                                                                                                                      |                                                                                                              |
| SAED Data Base                                                                       | Production Surveys                                                                                                                                                                                                                                                |                                                                                                              |
| Location of Data Storage                                                             | SAED                                                                                                                                                                                                                                                              |                                                                                                              |
| INDICATOR DATA QUALITY                                                               |                                                                                                                                                                                                                                                                   |                                                                                                              |
| Date of Data Quality Review                                                          | November 2014                                                                                                                                                                                                                                                     |                                                                                                              |
| Main findings of data quality review                                                 | Average Score (out of 4)                                                                                                                                                                                                                                          | Recommendations                                                                                              |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 3,4                                                                                                                                                                                                                                                               | Information provided by the SAED information system                                                          |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 3,5                                                                                                                                                                                                                                                               | None                                                                                                         |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 4,0                                                                                                                                                                                                                                                               | SAED ME system data                                                                                          |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 3,2                                                                                                                                                                                                                                                               | Propose to provide information on the margin of error resulting from the use of the yields estimation method |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                                                                                                                                                                                                                                                               | None                                                                                                         |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 4,0                                                                                                                                                                                                                                                               | None                                                                                                         |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 3,7                                                                                                                                                                                                                                                               | None                                                                                                         |
| Overall Evaluation                                                                   | 3,7                                                                                                                                                                                                                                                               |                                                                                                              |
| Action taken in response to data quality review                                      | - Collection procedure clarified and harmonized with SAED<br><br>- Margins of error linked to the yield plots specified                                                                                                                                           |                                                                                                              |
| Known data limitations and significance                                              | - A sampling of Producers' Organizations is undertaken by SAED. Private producers are not taken into consideration.                                                                                                                                               |                                                                                                              |
| Actions taken to address data limitations                                            | - MCA-S's requests to SAED to take the locality aspects into consideration (differentiate Delta and Ngalenka) in the sampling device;<br>- Exchanges on the measures taken with regard to date quality                                                            |                                                                                                              |

**IWRM.1**

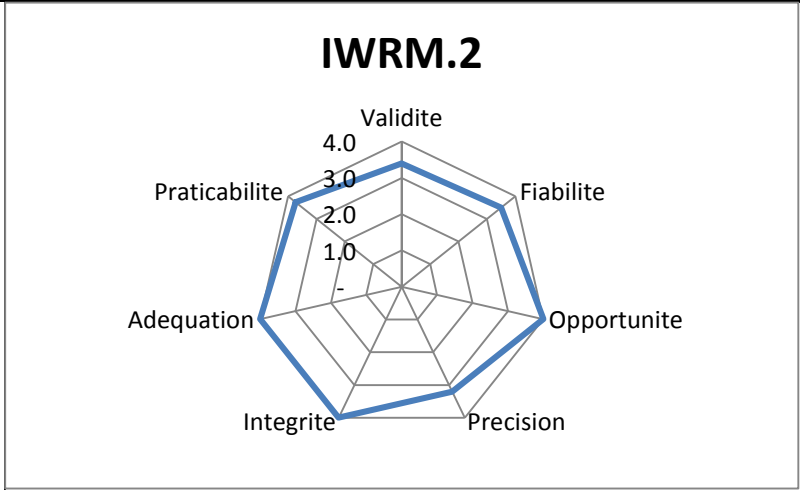
| Indicator     | Score |
|---------------|-------|
| Validite      | 3.4   |
| Fiabilite     | 3.5   |
| Opportunité   | 4.0   |
| Precision     | 3.2   |
| Integrité     | 4.0   |
| Adequation    | 4.0   |
| Praticabilité | 3.7   |

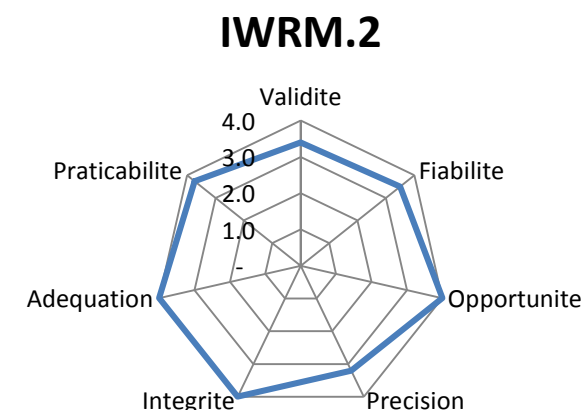


| INDICATOR BASELINE INFORMATION                                      |                                                                                                                                                                               |                   |                                                               |                        |                                                                |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------|------------------------|----------------------------------------------------------------|
| Old Baseline                                                        | 102 000                                                                                                                                                                       | Old Baseline Year | 2010-2011                                                     | Source of old Baseline | Data Base SAED : Refer to Letter SAED N° 1959-12 du 12-12-2012 |
| New Baseline                                                        | 102 000                                                                                                                                                                       | New Baseline Year | 2010-2011                                                     | Source of New Baseline | Data Base SAED : Refer to Letter SAED N° 1959-12 of 12-12-2012 |
| Justification for Baseline Change (if any)                          |                                                                                                                                                                               |                   |                                                               |                        |                                                                |
| INDICATOR TARGET CALCULATIONS                                       |                                                                                                                                                                               |                   |                                                               |                        |                                                                |
|                                                                     | Target                                                                                                                                                                        |                   |                                                               |                        |                                                                |
| YEAR 1                                                              | Old                                                                                                                                                                           | New               | Justification for changes to targets or calculations (if any) |                        |                                                                |
| Oct 2010 - Sept. 2011                                               | 102 000                                                                                                                                                                       | 102 000           |                                                               |                        |                                                                |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                               |                   |                                                               |                        |                                                                |
| YEAR 2                                                              | Old                                                                                                                                                                           | New               | Justification for changes to targets or calculations (if any) |                        |                                                                |
| Oct 2011 - Sept. 2012                                               | 107000                                                                                                                                                                        | 107 000           |                                                               |                        |                                                                |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                               |                   |                                                               |                        |                                                                |
| YEAR 3                                                              | Old                                                                                                                                                                           | New               | Justification for changes to targets or calculations (if any) |                        |                                                                |
| Oct 2012 - Sept. 2013                                               | 107 000                                                                                                                                                                       | 107 000           |                                                               |                        |                                                                |
| Explanation of assumptions and inputs to target calculations        | During year 3, the exploitation of the Ngalenka Basin will come to a halt with the start of works scheduled in Year 1. However, the productions will be pursued in the Delta. |                   |                                                               |                        |                                                                |
| YEAR 4                                                              | Old                                                                                                                                                                           | New               | Justification for changes to targets or calculations (if any) |                        |                                                                |
| Oct 2013 - Sept. 2014                                               | 107 000                                                                                                                                                                       | 107 000           |                                                               |                        |                                                                |
| Explanation of assumptions and inputs to target calculations        | During Year 4, the Ngalenka Basin will be under production and in the Delta, some of the built infrastructure will be operational and will help improve the irrigation system |                   |                                                               |                        |                                                                |
| YEAR 5                                                              | Old                                                                                                                                                                           | New               | Justification for changes to targets or calculations (if any) |                        |                                                                |
| Oct 2014 - Sept. 2015                                               | 111 000                                                                                                                                                                       | 111 000           |                                                               |                        |                                                                |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                               |                   |                                                               |                        |                                                                |
| Long Term Target                                                    | Old                                                                                                                                                                           | New               | Justification for changes to targets or calculations (if any) |                        |                                                                |
|                                                                     | 277 000                                                                                                                                                                       | 277 000           |                                                               |                        |                                                                |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                               |                   |                                                               |                        |                                                                |
| COMMENTS :                                                          |                                                                                                                                                                               |                   |                                                               |                        |                                                                |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                                                                                                                                               |                   |                                                               |                        |                                                                |
| <a href="#">Method of estimating rice yield plots</a>               |                                                                                                                                                                               |                   |                                                               |                        |                                                                |

## 2.2. Indicator IWRM.2. Tomato production (Delta / Ngalenka)

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Tomato production (Delta / Ngalenka)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Current Indicator Number | IWRM.2.                  | All Previous Indicator Numbers | IWRM.2.                                                          |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Classification           | Level                    | Unit of Measure*               | Tons                                                             |
| Detailed Definition                                                                                 | Total quantity of cold off-season tomatoes produced per year in the project's intervention zones.                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | ANNUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          | NO                       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          | YES (Delta / Ngalenka)   |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the attainment of the IWRM project objective, which is to increase agricultural production and the productivity of the agricultural sector. Actually, the construction of the water infrastructure, the improvement of the drainage systems and the land tenure security activities will help increase tomato production, one of the key crops of the irrigation zones. Such production increase will help assess the increase in agricultural production and productivity.                     |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | The indicator will provide information on the increase in production resulting in the increase in cultivable hectares, cropping intensity and yields. The ERR was set on the basis of 3 crops (Rice, Tomatoes, Onions).                                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | The increase in tomato production resulting from the conduct of activities will have an impact on employment and the allocation of recovered land and/or extension to new beneficiaries. Thus, one expects close to 22,336 beneficiary households i.e. 268,029 people, 35% of who are in quintile 1 (<\$2/j), 42% between \$2 and \$4/d and 23% higher than \$4/d.                                                                                                                                                                    |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | The impact evaluation survey lays emphasis on the tomato production of households in the processing areas and test zones. The data obtained with test zones may be compared with those obtained in the processing areas with a view to evaluating the impact of infrastructure built in the processing areas.                                                                                                                                                                                                                         |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | The data will be disaggregated by zone (Delta and Ngalenka) The disaggregation shows the contribution of each of zones in agricultural production and productivity.                                                                                                                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Irrigation Project Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Cheikh T. SENE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Phone                    | 221.77.333.15.80         | E-mail                         | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | SAED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | <p>Done on the basis of results published by SAED on the yield plots and the situation on the areas cultivated according to the season (cold off-season).</p> <p>It involves conducting a random sampling concerning 10% of plots in the total population of plots in each zone until the surface area to be sampled is attained. This method will thus be applied to the plot whose size is normally between 0.1 and 1ha. The square or rectangle should measure 10m2</p> <p>Formula = Average yield X total cultivated hectares</p> |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | These are survey data obtained through the methodology of yield plots installed by SAED                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
|                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |

|                                                                                      |        |                                                                                                                                                                                                                                                                        |                                                                                                              |                        |                                                                                     |
|--------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
| Detailed description of how data is transmitted from source to MCA                   |        | The data is transmitted to MCA-S through official correspondence by SAED. Additionally, a mission of the M&E Directorate is scheduled to meet the Monitoring and Evaluation team with a view to collecting all raw data required for the calculation of the indicator. |                                                                                                              |                        |                                                                                     |
| Frequency and timing of data acquisition                                             |        | ANNUAL                                                                                                                                                                                                                                                                 |                                                                                                              |                        |                                                                                     |
| Names of verification sources                                                        |        |                                                                                                                                                                                                                                                                        | Means of verification                                                                                        |                        |                                                                                     |
| SAED Annual Report, Letter                                                           |        |                                                                                                                                                                                                                                                                        | Annual production statistics                                                                                 |                        |                                                                                     |
| SAED Data Base                                                                       |        |                                                                                                                                                                                                                                                                        | Production sampling surveys                                                                                  |                        |                                                                                     |
| Location of Data Storage                                                             |        | SAED                                                                                                                                                                                                                                                                   |                                                                                                              |                        |                                                                                     |
| INDICATOR DATA QUALITY                                                               |        |                                                                                                                                                                                                                                                                        |                                                                                                              |                        |                                                                                     |
| Date of Data Quality Review                                                          |        | November 2014                                                                                                                                                                                                                                                          |                                                                                                              |                        |                                                                                     |
| Main findings of data quality review                                                 |        | Average Score (out of)                                                                                                                                                                                                                                                 | Recommendations                                                                                              |                        |  |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        | 3,4                                                                                                                                                                                                                                                                    | Information provided by the SAED information system                                                          |                        |                                                                                     |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        | 3,5                                                                                                                                                                                                                                                                    | None                                                                                                         |                        |                                                                                     |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        | 4,0                                                                                                                                                                                                                                                                    | SAED ME system data                                                                                          |                        |                                                                                     |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        | 3,2                                                                                                                                                                                                                                                                    | Propose to provide information on the margin of error resulting from the use of the yields estimation method |                        |                                                                                     |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        | 4,0                                                                                                                                                                                                                                                                    | None                                                                                                         |                        |                                                                                     |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        | 4,0                                                                                                                                                                                                                                                                    | None                                                                                                         |                        |                                                                                     |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        | 3,7                                                                                                                                                                                                                                                                    | None                                                                                                         |                        |                                                                                     |
| Overall assessment                                                                   |        | 3,7                                                                                                                                                                                                                                                                    |                                                                                                              |                        |                                                                                     |
| Action taken in response to data quality review                                      |        | - Collection procedure clarified and harmonized with SAED<br>- Margins of error linked to the yield plots specified                                                                                                                                                    |                                                                                                              |                        |                                                                                     |
| Known data limitations and significance                                              |        | - A sampling is undertaken by SAED with the Producers Organization. Private producers are not taken into consideration.                                                                                                                                                |                                                                                                              |                        |                                                                                     |
| Actions taken to address data limitations                                            |        | - Taking into consideration the locality aspects into consideration (differentiate Delta and Ngalenka) in the sampling device;<br>- Exchanges on the measures taken with regard to data quality                                                                        |                                                                                                              |                        |                                                                                     |
| INDICATOR BASELINE INFORMATION                                                       |        |                                                                                                                                                                                                                                                                        |                                                                                                              |                        |                                                                                     |
| Old Baseline                                                                         | 12 700 | Old Baseline Year                                                                                                                                                                                                                                                      | 2010-2011                                                                                                    | Source of old Baseline | Compact et and ERR                                                                  |
| New Baseline                                                                         | 12 700 | New Baseline Year                                                                                                                                                                                                                                                      | 2010-2011                                                                                                    | Source of New Baseline | Data Base SAED : Refer to Letter SAED N° 1959-12 of 12-12-2012                      |
| Justification for Baseline Change (if any)                                           |        | The original baseline of 10,500 (and subsequent targets) were erroneously set based on accepting improper output from the ERR model. The new target is based on SAED values for production the year prior to the compact works.                                        |                                                                                                              |                        |                                                                                     |



**INDICATOR TARGET CALCULATIONS**

| MEMORANDUM FOR THE PRESIDENT OF THE BOARD OF DIRECTORS       |         |         |                                                               |  |
|--------------------------------------------------------------|---------|---------|---------------------------------------------------------------|--|
|                                                              | Target  |         |                                                               |  |
| YEAR 1                                                       | Old     | New     | Justification for changes to targets or calculations (if any) |  |
| Oct 2010 - Sept. 2011                                        | 12 700  | 12 700  |                                                               |  |
| Explanation of assumptions and inputs to target calculations |         |         |                                                               |  |
| YEAR 2                                                       | Old     | New     | Justification for changes to targets or calculations (if any) |  |
| Oct 2011 - Sept. 2012                                        | 14 200  | 14 200  |                                                               |  |
| Explanation of assumptions and inputs to target calculations |         |         |                                                               |  |
| YEAR 3                                                       | Old     | New     | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                        | 14 200  | 14 200  |                                                               |  |
| Explanation of assumptions and inputs to target calculations |         |         |                                                               |  |
| YEAR 4                                                       | Old     | New     | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                        | 14 200  | 14 200  |                                                               |  |
| Explanation of assumptions and inputs to target calculations |         |         |                                                               |  |
| YEAR 5                                                       | Old     | New     | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                        | 35 500  | 35 500  |                                                               |  |
| Explanation of assumptions and inputs to target calculations |         |         |                                                               |  |
| Long Term Target                                             | Old     | New     | Justification for changes to targets or calculations (if any) |  |
|                                                              | 115 000 | 115 000 |                                                               |  |
| Explanation of assumptions and inputs to target calculations |         |         |                                                               |  |

**COMMENTS****SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required)**

[Method of estimating yields of diversification crops](#)

## 2.3. Indicator IWRM.3. Onion production (Delta / Ngalenka)

| INDICATOR BASIC DETAILS                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                  |                                |                                                                  |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                               | Onion production (Delta / Ngalenka)                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                  | Version                        | N° 03 /Sept 2015                                                 |
| Common Indicator Number                                      | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Current Indicator Number | IWRM.3.          | All Previous Indicator Numbers | IWRM.3.                                                          |
| Level                                                        | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Classification           | Level            | Unit of Measure*               | Tons                                                             |
| Detailed Definition                                          | Total quantity of cold off-season onions produced per annum in the project's intervention areas.                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                  |                                |                                                                  |
| Frequency of Reporting                                       | ANNUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Reporting Period Covered |                  | Compact Duration               |                                                                  |
| Disaggregations                                              | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | NO                       |                  |                                |                                                                  |
|                                                              | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | NO                       |                  |                                |                                                                  |
|                                                              | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | NO                       |                  |                                |                                                                  |
|                                                              | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | YES (Delta / Ngalenka)   |                  |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                  |                                |                                                                  |
| Justification for Including Indicator                        | The indicator provides information on the attainment of the IWRM project objective which is to increase agricultural production and the productivity of the agricultural sector. Actually, the construction of the water infrastructure, the improvement of the drainage systems and the land tenure security activities will help increase onion production, one of the key crops of the irrigation zones. Such production increase will help assess the progression of production and productivity. |                          |                  |                                |                                                                  |
| How does the indicator link to the ERR?                      | The indicator will provide information on the increase in production resulting in the increase in cultivable hectares, cropping intensity and yields. The ERR was set on the basis of 3 crops (Rice, Tomatoes, Onions).                                                                                                                                                                                                                                                                               |                          |                  |                                |                                                                  |
| How does the indicator link to the BA?                       | The increase in onion production resulting from the conduct of activities will have an impact on employment and the allocation of recovered land and/or extension to new beneficiaries. Thus, one expects close to 22,336 beneficiary households i.e. 268,029 people, 35% of whom are in quintile 1 (<\$2/d), 42% between \$2 and \$4/d and 23% higher than \$4/d.                                                                                                                                    |                          |                  |                                |                                                                  |
| How does the indicator link to the impact evaluation?        | The impact evaluation survey lays emphasis on the onion production of households in the processing areas and test zones. The data obtained with test zones may be compared with those obtained in the processing areas with a view to evaluating the impact of infrastructure built in the processing areas.                                                                                                                                                                                          |                          |                  |                                |                                                                  |
| Justification for Disaggregations                            | The data will be disaggregated by zone (Delta and Ngalenka). The disaggregation shows the contribution of each of the zones in agricultural production and productivity.                                                                                                                                                                                                                                                                                                                              |                          |                  |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                  |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                | Irrigation Project Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                  |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA: | Cheikh T. SENE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Phone                    | 221.77.333.15.80 | E-mail                         | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data        | SAED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                  |                                |                                                                  |



|                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                              |
|--------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Detailed description of data collection methodology<br>(including any calculations computed by source) |  | Done on the basis of results published by SAED on the yield plots and the situation on the areas cultivated according to the season (cold off-season).<br>It involves conducting a random sampling concerning 10% of plots in the total population of plots in each zone until the surface area to be sampled is attained. This method will thus be applied to the plot whose size is normally between 0.1 and 1 ha. The square or rectangle should measure 10m2. However, for the purpose of representativeness, the following spectra will be used: <ul style="list-style-type: none"><li>0.10 – 0.5 ha : 1 square or rectangle</li><li>More than 0.5 ha : 2 squares or rectangles</li></ul> Formula = Average yield X total cultivable hectares |                                                                                                              |
| If survey data, verbatim question(s) posed to respondent                                               |  | These are survey data obtained through the methodology of yield plots installed by SAED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                              |
| Detailed description of how data is transmitted from source to MCA                                     |  | The data is transmitted to MCA-S through official correspondence by SAED. Besides, a mission of the M&E Directorate is scheduled to meet the Monitoring and Evaluation team with a view to collecting all raw data required for the calculation of the indicator.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                              |
| Frequency and timing of data acquisition                                                               |  | ANNUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                              |
| Names of verification sources                                                                          |  | Means of verification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                              |
| SAED Annual Report, Letter                                                                             |  | Annual production statistics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                              |
| SAED Data Base                                                                                         |  | Production sampling surveys                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                              |
| Location of Data Storage                                                                               |  | SAED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                              |
| INDICATOR DATA QUALITY                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                              |
| Date of Data Quality Review                                                                            |  | November 2014                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                              |
| Main findings of data quality review                                                                   |  | Average Score<br>(out of 4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Recommendations                                                                                              |
| 1. VALIDITY – Does the data clearly represent the desired results?                                     |  | 3,4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Information provided by the SAED information system                                                          |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time?                   |  | 3,5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | None                                                                                                         |
| 3. TIMELINESS- Are the data current and frequently collected?                                          |  | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SAED ME system data                                                                                          |
| 4. PRECISION – Does the data have an acceptable margin of error?                                       |  | 3,2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Propose to provide information on the margin of error resulting from the use of the yields estimation method |
| 5. INTEGRITY- Is the data free from manipulation?                                                      |  | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | None                                                                                                         |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?                       |  | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | None                                                                                                         |
| 7. PRACTICABILITY- Is the data current and frequently collected?                                       |  | 3,7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | None                                                                                                         |
| Overall assessment                                                                                     |  | 3,7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                              |
| Action taken in response to data quality review                                                        |  | <div>- Collection procedure clarified and harmonized with SAED</div> <div>- Disaggregation by gender and in the absence of disaggregated data, inform the heading "Unspecified"</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                              |

**IWRM.3**

| Critère       | Score |
|---------------|-------|
| Validite      | 3.4   |
| Fiabilite     | 3.5   |
| Opportunité   | 4.0   |
| Précision     | 3.2   |
| Intégrité     | 4.0   |
| Adéquation    | 4.0   |
| Praticabilité | 3.7   |

|                                                                     |         |                                                                                                                                                                    |                                                               |                        |                                                                     |
|---------------------------------------------------------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------|---------------------------------------------------------------------|
| Known data limitations and significance                             |         | - A sampling is undertaken by SAED with the Producers' Organization. Private producers are not taken into consideration.                                           |                                                               |                        |                                                                     |
| Actions taken to address data limitations                           |         | - Integration of locality aspects (differentiate Delta and Ngalenka) in the SAED sampling system;<br>- Exchanges on the measures taken with regard to data quality |                                                               |                        |                                                                     |
| INDICATOR BASELINE INFORMATION                                      |         |                                                                                                                                                                    |                                                               |                        |                                                                     |
| Old Baseline                                                        | 10 900  | Old Baseline Year                                                                                                                                                  | 2010-2011                                                     | Source of old Baseline | Compact et and ERR                                                  |
| New Baseline                                                        | 10 900  | New Baseline Year                                                                                                                                                  | 2010-2011                                                     | Source of New Baseline | SAED Data Base : Refer to Letter from SAED N° 1959-12 du 12-12-2012 |
| Justification for Baseline Change (if any)                          |         |                                                                                                                                                                    |                                                               |                        |                                                                     |
| INDICATOR TARGET CALCULATIONS                                       |         |                                                                                                                                                                    |                                                               |                        |                                                                     |
|                                                                     | Target  |                                                                                                                                                                    |                                                               |                        |                                                                     |
| YEAR 1                                                              | Old     | New                                                                                                                                                                | Justification for changes to targets or calculations (if any) | ▪                      |                                                                     |
| Oct 2010 - Sept. 2011                                               | 10 900  | 10 900                                                                                                                                                             |                                                               |                        |                                                                     |
| Explanation of assumptions and inputs to target calculations        |         |                                                                                                                                                                    |                                                               |                        |                                                                     |
| YEAR 2                                                              | Old     | New                                                                                                                                                                | Justification for changes to targets or calculations (if any) |                        |                                                                     |
| Oct 2011 - Sept. 2012                                               | 16 000  | 16 000                                                                                                                                                             |                                                               |                        |                                                                     |
| Explanation of assumptions and inputs to target calculations        |         |                                                                                                                                                                    |                                                               |                        |                                                                     |
| YEAR 3                                                              | Old     | New                                                                                                                                                                | Justification for changes to targets or calculations (if any) |                        |                                                                     |
| Oct 2012 - Sept. 2013                                               | 16 000  | 16 000                                                                                                                                                             |                                                               |                        |                                                                     |
| Explanation of assumptions and inputs to target calculations        |         |                                                                                                                                                                    |                                                               |                        |                                                                     |
| YEAR 4                                                              | Old     | New                                                                                                                                                                | Justification for changes to targets or calculations (if any) |                        |                                                                     |
| Oct 2013 - Sept. 2014                                               | 16 000  | 16 000                                                                                                                                                             |                                                               |                        |                                                                     |
| Explanation of assumptions and inputs to target calculations        |         |                                                                                                                                                                    |                                                               |                        |                                                                     |
| YEAR 5                                                              | Old     | New                                                                                                                                                                | Justification for changes to targets or calculations (if any) |                        |                                                                     |
| Oct 2014 - Sept. 2015                                               | 40 000  | 40 000                                                                                                                                                             |                                                               |                        |                                                                     |
| Explanation of assumptions and inputs to target calculations        |         |                                                                                                                                                                    |                                                               |                        |                                                                     |
| Long Term Target                                                    | Old     | New                                                                                                                                                                | Justification for changes to targets or calculations (if any) |                        |                                                                     |
|                                                                     | 130 000 | 130 000                                                                                                                                                            |                                                               |                        |                                                                     |
| Explanation of assumptions and inputs to target calculations        |         |                                                                                                                                                                    |                                                               |                        |                                                                     |
| COMMENTS                                                            |         |                                                                                                                                                                    |                                                               |                        |                                                                     |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |         |                                                                                                                                                                    |                                                               |                        |                                                                     |
| Méthode d'estimation des rendements des cultures de diversification |         |                                                                                                                                                                    |                                                               |                        |                                                                     |

## 2.4. Indicator IWRM.4. Cropping intensity (Delta)

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Cropping intensity (Delta)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Current Indicator Number | IWRM.4.                  | All Previous Indicator Numbers | IWRM.4.                                                          |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Classification           | Level                    | Unit of Measure*               | Percentage                                                       |
| Detailed Definition                                                                                 | Cropping intensity in irrigated areas of the Delta is calculated on the basis of the formula: Total number of hectares cultivated per year / Total number of cultivable hectares. The cultivable land represents the entire surface area that can be cultivated (reported by SAED as « superficie exploitable »)                                                                                                                                                                                                                                                                                                                         |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | ANNUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          | NO                       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          | NO                       |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator will provide information on the achievement of the IWRM project objective consisting in increasing agricultural production and the productivity of the agricultural sector. The development of cropping intensity will constitute a result that will help assess the progression in hectares under production.                                                                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | The indicator will provide information on Cropping Intensity, which is the ratio of hectares under production over cultivable areas. This ratio will make it possible to accurately report the increase in productivity and thus the ERR. Moreover, the CI will be a decisive factor to show the increase in available water quantities and the efficiency of the drainage system.                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | The impact evaluation survey shows the CI trend in comparison and control zones. The data obtained with control zones may be compared with those in the comparison zones in order to evaluate the impact of infrastructure built in the comparison zones.                                                                                                                                                                                                                                                                                                                                                                                |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Irrigation Project Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Cheikh T. SENE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Phone                    | 221.77.333.15.80         | E-mail                         | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | SAED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | <p>The collection of data on the total cultivated areas in the irrigated land and per season (rainy season, dry season, hot dry season). The data collected come from the following sources :</p> <ul style="list-style-type: none"><li>▪ Satellite images taken in the middle of the cycle (for different farming seasons);</li><li>▪ Results of field surveys (conducted by the remote sensing team ) and specific studies (socio-land studies)</li><li>▪ Various mapping means recovered in digital form (soil maps, drawing plans of works, etc.);</li><li>▪ socio-economic data base (developments / development actors);</li></ul> |                          |                          |                                |                                                                  |

|                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                              |  |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--|
|                                                                                      | Data on the total cultivated areas concerning the rainy season is collected by mobilizing SAED's field structure, in each Delegation, under the responsibility of the Monitoring-Evaluation Office (BSE), For each Development Unit (UMV), the type of crops and cultivated areas as well as the PO growing them will be registered. The collected data on areas sown during the rainy season, after verification by the heads of sectors, are entered by the Monitoring and Evaluation Office.<br>Numerator (1) = total cultivated areas for all seasons<br>Denominator (2) = cultivable land surfaces in the Delta ["superficie exploitable" in the SAED database]<br>Cropping Intensity = (1) / (2) |                                                                                              |  |
| If survey data, verbatim question(s) posed to respondent                             | These are survey data obtained by SAED on the total cultivated areas in the irrigated land. The data collection on the total cultivated areas concerns the three seasons of the year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                              |  |
| Detailed description of how data is transmitted from source to MCA                   | The data is transmitted to SAED through MCA-S's official correspondence. Besides, a mission of the M&E Directorate is scheduled to meet the Monitoring and Evaluation team with a view to collecting all raw data required for the calculation of the indicator.                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                              |  |
| Frequency and timing of data acquisition                                             | ANNUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                              |  |
| Names of verification sources                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Means of verification                                                                        |  |
| Rapport Annuel SAED, lettre SAED                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Statistiques sur les superficies cultivables et cultivées dans le Ngalenka                   |  |
| Base de Données SAED                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                              |  |
| Location of Data Storage                                                             | SAED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                              |  |
| INDICATOR DATA QUALITY                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                              |  |
| Date of Data Quality Review                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | November 2014                                                                                |  |
| Main findings of data quality review                                                 | Average Score (out of 4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Recommendations                                                                              |  |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Information provided by SAED information system Indicator to reposition as impact indicator. |  |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | N/A                                                                                          |  |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | SAED ME system data                                                                          |  |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | N/A                                                                                          |  |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | N/A                                                                                          |  |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | N/A                                                                                          |  |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 3,7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | N/A                                                                                          |  |
| Overall assessment                                                                   | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                              |  |
| Action taken in response to data quality review                                      | - Procédure et méthodologie de collecte précisée et harmonisée avec la SAED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                              |  |

|                                                                     |                                                                      |                   |                                                               |                                                                      |                                                               |
|---------------------------------------------------------------------|----------------------------------------------------------------------|-------------------|---------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------|
| Known data limitations and significance                             |                                                                      | Not Applicable    |                                                               |                                                                      |                                                               |
| Actions taken to address data limitations                           |                                                                      | Not Applicable    |                                                               |                                                                      |                                                               |
| INDICATOR BASELINE INFORMATION                                      |                                                                      |                   |                                                               |                                                                      |                                                               |
| Old Baseline                                                        | 0,6                                                                  | Old Baseline Year | 2010-2011                                                     | Source of old Baseline                                               | SAED Data Base: Refer To Letter SAED N° 1959-12 of 12-12-2012 |
| New Baseline                                                        | 60%                                                                  | New Baseline Year | 2010-2011                                                     | Source of New Baseline                                               | SAED Data Base: Refer To Letter SAED N° 1959-12 of 12-12-2012 |
| Justification for Baseline Change (if any)                          | MCC has requested that the indicator be reformulated as a percentage |                   |                                                               |                                                                      |                                                               |
| INDICATOR TARGET CALCULATIONS                                       |                                                                      |                   |                                                               |                                                                      |                                                               |
|                                                                     | Target                                                               |                   |                                                               |                                                                      |                                                               |
| YEAR 1                                                              | Old                                                                  | New               | Justification for changes to targets or calculations (if any) | MCC has requested that the indicator be reformulated as a percentage |                                                               |
| Oct 2010 - Sept. 2011                                               | 0,6                                                                  | 60%               |                                                               |                                                                      |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                      |                   |                                                               |                                                                      |                                                               |
| YEAR 2                                                              | Old                                                                  | New               | Justification for changes to targets or calculations (if any) | MCC has requested that the indicator be reformulated as a percentage |                                                               |
| Oct 2011 - Sept. 2012                                               | 0,6                                                                  | 60%               |                                                               |                                                                      |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                      |                   |                                                               |                                                                      |                                                               |
| YEAR 3                                                              | Old                                                                  | New               | Justification for changes to targets or calculations (if any) | MCC has requested that the indicator be reformulated as a percentage |                                                               |
| Oct 2012 - Sept. 2013                                               | 0,6                                                                  | 60%               |                                                               |                                                                      |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                      |                   |                                                               |                                                                      |                                                               |
| YEAR 4                                                              | Old                                                                  | New               | Justification for changes to targets or calculations (if any) | MCC has requested that the indicator be reformulated as a percentage |                                                               |
| Oct 2013 - Sept. 2014                                               | 0,6                                                                  | 60%               |                                                               |                                                                      |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                      |                   |                                                               |                                                                      |                                                               |
| YEAR 5                                                              | Old                                                                  | New               | Justification for changes to targets or calculations (if any) | MCC has requested that the indicator be reformulated as a percentage |                                                               |
| Oct 2014 - Sept. 2015                                               | 0,7                                                                  | 70%               |                                                               |                                                                      |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                      |                   |                                                               |                                                                      |                                                               |
| Long Term Target                                                    | Old                                                                  | New               | Justification for changes to targets or calculations (if any) | MCC has requested that the indicator be reformulated as a percentage |                                                               |
|                                                                     | 1,5                                                                  | 150%              |                                                               |                                                                      |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                      |                   |                                                               |                                                                      |                                                               |
| COMMENTS                                                            |                                                                      |                   |                                                               |                                                                      |                                                               |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                                      |                   |                                                               |                                                                      |                                                               |
|                                                                     |                                                                      |                   |                                                               |                                                                      |                                                               |

## 2.5. Indicator IWRM.5. Cropping Intensity (Ngalenka)

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                  |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Cropping Intensity (Ngalenka)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                  | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Current Indicator Number | IWRM.5.          | All Previous Indicator Numbers | IWRM.5.                                                          |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Classification           | Level            | Unit of Measure*               | Percentage                                                       |
| Detailed Definition                                                                                 | The cropping intensity in the Ngalenka irrigated areas is calculated according to the following formula: Total number of hectares cultivated per year / Total number of cultivable hectares. The cultivable land represents the all the land that can be cultivated. For Ngalenka, this refers to the eventual 450 ha covered by the perimeter, even during years 1 – 3.                                                                                                                                                                                        |                          |                  |                                |                                                                  |
| Frequency of Reporting                                                                              | ANNUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Reporting Period Covered | Compact Duration |                                |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          | NO               |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          | NO               |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          | NO               |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          | NO               |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                  |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the attainment of the IWRM project objective which is to increase agricultural production and the productivity of the agricultural sector. The trend of the cropping intensity will constitute a result that will help assess the progression of hectares under production.                                                                                                                                                                                                                                               |                          |                  |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | The indicator will provide information on the Cropping Intensity, which is the ratio between the hectares under production/ and the cultivable areas. This relationship accurately reflects the increase in productivity and thus of the ERR. Thus, the CI will be a decisive factor in showing the increase in the quantities of water available and the efficiency of the drainage system.                                                                                                                                                                    |                          |                  |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                  |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | The Impact evaluation survey shows the CI trends in the processing and test zones. The data obtained with test zones may be compared with those obtained in the processing areas with a view to evaluating the impact of infrastructure built in the processing areas.                                                                                                                                                                                                                                                                                          |                          |                  |                                |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                  |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                  |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Irrigation Project Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                  |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Cheikh T. SENE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Phone                    | 221.77.333.15.80 | E-mail                         | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | SAED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                  |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | The collection of data on the total cultivated areas in the irrigated perimeters and per season (rainy season, dry season, hot dry season). The data collected come from the following sources : <ul style="list-style-type: none"><li>▪ Satellite images taken in the middle of the cycle (for different farming seasons);</li><li>▪ Results of field surveys (conducted by the remote sensing team ) and specific studies (socio-land studies)</li><li>▪ Various mapping means recovered in digital form (soil maps, drawing plans of works, etc.);</li></ul> |                          |                  |                                |                                                                  |

|                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                           |                              |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------|
|                                                                                      | <div>▪ socio-economic data base (developments / development actors);</div> <div>Data on the total cultivated areas concerning the rainy season is collected by mobilizing SAED's field structure, in each Delegation, under the responsibility of the Monitoring-Evaluation Office (BSE), For each Development Unit (UMV), the type of crops and cultivated areas as well as the PO growing them will be registered. The collected data on areas sown during the rainy season, after verification by the heads of sectors, are entered by the Monitoring and Evaluation Office.</div> <div>Numerator (1) = total cultivated areas for all seasons</div> <div>Denominator (2) = cultivable land surfaces in the Ngalenka</div> <div>Cropping Intensity = (1) / (2)</div> |                                                           |                              |
| If survey data, verbatim question(s) posed to respondent                             | These are survey data obtained by SAED on the total cultivated areas in the irrigated land.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                           |                              |
| Detailed description of how data is transmitted from source to MCA                   | The data is transmitted to SAED through MCA-S's official correspondence. Besides, a mission of the M&E Directorate is scheduled to meet the Monitoring and Evaluation team with a view to collecting all raw data required for the calculation of the indicator.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                           |                              |
| Frequency and timing of data acquisition                                             | ANNUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                           |                              |
| Names of verification sources                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Means of verification                                     |                              |
| SEAD Annual Report                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Statistics on cultivable and cultivated land in the Delta |                              |
| SAED Data Base                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                           |                              |
| Location of Data Storage                                                             | SAED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                           |                              |
| INDICATOR DATA QUALITY                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                           |                              |
| Date of Data Quality Review                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | November 2014                                             |                              |
| Main findings of data quality review                                                 | Average Score (out of 4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Recommendations                                           | <div><div>IWRM.5</div></div> |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | N/A                                                       |                              |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | N/A                                                       |                              |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | N/A                                                       |                              |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | N/A                                                       |                              |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | N/A                                                       |                              |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | N/A                                                       |                              |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 3,7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | N/A                                                       |                              |
| Overall assessment                                                                   | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                           |                              |
| Action taken in response to data quality review                                      | - Collection procedure and methodology clarified and harmonized with SAED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                           |                              |
| Known data limitations and significance                                              | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                           |                              |



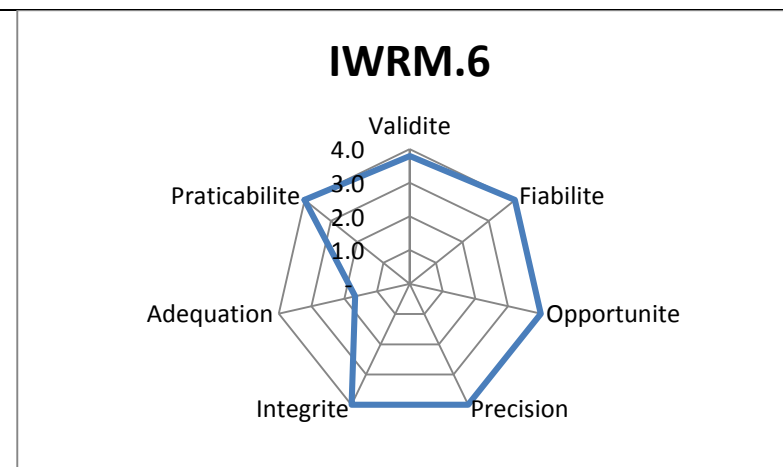
|                                                                     |                                                                      |                   |                                                               |                                                                                                                                    |                                                               |
|---------------------------------------------------------------------|----------------------------------------------------------------------|-------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| Actions taken to address data limitations                           |                                                                      | Not Applicable    |                                                               |                                                                                                                                    |                                                               |
| INDICATOR BASELINE INFORMATION                                      |                                                                      |                   |                                                               |                                                                                                                                    |                                                               |
| Old Baseline                                                        | 0,2                                                                  | Old Baseline Year | 2010-2011                                                     | Source of old Baseline                                                                                                             | SAED Data Base: Refer To Letter SAED N° 1959-12 of 12-12-2012 |
| New Baseline                                                        | 20%                                                                  | New Baseline Year | 2010-2011                                                     | Source of New Baseline                                                                                                             | SAED Data Base: Refer To Letter SAED N° 1959-12 of 12-12-2012 |
| Justification for Baseline Change (if any)                          | MCC has requested that the indicator be reformulated as a percentage |                   |                                                               |                                                                                                                                    |                                                               |
| INDICATOR TARGET CALCULATIONS                                       |                                                                      |                   |                                                               |                                                                                                                                    |                                                               |
|                                                                     | Target                                                               |                   |                                                               |                                                                                                                                    |                                                               |
| YEAR 1                                                              | Old                                                                  | New               | Justification for changes to targets or calculations (if any) | MCC has requested that the indicator be reformulated as a percentage                                                               |                                                               |
| Oct 2010 - Sept. 2011                                               | 0.2                                                                  | 20%               |                                                               |                                                                                                                                    |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                      |                   |                                                               |                                                                                                                                    |                                                               |
| YEAR 2                                                              | Old                                                                  | New               | Justification for changes to targets or calculations (if any) | MCC has requested that the indicator be reformulated as a percentage                                                               |                                                               |
| Oct 2011 - Sept. 2012                                               | 0,2                                                                  | 20%               |                                                               |                                                                                                                                    |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                      |                   |                                                               |                                                                                                                                    |                                                               |
| YEAR 3                                                              | Old                                                                  | New               | Justification for changes to targets or calculations (if any) | MCC has requested that the indicator be reformulated as a percentage                                                               |                                                               |
| Oct 2012 - Sept. 2013                                               | 0,0                                                                  | 0%                |                                                               |                                                                                                                                    |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                      |                   |                                                               |                                                                                                                                    |                                                               |
| YEAR 4                                                              | Old                                                                  | New               | Justification for changes to targets or calculations (if any) | MCC has requested that the indicator be reformulated as a percentage                                                               |                                                               |
| Oct 2013 - Sept. 2014                                               | 1.0                                                                  | 100%              |                                                               |                                                                                                                                    |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                      |                   |                                                               |                                                                                                                                    |                                                               |
| YEAR 5                                                              | Old                                                                  | New               | Justification for changes to targets or calculations (if any) | MCC has requested that the indicator be reformulated as a percentage                                                               |                                                               |
| Oct 2014 - Sept. 2015                                               | 1.2                                                                  | 120%              |                                                               |                                                                                                                                    |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                      |                   |                                                               |                                                                                                                                    |                                                               |
| Long Term Target                                                    | Old                                                                  | New               | Justification for changes to targets or calculations (if any) | This figure is given by SAED based on agricultural potential. MCC has requested that the indicator be reformulated as a percentage |                                                               |
|                                                                     | TBD                                                                  | 180%              |                                                               |                                                                                                                                    |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                      |                   |                                                               |                                                                                                                                    |                                                               |
| COMMENTS                                                            |                                                                      |                   |                                                               |                                                                                                                                    |                                                               |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                                      |                   |                                                               |                                                                                                                                    |                                                               |
|                                                                     |                                                                      |                   |                                                               |                                                                                                                                    |                                                               |



## 2.6. Indicator IWRM.6. Total area with improved irrigation infrastructure (Delta and Ngalenka)

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                        |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Total area with improved irrigation infrastructure (Delta and Ngalenka)                                                                                                                                                                                                                                                                                                                                                                                     |                          |                        | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                              | Current Indicator Number | IWRM.6.                | All Previous Indicator Numbers | IWRM.6.                                                          |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Classification           | Level                  | Unit of Measure*               | Hectares                                                         |
| Detailed Definition                                                                                 | Total number of hectares that are supplied with complete systems for improved irrigation (land that has access to irrigation water flows, has been properly leveled) The improved irrigation areas include those that were already improved prior to the MCC project and those that are added via irrigation extensions that are supplied by the system that is being rehabilitated through the compact. This is reported by SAED as “superficie aménagée”. |                          |                        |                                |                                                                  |
| Frequency of Reporting                                                                              | ANNUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Reporting Period Covered |                        | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          | NO                     |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          | NO                     |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          | NO                     |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          | YES (Delta / Ngalenka) |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                        |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator aims to capture the objective of the IWRM project to increase the land area that is under production. The completion of irrigation works under the project will increase the availability of water, improve drainage and reduce salinization, and encourage the extension of improved irrigation infrastructure (either by other organizations or by individuals) into new areas.                                                             |                          |                        |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | The indicator does not directly affect the economics, but constrains total production in a given season. If the indicator does not increase over time, then the increase in cultivated area will also eventually be limited                                                                                                                                                                                                                                 |                          |                        |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                        |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                        |                                |                                                                  |
| Justification for Disaggregations                                                                   | The data should be disaggregated by locality (Delta/Ngalenka)                                                                                                                                                                                                                                                                                                                                                                                               |                          |                        |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                        |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Irrigation Project Directorate                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                        |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Cheikh T. SENE                                                                                                                                                                                                                                                                                                                                                                                                                                              | Phone                    | 221.77.333.15.80       | E-mail                         | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | SAED                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                        |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | The data will be collected based on the SIG from the Implementing Entity for Irrigation and from SAED (including disaggregation by locality). The data will be taken from SAED's statistics on the agriculture campaigns and from maps                                                                                                                                                                                                                      |                          |                        |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                        |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data are communicated via official correspondence from SAED to the MCA-S. Additionally, missions by the M&E Directorate are periodically planned to collect and verify the data provided by SAED.                                                                                                                                                                                                                                                       |                          |                        |                                |                                                                  |

| Frequency and timing of data acquisition                                             |                  | QUARTERLY                                                                 |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
|--------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|------------------|----------|-----|-----------|-----|-------------|-----|-----------|-----|-----------|-----|------------|-----|---------------|-----|
| Names of verification sources                                                        |                  |                                                                           | Means of verification                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| SEAD Annual Report                                                                   |                  |                                                                           | Report from the PMU-Irrigation, SAED Agricultural Campaign Statistics, Maps |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| SAED Data Base                                                                       |                  |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Location of Data Storage                                                             |                  | SAED                                                                      |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| INDICATOR DATA QUALITY                                                               |                  |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Date of Data Quality Review                                                          |                  | November 2014                                                             |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Main findings of data quality review                                                 |                  | Average Score (out of 4)                                                  | Recommendations                                                             | <div><h3>IWRM.6</h3><table border="1"><caption>Data Quality Scores for IWRM.6</caption><thead><tr><th>Category</th><th>Score (out of 4)</th></tr></thead><tbody><tr><td>Validite</td><td>3,8</td></tr><tr><td>Fiabilite</td><td>4,0</td></tr><tr><td>Opportunité</td><td>4,0</td></tr><tr><td>Precision</td><td>4,0</td></tr><tr><td>Intégrité</td><td>4,0</td></tr><tr><td>Adecuation</td><td>4,0</td></tr><tr><td>Praticabilité</td><td>1,7</td></tr></tbody></table></div> |                   | Category | Score (out of 4) | Validite | 3,8 | Fiabilite | 4,0 | Opportunité | 4,0 | Precision | 4,0 | Intégrité | 4,0 | Adecuation | 4,0 | Praticabilité | 1,7 |
| Category                                                                             | Score (out of 4) |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Validite                                                                             | 3,8              |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Fiabilite                                                                            | 4,0              |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Opportunité                                                                          | 4,0              |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Precision                                                                            | 4,0              |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Intégrité                                                                            | 4,0              |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Adecuation                                                                           | 4,0              |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Praticabilité                                                                        | 1,7              |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |                  | 3,8                                                                       | N/A                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |                  | 4,0                                                                       | N/A                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 3. TIMELINESS- Are the data current and frequently collected?                        |                  | 4,0                                                                       | N/A                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |                  | 4,0                                                                       | N/A                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 5. INTEGRITY- Is the data free from manipulation?                                    |                  | 4,0                                                                       | N/A                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |                  | 1,7                                                                       | N/A                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |                  | 4,0                                                                       | N/A                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Overall assessment                                                                   |                  | 3,6                                                                       |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Action taken in response to data quality review                                      |                  | - Collection procedure and methodology clarified and harmonized with SAED |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Known data limitations and significance                                              |                  | Not Applicable                                                            |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Actions taken to address data limitations                                            |                  | Not Applicable                                                            |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| INDICATOR BASELINE INFORMATION                                                       |                  |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Old Baseline                                                                         | 34 848           | Old Baseline Year                                                         | 2010-2011                                                                   | Source of old Baseline                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ERR/SAED database |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| New Baseline                                                                         | 34 848           | New Baseline Year                                                         | 2010-2011                                                                   | Source of New Baseline                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ERR/SAED database |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Justification for Baseline Change (if any)                                           |                  |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| INDICATOR TARGET CALCULATIONS                                                        |                  |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
|                                                                                      | Target           |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| YEAR 1                                                                               | Old              | New                                                                       | Justification for changes to targets or calculations (if any)               | Delta : 34 802 ha                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Oct 2010 - Sept. 2011                                                                | 34, 848          | 34,848                                                                    |                                                                             | Ngalenka : 46 ha                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Explanation of assumptions and inputs to target calculations                         |                  |                                                                           |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |          |                  |          |     |           |     |             |     |           |     |           |     |            |     |               |     |

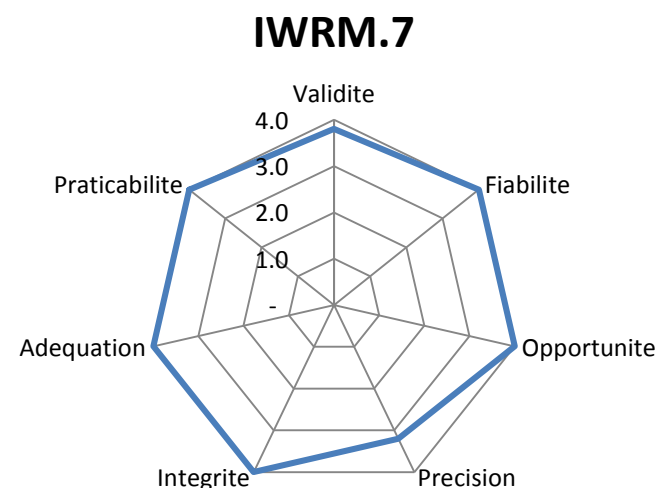


|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |                                                               |  |                                        |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------------------------------------------------|--|----------------------------------------|
| YEAR 2                                                              | Old                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | New    | Justification for changes to targets or calculations (if any) |  | Delta : 36 495 ha<br>Ngalenka : 46 ha  |
| Oct 2011 - Sept. 2012                                               | 36,541                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 36,541 |                                                               |  |                                        |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |                                                               |  |                                        |
| YEAR 3                                                              | Old                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | New    | Justification for changes to targets or calculations (if any) |  | Delta : 37 502 ha<br>Ngalenka : 52 ha  |
| Oct 2012 - Sept. 2013                                               | 37,554                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 37,554 |                                                               |  |                                        |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |                                                               |  |                                        |
| YEAR 4                                                              | Old                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | New    | Justification for changes to targets or calculations (if any) |  | Delta : 37 941 ha<br>Ngalenka : 440 ha |
| Oct 2013 - Sept. 2014                                               | 38,381                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 38,381 |                                                               |  |                                        |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |                                                               |  |                                        |
| YEAR 5                                                              | Old                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | New    | Justification for changes to targets or calculations (if any) |  | Delta : 37 941 ha<br>Ngalenka : 440 ha |
| Oct 2014 - Sept. 2015                                               | 38,381                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 38,381 |                                                               |  |                                        |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |                                                               |  |                                        |
| Long Term Target                                                    | Old                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | New    | Justification for changes to targets or calculations (if any) |  |                                        |
|                                                                     | 42,721                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 42,721 |                                                               |  |                                        |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |                                                               |  |                                        |
| COMMENTS                                                            | This indicator is different from indicator #18 in that it doesn't only include hectares once they are affected directly by the project. Thus, the baseline is not zero. In this way, it allows for the measurement of new irrigated lands that are added to the system during the life of the compact, which is one of the expected outcomes for the project.<br>This indicator replaces the former "Potentially Irrigable Land Area (Delta/Ngalenka)" because, as the former had been collected in practice by SAED, it was not going to allow us to see any change over time. This indicator provides a better appreciation of the increase in improved irrigation as a result of Compact investments. |        |                                                               |  |                                        |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |                                                               |  |                                        |
|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |                                                               |  |                                        |

## 2.7. Indicator IWRM. 7. Hectares under production across cropping seasons (Delta / Ngalenka)

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Hectares under production across cropping seasons (Delta / Ngalenka)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                          | Version                        | N° 02 03 / Sept 2015                                             |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Current Indicator Number | IWRM.7                   | All Previous Indicator Numbers | IWRM.8.                                                          |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Classification           | Level                    | Unit of Measure*               | Hectares                                                         |
| Detailed Definition                                                                                 | Total number of hectares devoted to agricultural production with the irrigation and drainage systems supported by the MCC in the Delta and Ngalenka. Each hectare will be counted once for each cropping season in which it is under production (thus, the same hectare could be counted up to three times per year)                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | ANNUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          | NO                       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          | YES (Delta / Ngalenka)   |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the attainment of the IWRM project objective, which is to increase hectares under production. The development of hectares under production in the irrigated areas will constitute a result that will help assess the progression of cropping intensity.                                                                                                                                                                                                                                                                                     |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | It is on the basis of the Hectares under production assumptions (i.e., total cultivated area across seasons), which were captured in the economic model.)                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | The data should be disaggregated by locality.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Irrigation Project Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Cheikh T. SENE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Phone                    | 221.77.333.15.80         | E-mail                         | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | SAED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Data on the total cultivated areas concerning the rainy season is collected by mobilizing SAED's field structure, in each Delegation, under the responsibility of the Monitoring-Evaluation Office (BSE). For each Development Unit (UMV), the type of crops and cultivated areas as well as the PO growing them will be registered. The collected data on areas sown during the rainy season, after verification by the heads of sectors, are entered by the Monitoring and Evaluation Office. Data collection concerns the Dry hot and cold seasons as well as the rainy season |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                |                                                                  |
|                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |

|                                                                                      |         |                                                                                                                                                                                                                                                                  |                 |                                 |                 |
|--------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------------|-----------------|
| Detailed description of how data is transmitted from source to MCA                   |         | The data is transmitted to SAED through MCA-S's official correspondence. Besides, a mission of the M&E Directorate is scheduled to meet the Monitoring and Evaluation team with a view to collecting all raw data required for the calculation of the indicator. |                 |                                 |                 |
| Frequency and timing of data acquisition                                             |         | ANNUAL                                                                                                                                                                                                                                                           |                 |                                 |                 |
| Names of verification sources                                                        |         | Means of verification                                                                                                                                                                                                                                            |                 |                                 |                 |
| SEAD Annual Report                                                                   |         | Report PMU Irrigation, SAED harvest statistics, Maps                                                                                                                                                                                                             |                 |                                 |                 |
| SAED Data Base                                                                       |         |                                                                                                                                                                                                                                                                  |                 |                                 |                 |
| Annual Report IWRM project                                                           |         |                                                                                                                                                                                                                                                                  |                 |                                 |                 |
| Location of Data Storage                                                             |         | SAED                                                                                                                                                                                                                                                             |                 |                                 |                 |
| INDICATOR DATA QUALITY                                                               |         |                                                                                                                                                                                                                                                                  |                 |                                 |                 |
| Date of Data Quality Review                                                          |         | November 2014                                                                                                                                                                                                                                                    |                 |                                 |                 |
| Main findings of data quality review                                                 |         | Average Score (out of 4)                                                                                                                                                                                                                                         | Recommendations | <div><p><b>IWRM.7</b></p></div> |                 |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |         | 3,8                                                                                                                                                                                                                                                              | N/A             |                                 |                 |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |         | 4,0                                                                                                                                                                                                                                                              | N/A             |                                 |                 |
| 3. TIMELINESS- Are the data current and frequently collected?                        |         | 4,0                                                                                                                                                                                                                                                              | N/A             |                                 |                 |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |         | 3,2                                                                                                                                                                                                                                                              | N/A             |                                 |                 |
| 5. INTEGRITY- Is the data free from manipulation?                                    |         | 4,0                                                                                                                                                                                                                                                              | N/A             |                                 |                 |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |         | 4,0                                                                                                                                                                                                                                                              | N/A             |                                 |                 |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |         | 4,0                                                                                                                                                                                                                                                              | N/A             |                                 |                 |
| Overall assessment                                                                   |         | 3,9                                                                                                                                                                                                                                                              |                 |                                 |                 |
| Action taken in response to data quality review                                      |         | - Collection procedure clarified and harmonized with SAED<br>- The indicator is disaggregated by locality                                                                                                                                                        |                 |                                 |                 |
| Known data limitations and significance                                              |         | Not Applicable                                                                                                                                                                                                                                                   |                 |                                 |                 |
| Actions taken to address data limitations                                            |         | Not Applicable                                                                                                                                                                                                                                                   |                 |                                 |                 |
| INDICATOR BASELINE INFORMATION                                                       |         |                                                                                                                                                                                                                                                                  |                 |                                 |                 |
| Old Baseline                                                                         | 21, 400 | Old Baseline Year                                                                                                                                                                                                                                                | 2010-2011       | Source of old Baseline          | Data Bases SAED |
| New Baseline                                                                         | 21,400  | New Baseline Year                                                                                                                                                                                                                                                | 2010-2011       | Source of New Baseline          | Data Bases SAED |



|                                                                     |                                                                                                                                                        |        |                                                               |  |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------------------------------------------------|--|
| Justification for Baseline Change (if any)                          | The original baseline and targets were based on area under management, while the current definition is based on cultivated area summed across seasons. |        |                                                               |  |
| INDICATOR TARGET CALCULATIONS                                       |                                                                                                                                                        |        |                                                               |  |
|                                                                     | Target                                                                                                                                                 |        |                                                               |  |
| YEAR 1                                                              | Old                                                                                                                                                    | New    | Justification for changes to targets or calculations (if any) |  |
| Oct 2010 - Sept. 2011                                               | 20,300                                                                                                                                                 | 20,300 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                        |        |                                                               |  |
| YEAR 2                                                              | Old                                                                                                                                                    | New    | Justification for changes to targets or calculations (if any) |  |
| Oct 2011 - Sept. 2012                                               | 20,300                                                                                                                                                 | 20,300 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                        |        |                                                               |  |
| YEAR 3                                                              | Old                                                                                                                                                    | New    | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 20,300                                                                                                                                                 | 20,300 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                        |        |                                                               |  |
| YEAR 4                                                              | Old                                                                                                                                                    | New    | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 20,300                                                                                                                                                 | 20,300 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                        |        |                                                               |  |
| YEAR 5                                                              | Old                                                                                                                                                    | New    | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 23,600                                                                                                                                                 | 23,600 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                        |        |                                                               |  |
| Long Term Target                                                    | Old                                                                                                                                                    | New    | Justification for changes to targets or calculations (if any) |  |
|                                                                     | 56,600                                                                                                                                                 | 56,600 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                        |        |                                                               |  |
| COMMENTS                                                            |                                                                                                                                                        |        |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                                                                                                                        |        |                                                               |  |
|                                                                     |                                                                                                                                                        |        |                                                               |  |

## 2.8. Indicator IWRM.8: Total flow measured (Q) at the Ronkh and G works

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Total flow measured (Q) at the Ronkh and G works                                                                                                                                                                                                                                            |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                                                              | Current Indicator Number | IWRM.8                   | All Previous Indicator Numbers | IWRM.9.                                                          |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                                                                     | Classification           | Level                    | Unit of Measure                | Rate                                                             |
| Detailed Definition                                                                                 | Volume of water flowing in the network of hydraulic systems per unit of time from the Ronkh and G works. Expressed in m3/s and measured in the off-season (Diamas on the coast of 2.20m).                                                                                                   |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | ANNUAL                                                                                                                                                                                                                                                                                      |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                          |                          | NO                       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                             |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                          |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                        |                          | NO                       |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the G and Ronkh works outflows. The increase in the Ronkh and G outflows will constitute a result that will help increase the irrigable or cultivable hectares. This increase also reflects the improvement of water availability for irrigated land. |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | The increase in flow rate is a water availability measurement element; which guarantees an increase in water availability                                                                                                                                                                   |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | The flow increase facilitates water access to more beneficiaries                                                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Irrigation Project Directorate                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Cheikh T. SENE                                                                                                                                                                                                                                                                              | Phone                    | 221.77.333.15.80         | E-mail                         | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | SAED                                                                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use data from the PMU Irrigation report. Water flow measurements will be calculated using the water flow meters to be installed by the Compact.                                                                                                                                             |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | SAED harvest statistics<br>Maps                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted to SAED through MCA-S's official correspondence. Besides, a mission of the M&E Directorate is scheduled to meet the Monitoring and Evaluation team with a view to collecting all raw data required for the calculation of the indicator.                            |                          |                          |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | ANNUAL                                                                                                                                                                                                                                                                                      |                          |                          |                                |                                                                  |

| Names of verification sources                                                        |  |                                                                                                                                        | Means of verification                                |                                 |                        |                                |
|--------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------------------|------------------------|--------------------------------|
| SEAD Annual Report                                                                   |  |                                                                                                                                        | Report PMU Irrigation, SAED harvest statistics, Maps |                                 |                        |                                |
| SEAD Annual Report                                                                   |  |                                                                                                                                        | Rapport PMU Irrigation, Rapport sur les Indicators   |                                 |                        |                                |
| Flow measurement Report                                                              |  |                                                                                                                                        | SAED Data Base                                       |                                 |                        |                                |
| Location of Data Storage                                                             |  | SAED                                                                                                                                   |                                                      |                                 |                        |                                |
| INDICATOR DATA QUALITY                                                               |  |                                                                                                                                        |                                                      |                                 |                        |                                |
| Date of Data Quality Review                                                          |  | November 2014                                                                                                                          |                                                      |                                 |                        |                                |
| Main findings of data quality review                                                 |  | Average Score (out of 4)                                                                                                               | Recommendations                                      | <div><p><b>IWRM.8</b></p></div> |                        |                                |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |  | 3,7                                                                                                                                    | N/A                                                  |                                 |                        |                                |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |  | 4,0                                                                                                                                    | N/A                                                  |                                 |                        |                                |
| 3. TIMELINESS- Are the data current and frequently collected?                        |  | 4,0                                                                                                                                    | N/A                                                  |                                 |                        |                                |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |  | 4,0                                                                                                                                    | N/A                                                  |                                 |                        |                                |
| 5. INTEGRITY- Is the data free from manipulation?                                    |  | 4,0                                                                                                                                    | N/A                                                  |                                 |                        |                                |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |  | 4,0                                                                                                                                    | N/A                                                  |                                 |                        |                                |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |  | 3,7                                                                                                                                    | N/A                                                  |                                 |                        |                                |
| Overall assessment                                                                   |  | 3,9                                                                                                                                    |                                                      |                                 |                        |                                |
| Action taken in response to data quality review                                      |  | Not Applicable                                                                                                                         |                                                      |                                 |                        |                                |
| Known data limitations and significance                                              |  | Not Applicable                                                                                                                         |                                                      |                                 |                        |                                |
| Actions taken to address data limitations                                            |  | Not Applicable                                                                                                                         |                                                      |                                 |                        |                                |
| INDICATOR BASELINE INFORMATION                                                       |  |                                                                                                                                        |                                                      |                                 |                        |                                |
| Old Baseline                                                                         |  | 20                                                                                                                                     | Old Baseline Year                                    | 2010 - 2011                     | Source of old Baseline | SAED flow measurement campaign |
| New Baseline                                                                         |  | 20                                                                                                                                     | New Baseline Year                                    | 2011-2012                       | Source of New Baseline | SAED flow measurement campaign |
| Justification for Baseline Change (if any)                                           |  | Implementation of the Program to Improve Water Availability (PDMAS) resulted in an increase in flows before the start of Compact works |                                                      |                                 |                        |                                |
| INDICATOR TARGET CALCULATIONS                                                        |  |                                                                                                                                        |                                                      |                                 |                        |                                |
|                                                                                      |  | Target                                                                                                                                 |                                                      |                                 |                        |                                |
| YEAR 1                                                                               |  | Old                                                                                                                                    | New                                                  |                                 |                        |                                |



|                                                                                                                                                                     |     |     |                                                               |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|---------------------------------------------------------------|--|
| Oct 2010 - Sept. 2011                                                                                                                                               | 20  | 20  | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations                                                                                                        |     |     |                                                               |  |
| YEAR 2                                                                                                                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2011 - Sept. 2012                                                                                                                                               | 20  | 20  |                                                               |  |
| Explanation of assumptions and inputs to target calculations                                                                                                        |     |     |                                                               |  |
| YEAR 3                                                                                                                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                                                                                                                               | 20  | 20  |                                                               |  |
| Explanation of assumptions and inputs to target calculations                                                                                                        |     |     |                                                               |  |
| YEAR 4                                                                                                                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                                                                                                                               | 20  | 20  |                                                               |  |
| Explanation of assumptions and inputs to target calculations                                                                                                        |     |     |                                                               |  |
| YEAR 5                                                                                                                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                                                                                                                               | 65  | 65  |                                                               |  |
| Explanation of assumptions and inputs to target calculations                                                                                                        |     |     |                                                               |  |
| Long Term Target                                                                                                                                                    | Old | New | Justification for changes to targets or calculations (if any) |  |
|                                                                                                                                                                     | 65  | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations                                                                                                        |     |     |                                                               |  |
| COMMENTS                                                                                                                                                            |     |     |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required)                                                                                                 |     |     |                                                               |  |
| NB : Measurements for the baseline year made in 12 <sup>th</sup> March, 2012 (Refer To " <a href="#">Rapport mesure de débit du 12 Mars 2012</a> " SAED, mars 2012) |     |     |                                                               |  |

## 2.9. Indicator IWRM.9. Number of hectares formalized (having a land allocation title and registered)

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Number of hectares formalized (having a land allocation title and registered)                                                                                                                                                                    |                          |                          | Version                        | N° 03 /Sept 2015                                                 |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                   | Current Indicator Number | IWRM.9                   | All Previous Indicator Numbers | IWRM.10.                                                         |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                          | Classification           | Cumulative               | Unit of Measure                | Hectares                                                         |
| Detailed Definition                                                                                 | Number of hectares of rural land that were officially recognized through the issuance of a land allocation title by the Local Authorities in the project's intervention areas.                                                                   |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                                                        |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                               |                          | NO                       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                  |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                               |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                             |                          | YES (Delta / Podor)      |                                |                                                                  |
| Comments about the Disaggregation                                                                   |                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | Land tenure security activities will help ensure new allocations or the regularization of existing ones and of their registration. The registration of plots will thus improve land management and, in particular, to formalize land use rights. |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | The indicator indicates the number of beneficiaries of new allocations or regularizations for the land tenure security activity                                                                                                                  |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | The indicator will be disaggregated by locality (Delta / Podor)                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Land and Institutional Reforms Directorate                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Alain DIOUF                                                                                                                                                                                                                                      | Phone                    | 221.77.333.15.72         | E-mail                         | <a href="mailto:adiouf@mcasenegal.org">adiouf@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Consultant responsible for the Land Tenure Security component LTS02                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use reports of the PMU Irrigation, of the Consultant responsible for land tenure security. Counting on the basis of land registers and land allocation titles issued                                                                             |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the Land and Institutional Reforms Directorate                                                                                                                                                                        |                          |                          |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |

|                                                                                      |   |                                                  |                                    |                        |                            |
|--------------------------------------------------------------------------------------|---|--------------------------------------------------|------------------------------------|------------------------|----------------------------|
| Names of verification sources                                                        |   |                                                  | Means of verification              |                        |                            |
| F&RI Directorate                                                                     |   |                                                  | Report F&RI Directorate            |                        |                            |
| Local Governments                                                                    |   |                                                  | Land Registers (Local Governments) |                        |                            |
| Location of Data Storage                                                             |   | MCA (Land and Institutional Reforms Directorate) |                                    |                        |                            |
| INDICATOR DATA QUALITY                                                               |   |                                                  |                                    |                        |                            |
| Date of Data Quality Review                                                          |   | November 2014                                    |                                    |                        |                            |
| Main findings of data quality review                                                 |   | Average Score (out of 4)                         | Recommendations                    |                        |                            |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |   | 3,6                                              | None                               |                        |                            |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |   | 3,6                                              | None                               |                        |                            |
| 3. TIMELINESS- Are the data current and frequently collected?                        |   | 3,7                                              | None                               |                        |                            |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |   | 4,0                                              | None                               |                        |                            |
| 5. INTEGRITY- Is the data free from manipulation?                                    |   | 4,0                                              | None                               |                        |                            |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |   | 4,0                                              | None                               |                        |                            |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |   | 4,0                                              | None                               |                        |                            |
| Overall assessment                                                                   |   | 3,8                                              |                                    |                        |                            |
| Action taken in response to data quality review                                      |   |                                                  | Not Applicable                     |                        |                            |
| Known data limitations and significance                                              |   |                                                  | Not Applicable                     |                        |                            |
| Actions taken to address data limitations                                            |   |                                                  | Not Applicable                     |                        |                            |
| INDICATOR BASELINE INFORMATION                                                       |   |                                                  |                                    |                        |                            |
| Old Baseline                                                                         | 0 | Old Baseline Year                                | 2010-2011                          | Source of old Baseline | F&RI Directorate Work Plan |
| New Baseline                                                                         | 0 | New Baseline Year                                | 2010-2011                          | Source of New Baseline | F&RI Directorate Work Plan |
| Justification for Baseline Change (if any)                                           |   |                                                  |                                    |                        |                            |
| INDICATOR TARGET CALCULATIONS                                                        |   |                                                  |                                    |                        |                            |

**IWRM.9**

| Category       | Score      |
|----------------|------------|
| Validite       | 3.6        |
| Fiabilite      | 3.6        |
| Opportunité    | 3.7        |
| Precision      | 4.0        |
| Integrité      | 4.0        |
| Adequation     | 4.0        |
| Praticabilité  | 4.0        |
| <b>Average</b> | <b>3.8</b> |

|                                                                     |                                                      |       |                                                               |  |
|---------------------------------------------------------------------|------------------------------------------------------|-------|---------------------------------------------------------------|--|
|                                                                     | Target                                               |       |                                                               |  |
| YEAR 1                                                              | Old                                                  | New   | Justification for changes to targets or calculations (if any) |  |
| Oct 2010 - Sept. 2011                                               | 0                                                    | 0     |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                      |       |                                                               |  |
| YEAR 2                                                              | Old                                                  | New   | Justification for changes to targets or calculations (if any) |  |
| Oct 2011 - Sept. 2012                                               | 0                                                    | 0     |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                      |       |                                                               |  |
| YEAR 3                                                              | Old                                                  | New   | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 0                                                    | 0     |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                      |       |                                                               |  |
| YEAR 4                                                              | Old                                                  | New   | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 748                                                  | 748   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        | Podor (Ngalenka) : 440 ha et Delta : 308 ha.         |       |                                                               |  |
| YEAR 5                                                              | Old                                                  | New   | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 3 440                                                | 3 440 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        | Includes Delta (3000 ha) and Podor/Ngalenka (440 ha) |       |                                                               |  |
| Long Term Target                                                    | Old                                                  | New   | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A                                                  | N/A   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                      |       |                                                               |  |
| COMMENTS                                                            |                                                      |       |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                      |       |                                                               |  |
|                                                                     |                                                      |       |                                                               |  |

## 2.10. Indicator IWRM.10. Percentage of land disputes resolved

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                                                          |                          |                                    |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Percentage of land disputes resolved                                                                                                                                                                                                                                                                                                                                                     |                          |                                    | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                                                                           | Current Indicator Number | IWRM.10                            | All Previous Indicator Numbers | IWRM.11.                                                         |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                                                                                                                                                                  | Classification           | Level (Cumulative)                 | Unit of Measure                | Percentage                                                       |
| Detailed Definition                                                                                 | Ratio of land disputes resolved at the level of land dispute resolution commissions, mediation and land settlement commissions in the town or municipal council, for all of the land disputes registered by these land conflict resolution bodies.                                                                                                                                       |                          |                                    |                                |                                                                  |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                                                                                                                                                                                                |                          | Reporting Period Covered           | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                       |                          | NO                                 |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                          |                          | NO                                 |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                       |                          | NO                                 |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                     |                          | YES (Delta / Podor)                |                                |                                                                  |
| Comments about the Disaggregation                                                                   |                                                                                                                                                                                                                                                                                                                                                                                          |                          |                                    |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                                                          |                          |                                    |                                |                                                                  |
| Justification for Including Indicator                                                               | The "Land Tenure Security" activity will help institute and strengthen the capacities of mediation bodies. It will also put in place dispute management instruments. This indicator will help measure the scope of instruments put in place and activities covering the bodies by assessing whether disputes are resolved or not; in accordance with the regulatory provisions in force. |                          |                                    |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                                                                           |                          |                                    |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                                                                                                                                           |                          |                                    |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                                                                                                                                           |                          |                                    |                                |                                                                  |
| Justification for Disaggregations                                                                   | The indicator will be disaggregated by locality (Delta / Podor)                                                                                                                                                                                                                                                                                                                          |                          |                                    |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                                                          |                          |                                    |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Land and Institutional Reforms Directorate                                                                                                                                                                                                                                                                                                                                               |                          |                                    |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Alain DIOUF                                                                                                                                                                                                                                                                                                                                                                              | Phone                    | 221.77.333.15.72                   | E-mail                         | <a href="mailto:adiouf@mcasenegal.org">adiouf@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Consultant responsible for the Land Tenure Security component LTS02                                                                                                                                                                                                                                                                                                                      |                          |                                    |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Collecting data on disputes on the basis of registers managed by the consultant and commissions responsible for dispute resolution.<br>"Percentage of land disputes resolved" = (Number of disputes resolved) x 100 / (Number of disputes registered).                                                                                                                                   |                          |                                    |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                                                                                                                                                           |                          |                                    |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the Land and Institutional Reforms Directorate                                                                                                                                                                                                                                                                                                                |                          |                                    |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                                                                                                                                                                                                                                                                |                          |                                    |                                |                                                                  |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                                                                                                                                                                          |                          | Means of verification              |                                |                                                                  |
| F&RI Directorate                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                          |                          | Report F&RI Directorate            |                                |                                                                  |
| Local Governments                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                          |                          | Land Registers (Local Governments) |                                |                                                                  |
| F&RI Directorate                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                          |                          | Dispute monitoring sheet           |                                |                                                                  |

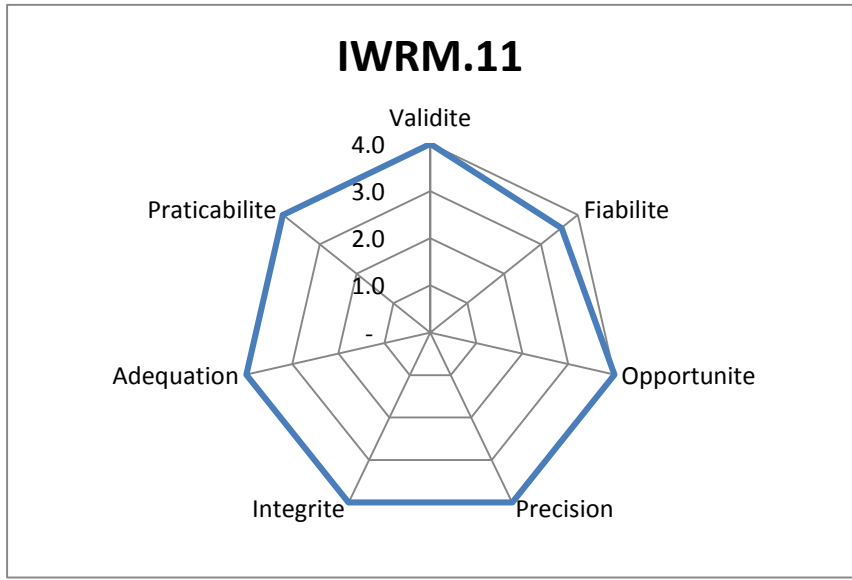
|                                                                                      |                          |                                                  |                                                               |                                                                                                                                                    |                |
|--------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Location of Data Storage                                                             |                          | MCA (Land and Institutional Reforms Directorate) |                                                               |                                                                                                                                                    |                |
| <b>INDICATOR DATA QUALITY</b>                                                        |                          |                                                  |                                                               |                                                                                                                                                    |                |
| Date of Data Quality Review                                                          |                          | June 2013                                        |                                                               |                                                                                                                                                    |                |
| Main findings of data quality review                                                 | Average Score (out of 4) | Recommendations                                  |                                                               | <p><b>IWRM.10</b></p> <p>Validite</p> <p>Fiabilite</p> <p>Opportunité</p> <p>Precision</p> <p>Integrité</p> <p>Adequation</p> <p>Praticabilité</p> |                |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 3,6                      | N/A                                              |                                                               |                                                                                                                                                    |                |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 4,0                      | N/A                                              |                                                               |                                                                                                                                                    |                |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 3,2                      | N/A                                              |                                                               |                                                                                                                                                    |                |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 3,0                      | N/A                                              |                                                               |                                                                                                                                                    |                |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                      | N/A                                              |                                                               |                                                                                                                                                    |                |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 2,4                      | N/A                                              |                                                               |                                                                                                                                                    |                |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 2,7                      | N/A                                              |                                                               |                                                                                                                                                    |                |
| Overall assessment                                                                   | 3,3                      |                                                  |                                                               |                                                                                                                                                    |                |
| Action taken in response to data quality review                                      |                          | Not Applicable                                   |                                                               |                                                                                                                                                    |                |
| Known data limitations and significance                                              |                          | Not Applicable                                   |                                                               |                                                                                                                                                    |                |
| Actions taken to address data limitations                                            |                          | Not Applicable                                   |                                                               |                                                                                                                                                    |                |
| <b>INDICATOR BASELINE INFORMATION</b>                                                |                          |                                                  |                                                               |                                                                                                                                                    |                |
| Old Baseline                                                                         | 0%                       | Old Baseline Year                                | 2010 - 2011                                                   | Source of old Baseline                                                                                                                             | DFRI Work Plan |
| New Baseline                                                                         | 0%                       | New Baseline Year                                | 2010 - 2011                                                   | Source of New Baseline                                                                                                                             | DFRI Work Plan |
| Justification for Baseline Change (if any)                                           |                          |                                                  |                                                               |                                                                                                                                                    |                |
| <b>INDICATOR TARGET CALCULATIONS</b>                                                 |                          |                                                  |                                                               |                                                                                                                                                    |                |
|                                                                                      | Target                   |                                                  |                                                               |                                                                                                                                                    |                |
| YEAR 1                                                                               | Old                      | New                                              | Justification for changes to targets or calculations (if any) |                                                                                                                                                    |                |
| Oct 2010 - Sept. 2011                                                                | 0%                       | 0%                                               |                                                               |                                                                                                                                                    |                |
| Explanation of assumptions and inputs to target calculations                         |                          |                                                  |                                                               |                                                                                                                                                    |                |
| YEAR 2                                                                               | Old                      | New                                              |                                                               |                                                                                                                                                    |                |

|                                                                     |     |     |                                                               |                                                                                                                                  |
|---------------------------------------------------------------------|-----|-----|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Oct 2011 - Sept. 2012                                               | 0%  | 0%  | Justification for changes to targets or calculations (if any) |                                                                                                                                  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |                                                                                                                                  |
| YEAR 3                                                              | Old | New | Justification for changes to targets or calculations (if any) | The Land Tenure Security implementation activities will start in year 3 but dispute resolution will effectively start in year 4. |
| Oct 2012 - Sept. 2013                                               | 0%  | 0%  |                                                               |                                                                                                                                  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |                                                                                                                                  |
| YEAR 4                                                              | Old | New | Justification for changes to targets or calculations (if any) |                                                                                                                                  |
| Oct 2013 - Sept. 2014                                               | 30% | 30% |                                                               |                                                                                                                                  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |                                                                                                                                  |
| YEAR 5                                                              | Old | New | Justification for changes to targets or calculations (if any) |                                                                                                                                  |
| Oct 2014 - Sept. 2015                                               | 50% | 50% |                                                               |                                                                                                                                  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |                                                                                                                                  |
| Long Term Target                                                    | Old | New | Justification for changes to targets or calculations (if any) |                                                                                                                                  |
|                                                                     | 50% | 50% |                                                               |                                                                                                                                  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |                                                                                                                                  |
| COMMENTS                                                            |     |     |                                                               |                                                                                                                                  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |     |     |                                                               |                                                                                                                                  |
|                                                                     |     |     |                                                               |                                                                                                                                  |

## 2.11. Indicator IWRM.11. Length of rehabilitated hydraulic axes in the Delta

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                 |                          |                          |                                                           |                                                                  |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-----------------------------------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Length of rehabilitated hydraulic axes in the Delta                                                                                                                                                                                                             |                          |                          | Version                                                   | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                                  | Current Indicator Number | IWRM. 11.                | All Previous Indicator Numbers                            | IWRM.12. / IWRM.13.                                              |
| Level                                                                                               | Output                                                                                                                                                                                                                                                          | Classification           | Cumulative               | Unit of Measure                                           | Kilometers                                                       |
| Detailed Definition                                                                                 | Designates works (Lot 2 Delta) relative to weed cutting, dredging and containment of the roads Gorom Upstream, Gorom Downstream, Lampsar Upstream, Lampsar Downstream, Canal Gandiolais, Ngalam, Ngrankaye and Kassack                                          |                          |                          |                                                           |                                                                  |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                                                                       |                          | Reporting Period Covered | Compact Duration                                          |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                              |                          | NO                       |                                                           |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                 |                          | NO                       |                                                           |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                              |                          | NO                       |                                                           |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                            |                          | NO                       |                                                           |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                 |                          |                          |                                                           |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the length of rehabilitated hydraulic axes in the Delta. The rehabilitation of these axes will boost the efficiency of the water infrastructure and thus lead to an increase in productivity and agricultural production. |                          |                          |                                                           |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                                                                                                                                  |                          |                          |                                                           |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                  |                          |                          |                                                           |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                  |                          |                          |                                                           |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                                                                                                  |                          |                          |                                                           |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                 |                          |                          |                                                           |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Irrigation Project Directorate                                                                                                                                                                                                                                  |                          |                          |                                                           |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Cheikh T. SENE                                                                                                                                                                                                                                                  | Phone                    | 221.77.333.15.80         | E-mail                                                    | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Consultant in charge of the supervision of works in the Delta                                                                                                                                                                                                   |                          |                          |                                                           |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use data provided by the Consultant responsible for supervising works in the Delta                                                                                                                                                                              |                          |                          |                                                           |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                                  |                          |                          |                                                           |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the Irrigation Directorate                                                                                                                                                                                                           |                          |                          |                                                           |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                                                                                                                                       |                          |                          |                                                           |                                                                  |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                                                 |                          |                          | Means of verification                                     |                                                                  |
| PMU Irrigation Report                                                                               |                                                                                                                                                                                                                                                                 |                          |                          | Final reports and Certificate of Completion               |                                                                  |
| Report of the inspection mission or of the Engineer                                                 |                                                                                                                                                                                                                                                                 |                          |                          | Report of the Engineer on the works performed by the Firm |                                                                  |
| Location of Data Storage                                                                            | MCA-S (Irrigation Project Directorate)                                                                                                                                                                                                                          |                          |                          |                                                           |                                                                  |
| INDICATOR DATA QUALITY                                                                              |                                                                                                                                                                                                                                                                 |                          |                          |                                                           |                                                                  |



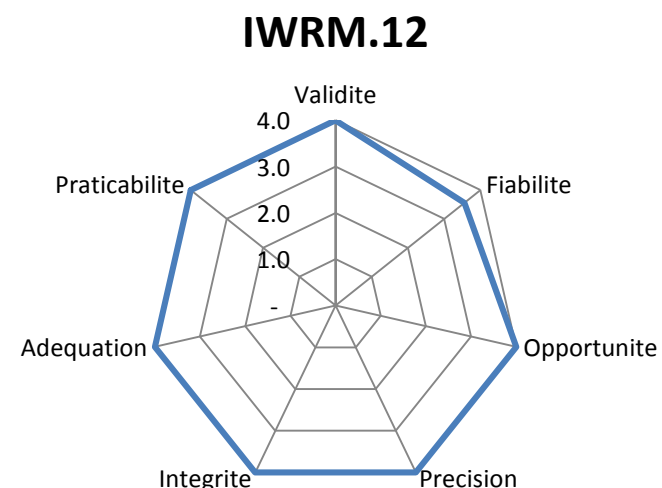
|                                                                                      |                          |                   |                                                                                                                     |                        |                        |
|--------------------------------------------------------------------------------------|--------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|
| Date of Data Quality Review                                                          |                          | November 2014     |                                                                                                                     |                        |                        |
| Main findings of data quality review                                                 | Average Score (out of 4) | Recommendations   | <div><p><b>IWRM.11</b></p></div> |                        |                        |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 4,0                      | N/A               |                                                                                                                     |                        |                        |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 3,6                      | N/A               |                                                                                                                     |                        |                        |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 4,0                      | N/A               |                                                                                                                     |                        |                        |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 4,0                      | N/A               |                                                                                                                     |                        |                        |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                      | N/A               |                                                                                                                     |                        |                        |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 4,0                      | N/A               |                                                                                                                     |                        |                        |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 4,0                      | N/A               |                                                                                                                     |                        |                        |
| Overall assessment                                                                   | 3,9                      |                   |                                                                                                                     |                        |                        |
| Action taken in response to data quality review                                      |                          | Not Applicable    |                                                                                                                     |                        |                        |
| Known data limitations and significance                                              |                          | Not Applicable    |                                                                                                                     |                        |                        |
| Actions taken to address data limitations                                            |                          | Not Applicable    |                                                                                                                     |                        |                        |
| INDICATOR BASELINE INFORMATION                                                       |                          |                   |                                                                                                                     |                        |                        |
| Old Baseline                                                                         | 0                        | Old Baseline Year | 2010 - 2011                                                                                                         | Source of old Baseline | IWRM Project Work Plan |
| New Baseline                                                                         | 0                        | New Baseline Year | 2010 - 2011                                                                                                         | Source of New Baseline | IWRM Project Work Plan |
| Justification for Baseline Change (if any)                                           |                          |                   |                                                                                                                     |                        |                        |
| INDICATOR TARGET CALCULATIONS                                                        |                          |                   |                                                                                                                     |                        |                        |
|                                                                                      | Target                   |                   |                                                                                                                     |                        |                        |
| YEAR 1                                                                               | Old                      | New               | Justification for changes to targets or calculations (if any)                                                       |                        |                        |
| Oct 2010 - Sept. 2011                                                                | 0                        | 0                 |                                                                                                                     |                        |                        |
| Explanation of assumptions and inputs to target calculations                         |                          |                   |                                                                                                                     |                        |                        |
| YEAR 2                                                                               | Old                      | New               | Justification for changes to targets or calculations (if any)                                                       |                        |                        |
| Oct 2011 - Sept. 2012                                                                | 0                        | 0                 |                                                                                                                     |                        |                        |
| Explanation of assumptions and inputs to target calculations                         |                          |                   |                                                                                                                     |                        |                        |
| YEAR 3                                                                               | Old                      | New               |                                                                                                                     |                        |                        |

|                                                                     |                                                                                                                                                                                                                                                                                                                                                         |       |                                                               |  |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------|--|
| Oct 2012 - Sept. 2013                                               | 0                                                                                                                                                                                                                                                                                                                                                       | 0     | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                         |       |                                                               |  |
| YEAR 4                                                              | Old                                                                                                                                                                                                                                                                                                                                                     | New   | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 40                                                                                                                                                                                                                                                                                                                                                      | 40    |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                         |       |                                                               |  |
| YEAR 5                                                              | Old                                                                                                                                                                                                                                                                                                                                                     | New   | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 144.5                                                                                                                                                                                                                                                                                                                                                   | 144.5 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                         |       |                                                               |  |
| Long Term Target                                                    | Old                                                                                                                                                                                                                                                                                                                                                     | New   | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A                                                                                                                                                                                                                                                                                                                                                     | N/A   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                         |       |                                                               |  |
| COMMENTS                                                            | This represents lot 2 Delta works with the following stretches: Gorom Upstream (24.8km), Gorom Downstream (7.8 km), Kassack Nord (10.3 km), Kassack Sud (9.73 km), Lampsar Upstream (20.11 km), Lampsar Médian (24.93 km), Lampsar Downstream (17,31 km), Canal Gandiolais (7,9 km), Ngalam (12,9 km) et Nkrankaye (8.67 km), i.e. a total of 144.5 km. |       |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                                                                                                                                                                                                                                                                                                                         |       |                                                               |  |
|                                                                     |                                                                                                                                                                                                                                                                                                                                                         |       |                                                               |  |

## 2.12. Indicator IWRM.12. Length of the main drainage canal built in the Delta

| <b>INDICATOR BASIC DETAILS</b>                                                                      |                                                                                                               |                                                                                                |                                             |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Length of the main drainage canal built in the Delta                                                          |                                                                                                |                                             | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | Not Applicable                                                                                                | Current Indicator Number                                                                       | IWRM.12                                     | All Previous Indicator Numbers | IWRM.13. / IWRM.14.                                                     |
| Level                                                                                               | Output                                                                                                        | Classification                                                                                 | Cumulative                                  | Unit of Measure                | Kilometers                                                              |
| Detailed Definition                                                                                 | The constructed length of a new drain (tranche 2 of branch B of the Delta emissary). It is in the lot 3-Delta |                                                                                                |                                             |                                |                                                                         |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                     |                                                                                                | Reporting Period Covered                    | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                            |                                                                                                | NO                                          |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                               |                                                                                                | NO                                          |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                            |                                                                                                | NO                                          |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                          |                                                                                                | NO                                          |                                |                                                                         |
| <b>INDICATOR JUSTIFICATION DETAILS</b>                                                              |                                                                                                               |                                                                                                |                                             |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                                                               | The indicator provides information on the length of the main drainage canal built in the Delta |                                             |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                                                               | Not Applicable                                                                                 |                                             |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                                                               | Not Applicable                                                                                 |                                             |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                                                               | Not Applicable                                                                                 |                                             |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                                                               | Not Applicable                                                                                 |                                             |                                |                                                                         |
| <b>INDICATOR ACQUISITION PLAN</b>                                                                   |                                                                                                               |                                                                                                |                                             |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                               | Irrigation Project Directorate                                                                 |                                             |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                               | Cheikh T. SENE                                                                                 | Phone                                       | 221.77.333.15.80               | E-mail <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                               | Consultant responsible for supervising works in the Delta                                      |                                             |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                               | Use data provided by the Consultant responsible for supervising works in the Delta             |                                             |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                               | Not Applicable                                                                                 |                                             |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                               | The data is transmitted by the Irrigation Directorate                                          |                                             |                                |                                                                         |
| Frequency and timing of data acquisition                                                            |                                                                                                               | QUARTERLY                                                                                      |                                             |                                |                                                                         |
| Names of verification sources                                                                       |                                                                                                               |                                                                                                | Means of verification                       |                                |                                                                         |
| PMU Irrigation Report                                                                               |                                                                                                               |                                                                                                | Final reports and Certificate of Completion |                                |                                                                         |
| Report of the inspection mission                                                                    |                                                                                                               |                                                                                                | Final reports and Certificate of Completion |                                |                                                                         |
| Location of Data Storage                                                                            |                                                                                                               | MCA-S (Irrigation Project Directorate)                                                         |                                             |                                |                                                                         |
| <b>INDICATOR DATA QUALITY</b>                                                                       |                                                                                                               |                                                                                                |                                             |                                |                                                                         |
| Date of Data Quality Review                                                                         |                                                                                                               |                                                                                                | November 2014                               |                                |                                                                         |
| Main findings of data quality review                                                                |                                                                                                               | Average Score (out of 4)                                                                       | Recommendations                             |                                |                                                                         |

|                                                                                      |     |     |
|--------------------------------------------------------------------------------------|-----|-----|
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 4,0 | N/A |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 3,6 | N/A |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 4,0 | N/A |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 4,0 | N/A |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0 | N/A |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 4,0 | N/A |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 4,0 | N/A |
| Overall assessment                                                                   | 3,9 |     |



|                                                 |                |
|-------------------------------------------------|----------------|
| Action taken in response to data quality review | Not Applicable |
| Known data limitations and significance         | Not Applicable |
| Actions taken to address data limitations       | Not Applicable |

**INDICATOR BASELINE INFORMATION**

|                                            |   |                   |             |                        |                              |
|--------------------------------------------|---|-------------------|-------------|------------------------|------------------------------|
| Old Baseline                               | 0 | Old Baseline Year | 2010 - 2011 | Source of old Baseline | Irrigation Project Work Plan |
| New Baseline                               | 0 | New Baseline Year | 2010 - 2011 | Source of New Baseline | Irrigation Project Work Plan |
| Justification for Baseline Change (if any) |   |                   |             |                        |                              |

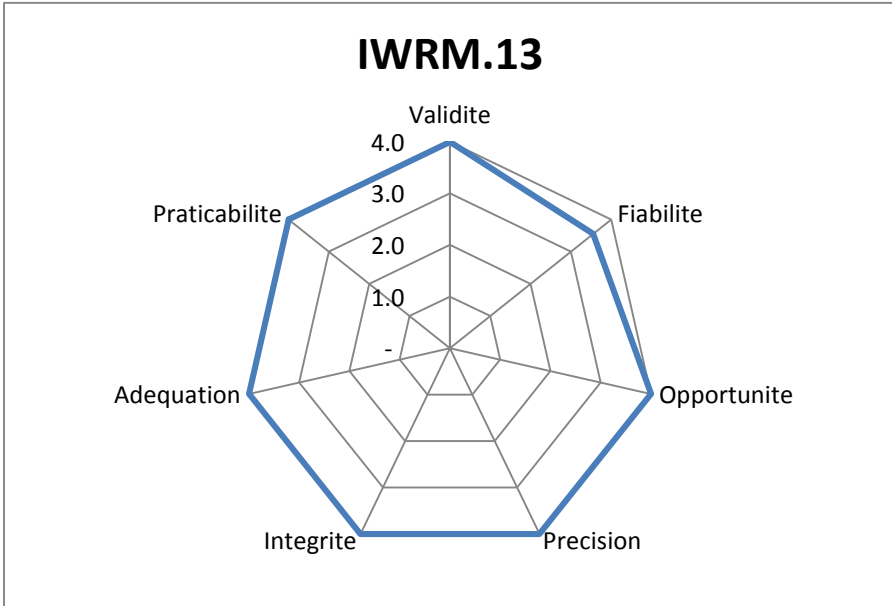
**INDICATOR TARGET CALCULATIONS**

|                                                              | Target |     |                                                               |  |
|--------------------------------------------------------------|--------|-----|---------------------------------------------------------------|--|
| YEAR 1                                                       | Old    | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2010 - Sept. 2011                                        | 0      | 0   |                                                               |  |
| Explanation of assumptions and inputs to target calculations |        |     |                                                               |  |
| YEAR 2                                                       | Old    | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2011 - Sept. 2012                                        | 0      | 0   |                                                               |  |
| Explanation of assumptions and inputs to target calculations |        |     |                                                               |  |
| YEAR 3                                                       | Old    | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                        | 0      | 0   |                                                               |  |

|                                                                     |                                                                                       |      |                                                               |  |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|------|---------------------------------------------------------------|--|
| Explanation of assumptions and inputs to target calculations        |                                                                                       |      |                                                               |  |
| YEAR 4                                                              | Old                                                                                   | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 0                                                                                     | 0    |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                       |      |                                                               |  |
| YEAR 5                                                              | Old                                                                                   | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 40.8                                                                                  | 40.8 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        | Delta : 21.7 km of new drain and 19.1 km of drain to be standardized (current Djeuss) |      |                                                               |  |
| Long Term Target                                                    | Old                                                                                   | New  | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A                                                                                   | N/A  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                       |      |                                                               |  |
| COMMENTS                                                            |                                                                                       |      |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                                                       |      |                                                               |  |
|                                                                     |                                                                                       |      |                                                               |  |

## 2.13. Indicator IWRM.13. Total length of canals and drains built in Ngalenka

| INDICATOR BASIC DETAILS                                                                             |                                                                             |                                                                                               |                                             |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Total length of canals and drains built in Ngalenka                         |                                                                                               |                                             | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | Not Applicable                                                              | Current Indicator Number                                                                      | IWRM.13                                     | All Previous Indicator Numbers | IWRM.14 / IWRM.15.                                                      |
| Level                                                                                               | Output                                                                      | Classification                                                                                | Cumulative                                  | Unit of Measure                | Kilometers                                                              |
| Detailed Definition                                                                                 | Total length of canals and drains newly built by the project with MCC funds |                                                                                               |                                             |                                |                                                                         |
| Frequency of Reporting                                                                              | QUARTERLY                                                                   |                                                                                               | Reporting Period Covered                    | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                          |                                                                                               | NO                                          |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                             |                                                                                               | NO                                          |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                          |                                                                                               | NO                                          |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                        |                                                                                               | NO                                          |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                             |                                                                                               |                                             |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                             | The indicator provides information on the total length of canals and drains built in Ngalenka |                                             |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                             | Not Applicable                                                                                |                                             |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                             | Not Applicable                                                                                |                                             |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                             | Not Applicable                                                                                |                                             |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                             | Not Applicable                                                                                |                                             |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                             |                                                                                               |                                             |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                             | Irrigation Project Directorate                                                                |                                             |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                             | Cheikh T. SENE                                                                                | Phone                                       | 221.77.333.15.80               | E-mail <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                             | Consultant responsible for supervising works in Ngalenka                                      |                                             |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                             | Use data provided by the Consultant responsible for supervising works in Ngalenka             |                                             |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                             | Not Applicable                                                                                |                                             |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                             | The data is transmitted by the Irrigation Directorate                                         |                                             |                                |                                                                         |
| Frequency and timing of data acquisition                                                            |                                                                             | QUARTERLY                                                                                     |                                             |                                |                                                                         |
| Names of verification sources                                                                       |                                                                             |                                                                                               | Means of verification                       |                                |                                                                         |
| PMU Irrigation Report                                                                               |                                                                             |                                                                                               | Final reports and Certificate of Completion |                                |                                                                         |
| Report of the inspection mission                                                                    |                                                                             |                                                                                               | Final reports and Certificate of Completion |                                |                                                                         |
| Location of Data Storage                                                                            |                                                                             | MCA-S (Irrigation Project Directorate)                                                        |                                             |                                |                                                                         |
| INDICATOR DATA QUALITY                                                                              |                                                                             |                                                                                               |                                             |                                |                                                                         |
| Date of Data Quality Review                                                                         |                                                                             | November 2014                                                                                 |                                             |                                |                                                                         |

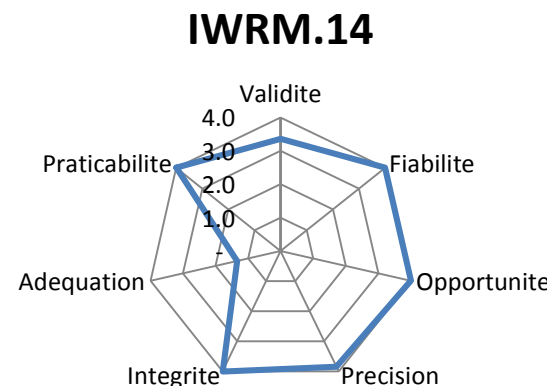
|                                                                                      |                             |                   |                                                                                                                |                        |                                     |
|--------------------------------------------------------------------------------------|-----------------------------|-------------------|----------------------------------------------------------------------------------------------------------------|------------------------|-------------------------------------|
| Main findings of data quality review                                                 | Average Score<br>(out of 4) | Recommendations   | <div><h3>IWRM.13</h3></div> |                        |                                     |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 4,0                         | N/A               |                                                                                                                |                        |                                     |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 3,6                         | N/A               |                                                                                                                |                        |                                     |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 4,0                         | N/A               |                                                                                                                |                        |                                     |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 4,0                         | N/A               |                                                                                                                |                        |                                     |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                         | N/A               |                                                                                                                |                        |                                     |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 4,0                         | N/A               |                                                                                                                |                        |                                     |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 4,0                         | N/A               |                                                                                                                |                        |                                     |
| Overall assessment                                                                   | 3,9                         |                   |                                                                                                                |                        |                                     |
| Action taken in response to data quality review                                      | Not Applicable              |                   |                                                                                                                |                        |                                     |
| Known data limitations and significance                                              | Not Applicable              |                   |                                                                                                                |                        |                                     |
| Actions taken to address data limitations                                            | Not Applicable              |                   |                                                                                                                |                        |                                     |
| INDICATOR BASELINE INFORMATION                                                       |                             |                   |                                                                                                                |                        |                                     |
| Old Baseline                                                                         | 0                           | Old Baseline Year | 2010 - 2011                                                                                                    | Source of old Baseline | Work Plan of the Irrigation Project |
| New Baseline                                                                         | 0                           | New Baseline Year | 2010 - 2011                                                                                                    | Source of New Baseline | Work Plan of the Irrigation Project |
| Justification for Baseline Change (if any)                                           |                             |                   |                                                                                                                |                        |                                     |
| INDICATOR TARGET CALCULATIONS                                                        |                             |                   |                                                                                                                |                        |                                     |
|                                                                                      | Target                      |                   |                                                                                                                |                        |                                     |
| YEAR 1                                                                               | Old                         | New               | Justification for changes to targets or calculations (if any)                                                  |                        |                                     |
| Oct 2010 - Sept. 2011                                                                | 0                           | 0                 |                                                                                                                |                        |                                     |
| Explanation of assumptions and inputs to target calculations                         |                             |                   |                                                                                                                |                        |                                     |
| YEAR 2                                                                               | Old                         | New               |                                                                                                                |                        |                                     |

|                                                                     |                                                                                                                                                    |      |                                                               |  |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------------------------------------------------|--|
| Oct 2011 - Sept. 2012                                               | 0                                                                                                                                                  | 0    | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                    |      |                                                               |  |
| YEAR 3                                                              | Old                                                                                                                                                | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 25,0                                                                                                                                               | 25,0 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        | This represents the following canals and drains: main drain (2.0 km), secondary drain (14.0 km), main canal (2.0 km) and secondary canal (7.0 km). |      |                                                               |  |
| YEAR 4                                                              | Old                                                                                                                                                | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 25,0                                                                                                                                               | 25,0 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                    |      |                                                               |  |
| YEAR 5                                                              | Old                                                                                                                                                | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 25,0                                                                                                                                               | 25,0 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                    |      |                                                               |  |
| Long Term Target                                                    | Old                                                                                                                                                | New  | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A                                                                                                                                                | N/A  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                    |      |                                                               |  |
| COMMENTS                                                            |                                                                                                                                                    |      |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                                                                                                                    |      |                                                               |  |
|                                                                     |                                                                                                                                                    |      |                                                               |  |



## 2.14. Indicator IWRM.14. Hectares under improved irrigation (with MCC support)

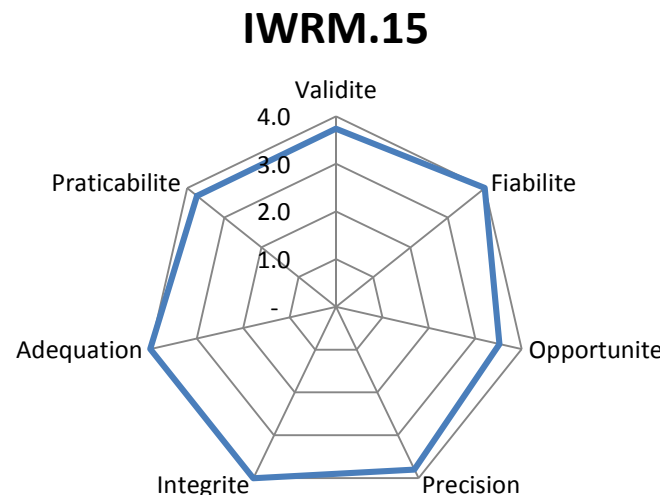
| <b>INDICATOR BASIC DETAILS</b>                                                                      |                                                                                                                                                                                                                                                |                                                                                                                                                      |                           |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Hectares under improved irrigation (with MCC support)                                                                                                                                                                                          |                                                                                                                                                      |                           | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | (AI-8)                                                                                                                                                                                                                                         | Current Indicator Number                                                                                                                             | IWRM.14                   | All Previous Indicator Numbers | IWRM.15. / IWRM.16.                                                     |
| Level                                                                                               | Output                                                                                                                                                                                                                                         | Classification                                                                                                                                       | Cumulative                | Unit of Measure*               | Hectares                                                                |
| Detailed Definition                                                                                 | The number of hectares served by existing or new irrigation infrastructure that are either rehabilitated or constructed with MCC funding. (This is the number of hectares affected by the infrastructure improvements once they are complete.) |                                                                                                                                                      |                           |                                |                                                                         |
| Frequency of Reporting                                                                              | ANNUAL                                                                                                                                                                                                                                         |                                                                                                                                                      | Reporting Period Covered  | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                             |                                                                                                                                                      | NO                        |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                |                                                                                                                                                      | NO                        |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                             |                                                                                                                                                      | NO                        |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                           |                                                                                                                                                      | YES (Delta / Ngalenka)    |                                |                                                                         |
| <b>INDICATOR JUSTIFICATION DETAILS</b>                                                              |                                                                                                                                                                                                                                                |                                                                                                                                                      |                           |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                                                                                                                                                                                                | It is an indicator proposed on the list of common indicators. See "Guidance on Common Indicator, May 2012" MCC.                                      |                           |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                                                                                                                | Not Applicable                                                                                                                                       |                           |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                                                                                                                                                                                                | Not Applicable                                                                                                                                       |                           |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                                                                                                                | Not Applicable                                                                                                                                       |                           |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                                                                                                                                                                                                | The indicator will be disaggregated by locality (Delta / Ngalenka)                                                                                   |                           |                                |                                                                         |
| <b>INDICATOR ACQUISITION PLAN</b>                                                                   |                                                                                                                                                                                                                                                |                                                                                                                                                      |                           |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                                                                                                                | Irrigation Project Directorate                                                                                                                       |                           |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                                                                                                                | Cheikh T. SENE                                                                                                                                       | Phone                     | 221.77.333.15.80               | E-mail <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                                                                                                                | SAED                                                                                                                                                 |                           |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                                                                                                                | The indicator includes all the hectares in the service area of an improved irrigation system regardless of whether or not they are under production. |                           |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                                                                                                                | Not Applicable                                                                                                                                       |                           |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                                                                                                                | The data is transmitted by the Irrigation Directorate                                                                                                |                           |                                |                                                                         |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                                                                                                                | ANNUAL                                                                                                                                               |                           |                                |                                                                         |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                                |                                                                                                                                                      | Means of verification     |                                |                                                                         |
| PMU Irrigation Report                                                                               |                                                                                                                                                                                                                                                |                                                                                                                                                      | Table of indicators       |                                |                                                                         |
| Final completion report of the Consultant in charge of supervision                                  |                                                                                                                                                                                                                                                |                                                                                                                                                      | Monthly and Final Reports |                                |                                                                         |
| SAED Report                                                                                         |                                                                                                                                                                                                                                                |                                                                                                                                                      | Data base                 |                                |                                                                         |
| Location of Data Storage                                                                            |                                                                                                                                                                                                                                                | SAED                                                                                                                                                 |                           |                                |                                                                         |
| <b>INDICATOR DATA QUALITY</b>                                                                       |                                                                                                                                                                                                                                                |                                                                                                                                                      |                           |                                |                                                                         |

|                                                                                      |        |                                                           |                                                               |                        |                                                                                                               |
|--------------------------------------------------------------------------------------|--------|-----------------------------------------------------------|---------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------|
| Date of Data Quality Review                                                          |        | Novembre 2014                                             |                                                               |                        |                                                                                                               |
| Main findings of data quality review                                                 |        | Average Score<br>(out of 4)                               | Recommendations                                               |                        | <div><b>IWRM.14</b></div>  |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        | 3,4                                                       |                                                               |                        |                                                                                                               |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        | 4,0                                                       |                                                               |                        |                                                                                                               |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        | 4,0                                                       |                                                               |                        |                                                                                                               |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        | 3,8                                                       |                                                               |                        |                                                                                                               |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        | 4,0                                                       |                                                               |                        |                                                                                                               |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        | 2,4                                                       |                                                               |                        |                                                                                                               |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        | 4,0                                                       |                                                               |                        |                                                                                                               |
| Overall assessment                                                                   |        | 3,7                                                       |                                                               |                        |                                                                                                               |
| Action taken in response to data quality review                                      |        | - Collection procedure clarified and harmonized with SAED |                                                               |                        |                                                                                                               |
| Known data limitations and significance                                              |        | Not Applicable                                            |                                                               |                        |                                                                                                               |
| Actions taken to address data limitations                                            |        | Not Applicable                                            |                                                               |                        |                                                                                                               |
| INDICATOR BASELINE INFORMATION                                                       |        |                                                           |                                                               |                        |                                                                                                               |
| Old Baseline                                                                         | 0      | Old Baseline Year                                         | 2011 - 2012                                                   | Source of old Baseline | IWRM Project Work Plan                                                                                        |
| New Baseline                                                                         | 0      | New Baseline Year                                         | 2011 - 2012                                                   | Source of New Baseline | IWRM Project Work Plan                                                                                        |
| Justification for Baseline Change (if any)                                           |        |                                                           |                                                               |                        |                                                                                                               |
| INDICATOR TARGET CALCULATIONS                                                        |        |                                                           |                                                               |                        |                                                                                                               |
|                                                                                      | Target |                                                           |                                                               |                        |                                                                                                               |
| YEAR 1                                                                               | Old    | New                                                       | Justification for changes to targets or calculations (if any) |                        |                                                                                                               |
| Oct 2010 - Sept. 2011                                                                | N/A    | N/A                                                       |                                                               |                        |                                                                                                               |
| Explanation of assumptions and inputs to target calculations                         |        |                                                           |                                                               |                        |                                                                                                               |
| YEAR 2                                                                               | Old    | New                                                       | Justification for changes to targets or calculations (if any) |                        |                                                                                                               |
| Oct 2011 - Sept. 2012                                                                | 0      | 0                                                         |                                                               |                        |                                                                                                               |
| Explanation of assumptions and inputs to target calculations                         |        |                                                           |                                                               |                        |                                                                                                               |
| YEAR 3                                                                               | Old    | New                                                       | Justification for changes to targets or calculations (if any) |                        |                                                                                                               |
| Oct 2012 - Sept. 2013                                                                | 0      | 0                                                         |                                                               |                        |                                                                                                               |

|                                                                     |                                                   |        |                                                               |  |
|---------------------------------------------------------------------|---------------------------------------------------|--------|---------------------------------------------------------------|--|
| Explanation of assumptions and inputs to target calculations        |                                                   |        |                                                               |  |
| YEAR 4                                                              | Old                                               | New    | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 35 480                                            | 35 480 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        | This includes : Delta 35040 ha et Ngalenka 440 ha |        |                                                               |  |
| YEAR 5                                                              | Old                                               | New    | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 35 480                                            | 35 480 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                   |        |                                                               |  |
| Long Term Target                                                    | Old                                               | New    | Justification for changes to targets or calculations (if any) |  |
|                                                                     | 42 721                                            | 42 721 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                   |        |                                                               |  |
| COMMENTS                                                            |                                                   |        |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                   |        |                                                               |  |
|                                                                     |                                                   |        |                                                               |  |

## 2.15. Indicator IWRM. 15. Stakeholders trained

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Stakeholders trained                                                                                                                                                                                                                                                                                                                           |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | (L-3)                                                                                                                                                                                                                                                                                                                                          | Current Indicator Number | IWRM.15                  | All Previous Indicator Numbers | IWRM.16. / IWRM.17.                                              |
| Level                                                                                               | Output                                                                                                                                                                                                                                                                                                                                         | Classification           | Cumulative               | Unit of Measure                | Number                                                           |
| Detailed Definition                                                                                 | The number of public officials, traditional authorities, project beneficiaries and representatives of the private sector, receiving formal on-the-job land training or technical assistance regarding registration, surveying, conflict resolution, land allocation, land use planning, land legislation, land management or new technologies. |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                                                                                                                                                      |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                             |                          | YES (Male, Female)       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                |                          | YES (<35 / >35)          |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                             |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                           |                          | YES (Delta / Podor)      |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | With the support of the Consultant in charge of implementing land tenure security activities, several training sessions are scheduled for technical services, locally elected representatives and organizations with a view to strengthening their skills in land tenure security tools.                                                       |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Training activities will help improve the management of land resources and contribute to the land tenure security of beneficiary populations.                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | Beneficiaries of training activities will be characterized by gender, age and locality of origin.                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Land and Institutional Reforms Directorate                                                                                                                                                                                                                                                                                                     |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Alain DIOUF                                                                                                                                                                                                                                                                                                                                    | Phone                    | 221.77.333.15.72         | E-mail                         | <a href="mailto:adiouf@mcasenegal.org">adiouf@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Consultant responsible for implementing Land Tenure Security and PMU-SAED                                                                                                                                                                                                                                                                      |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use of reports and training sheets of the Consultant responsible for implementing Land Tenure Security with indications on the names, address, date and place of birth of persons. A person participating in several sessions shall be counted only once                                                                                       |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the Land and Institutional Reforms Directorate                                                                                                                                                                                                                                                                      |                          |                          |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                                                                                                                                                                                                                      |                          |                          |                                |                                                                  |

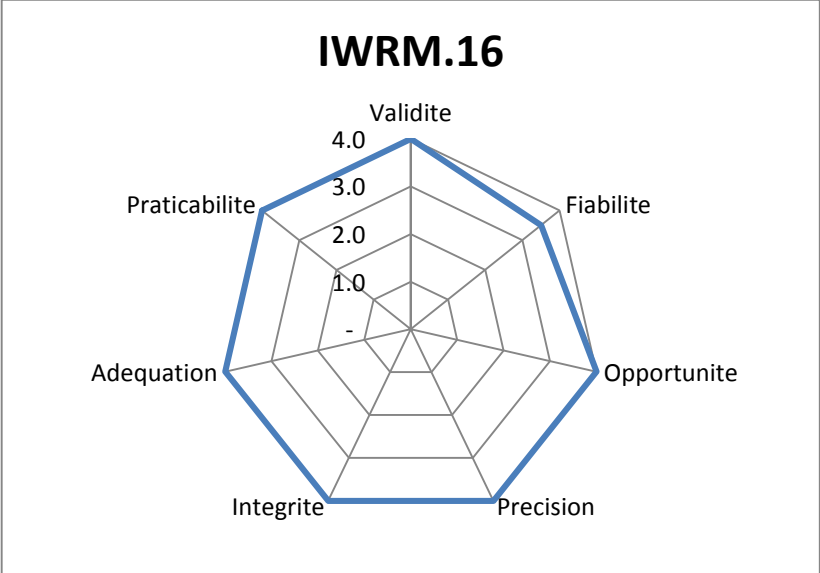
|                                                                                      |        |                                            |                                                               |                                                                                                                |                |
|--------------------------------------------------------------------------------------|--------|--------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------|
| Names of verification sources                                                        |        |                                            |                                                               | Means of verification                                                                                          |                |
| Report F&RI Directorate                                                              |        |                                            |                                                               | Report F&RI Directorate                                                                                        |                |
| Training reports of the consultant in charge of implementing land tenure security    |        |                                            |                                                               | Reports of the training activity                                                                               |                |
| Location of Data Storage                                                             |        | Land and Institutional Reforms Directorate |                                                               |                                                                                                                |                |
| INDICATOR DATA QUALITY                                                               |        |                                            |                                                               |                                                                                                                |                |
| Date of Data Quality Review                                                          |        |                                            | November 2014                                                 |                                                                                                                |                |
| Main findings of data quality review                                                 |        | Average Score (out of 4)                   | Recommendations                                               | <div><h3>IWRM.15</h3></div> |                |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        | 3,7                                        | N/A                                                           |                                                                                                                |                |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        | 4,0                                        | N/A                                                           |                                                                                                                |                |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        | 3,5                                        | N/A                                                           |                                                                                                                |                |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        | 3,8                                        | N/A                                                           |                                                                                                                |                |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        | 4,0                                        | N/A                                                           |                                                                                                                |                |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        | 4,0                                        | N/A                                                           |                                                                                                                |                |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        | 3,7                                        | N/A                                                           |                                                                                                                |                |
| Overall assessment                                                                   |        | 3,8                                        |                                                               |                                                                                                                |                |
| Action taken in response to data quality review                                      |        | Not Applicable                             |                                                               |                                                                                                                |                |
| Known data limitations and significance                                              |        | Not Applicable                             |                                                               |                                                                                                                |                |
| Actions taken to address data limitations                                            |        | Not Applicable                             |                                                               |                                                                                                                |                |
| INDICATOR BASELINE INFORMATION                                                       |        |                                            |                                                               |                                                                                                                |                |
| Old Baseline                                                                         | 0      | Old Baseline Year                          | 2010-2011                                                     | Source of old Baseline                                                                                         | DFRI Work Plan |
| New Baseline                                                                         | 0      | New Baseline Year                          | 2010-2011                                                     | Source of New Baseline                                                                                         | DFRI Work Plan |
| Justification for Baseline Change (if any)                                           |        |                                            |                                                               |                                                                                                                |                |
| INDICATOR TARGET CALCULATIONS                                                        |        |                                            |                                                               |                                                                                                                |                |
|                                                                                      | Target |                                            |                                                               |                                                                                                                |                |
| YEAR 1                                                                               | Old    | New                                        | Justification for changes to targets or calculations (if any) |                                                                                                                |                |
| Oct 2010 - Sept. 2011                                                                | 0      | 0                                          |                                                               |                                                                                                                |                |
| Explanation of assumptions and inputs to target calculations                         |        |                                            |                                                               |                                                                                                                |                |
| YEAR 2                                                                               | Old    | New                                        |                                                               |                                                                                                                |                |

|                                                                     |     |     |                                                               |  |
|---------------------------------------------------------------------|-----|-----|---------------------------------------------------------------|--|
| Oct 2011 - Sept. 2012                                               | 0   | 0   | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 3                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 200 | 200 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 4                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 400 | 400 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 5                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 600 | 600 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| Long Term Target                                                    | Old | New | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| COMMENTS                                                            |     |     |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |     |     |                                                               |  |
|                                                                     |     |     |                                                               |  |

## 2.16. Indicator IWRM.16. Number of hectares of mapped land

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                 |                                                                    |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Number of hectares of mapped land                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                 |                                                                    | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                          | Current Indicator Number                                                                                                                                                                                                                                                                        | IWRM.16                                                            | All Previous Indicator Numbers | IWRM.17. / IWRM.18.                                                     |
| Level                                                                                               | Output                                                                                                                                                                                                  | Classification                                                                                                                                                                                                                                                                                  | Cumulative                                                         | Unit of Measure                | Hectares                                                                |
| Detailed Definition                                                                                 | Hectares of rural land mapped thanks to the field inventory and/or the use of aerial or satellite photography making it possible to clarify the property boundaries, the delimitation, the types of use |                                                                                                                                                                                                                                                                                                 |                                                                    |                                |                                                                         |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                 | Reporting Period Covered                                           | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                 | NO                                                                 |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                 | NO                                                                 |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                 | NO                                                                 |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                 | YES (Delta / Podor)                                                |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                 |                                                                    |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                                                                                                                                                         | The mapping of irrigated land is one of the key tools implemented within the framework of the "land tenure security" activity with a view to contributing to dispute prevention and land management in the local communities. The mapped plots will be inserted in the Land Information System. |                                                                    |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                                                                         | Not Applicable                                                                                                                                                                                                                                                                                  |                                                                    |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                                                                                                                                                         | Not Applicable                                                                                                                                                                                                                                                                                  |                                                                    |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                                                                         | Not Applicable                                                                                                                                                                                                                                                                                  |                                                                    |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                                                                                                                                                         | The indicator will be disaggregated by locality as a means of reporting the results obtained by project zone or locality (Delta / Podor)                                                                                                                                                        |                                                                    |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                 |                                                                    |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                                                                         | Land and Institutional Reforms Directorate                                                                                                                                                                                                                                                      |                                                                    |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                                                                         | Alain DIOUF                                                                                                                                                                                                                                                                                     | Phone                                                              | 221.77.333.15.72               | E-mail <a href="mailto:adiouf@mcasenegal.org">adiouf@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                                                                         | PMU-SAED                                                                                                                                                                                                                                                                                        |                                                                    |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                                                                         | Use of maps of the development zones (reports of PMU Irrigation, PMU-SAED, Consultants)<br>Invoice prepared by GIS and land Specialists of PMU Irrigation                                                                                                                                       |                                                                    |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                                                                         | Not Applicable                                                                                                                                                                                                                                                                                  |                                                                    |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                                                                         | The data is transmitted by the Land and Institutional Reforms Directorate based on fact sheets and quarterly reports                                                                                                                                                                            |                                                                    |                                |                                                                         |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                                                                         | ANNUAL                                                                                                                                                                                                                                                                                          |                                                                    |                                |                                                                         |
| Names of verification sources                                                                       |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                 | Means of verification                                              |                                |                                                                         |
| Report F&RI Directorate                                                                             |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                 | Report F&RI Directorate                                            |                                |                                                                         |
| Reports of the consultant in charge of land tenure security                                         |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                 | Report / deliverables of the Consultant, Final Land Surveys Report |                                |                                                                         |
| Location of Data Storage                                                                            |                                                                                                                                                                                                         | Land and Institutional Reforms Directorate                                                                                                                                                                                                                                                      |                                                                    |                                |                                                                         |

**INDICATOR DATA QUALITY**

|                                                                                      |                          |                 |                                                                                     |
|--------------------------------------------------------------------------------------|--------------------------|-----------------|-------------------------------------------------------------------------------------|
| Date of Data Quality Review                                                          |                          | November 2014   |                                                                                     |
| Main findings of data quality review                                                 | Average Score (out of 4) | Recommendations |  |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 4,0                      | N/A             |                                                                                     |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 3,5                      | N/A             |                                                                                     |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 4,0                      | N/A             |                                                                                     |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 4,0                      | N/A             |                                                                                     |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                      | N/A             |                                                                                     |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 4,0                      | N/A             |                                                                                     |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 4,0                      | N/A             |                                                                                     |
| Overall assessment                                                                   | 3,9                      |                 |                                                                                     |
| Action taken in response to data quality review                                      | Not Applicable           |                 |                                                                                     |
| Known data limitations and significance                                              | Not Applicable           |                 |                                                                                     |
| Actions taken to address data limitations                                            | Not Applicable           |                 |                                                                                     |

**INDICATOR BASELINE INFORMATION**

|                                            |   |                   |           |                        |                |
|--------------------------------------------|---|-------------------|-----------|------------------------|----------------|
| Old Baseline                               | 0 | Old Baseline Year | 2010-2011 | Source of old Baseline | DFRI Work Plan |
| New Baseline                               | 0 | New Baseline Year | 2010-2011 | Source of New Baseline | DFRI Work Plan |
| Justification for Baseline Change (if any) |   |                   |           |                        |                |

**INDICATOR TARGET CALCULATION**

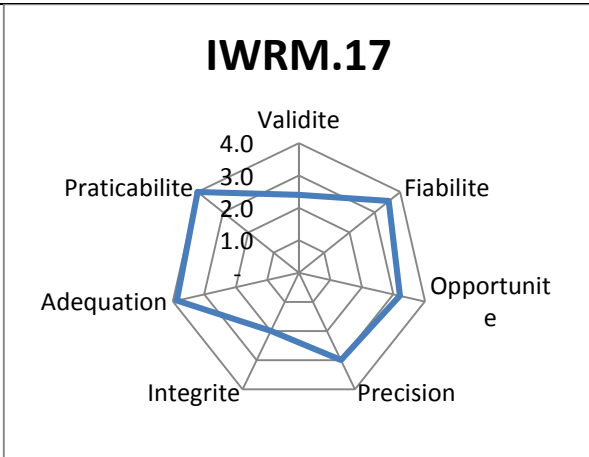
| YEAR 1                                                       | Target                                                                     |        | Justification for changes to targets or calculations (if any) |  |
|--------------------------------------------------------------|----------------------------------------------------------------------------|--------|---------------------------------------------------------------|--|
|                                                              | Old                                                                        | New    |                                                               |  |
| Oct 2010 - Sept. 2011                                        | 41 862                                                                     | 41 862 |                                                               |  |
| Explanation of assumptions and inputs to target calculations | This corresponds to : 10.012 ha in Podor and 31.850 ha in the Delta mapped |        |                                                               |  |
| YEAR 2                                                       | Target                                                                     |        | Justification for changes to targets or calculations (if any) |  |
|                                                              | Old                                                                        | New    |                                                               |  |
| Oct 2011 - Sept. 2012                                        | 41 862                                                                     | 41 862 |                                                               |  |
| Explanation of assumptions and inputs to target calculations | This corresponds to : 10.012 ha in Podor and 31.850 ha in the Delta mapped |        |                                                               |  |
| YEAR 3                                                       | Target                                                                     |        |                                                               |  |
|                                                              | Old                                                                        | New    |                                                               |  |



|                                                                     |                                                                            |        |                                                               |  |
|---------------------------------------------------------------------|----------------------------------------------------------------------------|--------|---------------------------------------------------------------|--|
| Oct 2012 - Sept. 2013                                               | 41 862                                                                     | 41 862 | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations        | This corresponds to : 10.012 ha in Podor and 31.850 ha in the Delta mapped |        |                                                               |  |
| YEAR 4                                                              | Old                                                                        | New    | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 41 862                                                                     | 41 862 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        | This corresponds to : 10.012 ha in Podor and 31.850 ha in the Delta mapped |        |                                                               |  |
| YEAR 5                                                              | Old                                                                        | New    | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 41 862                                                                     | 41 862 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        | This corresponds to : 10.012 ha in Podor and 31.850 ha in the Delta mapped |        |                                                               |  |
| Long Term Target                                                    | Old                                                                        | New    | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A                                                                        | N/A    |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                            |        |                                                               |  |
| COMMENTS                                                            |                                                                            |        |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                                            |        |                                                               |  |
|                                                                     |                                                                            |        |                                                               |  |

## 2.17. Indicator IWRM.17. Conflicts successfully mediated

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                           |                                                                                                                                                                                                                                                                                        |                          |                                |                                                                          |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------|--------------------------------------------------------------------------|
| Indicator Name                                                                                      | Conflicts successfully mediated                                                                                                                           |                                                                                                                                                                                                                                                                                        |                          | Version                        | N° 03 / Sept 2015                                                        |
| Common Indicator Number                                                                             | (L-4)                                                                                                                                                     | Current Indicator Number                                                                                                                                                                                                                                                               | IWRM.17                  | All Previous Indicator Numbers | IWRM.19                                                                  |
| Level                                                                                               | Output                                                                                                                                                    | Classification                                                                                                                                                                                                                                                                         | Cumulative               | Unit of Measure                | Number                                                                   |
| Detailed Definition                                                                                 | The number of disputed land and property rights cases that have been resolved by local authorities, contractors, mediators or courts with compact support |                                                                                                                                                                                                                                                                                        |                          |                                |                                                                          |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                 |                                                                                                                                                                                                                                                                                        | Reporting Period Covered | Compact Duration               |                                                                          |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                        |                                                                                                                                                                                                                                                                                        | NO                       |                                |                                                                          |
|                                                                                                     | By age (YES/NO)                                                                                                                                           |                                                                                                                                                                                                                                                                                        | NO                       |                                |                                                                          |
|                                                                                                     | By income (YES/NO)                                                                                                                                        |                                                                                                                                                                                                                                                                                        | NO                       |                                |                                                                          |
|                                                                                                     | By locality (YES/NO)                                                                                                                                      |                                                                                                                                                                                                                                                                                        | YES (Delta / Podor)      |                                |                                                                          |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                           |                                                                                                                                                                                                                                                                                        |                          |                                |                                                                          |
| Justification for Including Indicator                                                               |                                                                                                                                                           | It is an indicator proposed on the list of common indicators. See "Guidance on Common Indicator, May 2012" MCC. The indicator will help assess the efficiency of dispute resolution bodies, which have received land management tools and benefited from capacity building activities. |                          |                                |                                                                          |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                           | Not Applicable                                                                                                                                                                                                                                                                         |                          |                                |                                                                          |
| How does the indicator link to the BA?                                                              |                                                                                                                                                           | Dispute resolution will help secure investments in the areas                                                                                                                                                                                                                           |                          |                                |                                                                          |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                           | Not Applicable                                                                                                                                                                                                                                                                         |                          |                                |                                                                          |
| Justification for Disaggregations                                                                   |                                                                                                                                                           | The indicator will be disaggregated by locality (Delta / Podor)                                                                                                                                                                                                                        |                          |                                |                                                                          |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                           |                                                                                                                                                                                                                                                                                        |                          |                                |                                                                          |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                           | Land and Institutional Reforms Directorate                                                                                                                                                                                                                                             |                          |                                |                                                                          |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                           | Alain DIOUF                                                                                                                                                                                                                                                                            | Phone                    | 221.77.333.15.72               | E-mail: <a href="mailto:adiouf@mcasenegal.org">adiouf@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                           | Consultant responsible for the Land Tenure Security component LTS02                                                                                                                                                                                                                    |                          |                                |                                                                          |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                           | Count the number of disputes resolved by the mediation commissions and the Ombudsman in the Irrigation Project zone                                                                                                                                                                    |                          |                                |                                                                          |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                           | Not Applicable                                                                                                                                                                                                                                                                         |                          |                                |                                                                          |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                           | The data is transmitted by the Land and Institutional Reforms Directorate on the basis of dispute follow-up sheets and registers of disputes established in Local Communities.                                                                                                         |                          |                                |                                                                          |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                           | QUARTERLY                                                                                                                                                                                                                                                                              |                          |                                |                                                                          |
| Names of verification sources                                                                       |                                                                                                                                                           |                                                                                                                                                                                                                                                                                        |                          |                                | Means of verification                                                    |
| Report F&RI Directorate                                                                             |                                                                                                                                                           |                                                                                                                                                                                                                                                                                        |                          |                                | Tables of indicators and register                                        |

|                                                                                      |   |                                            |                          |                                                               |                                                                                                                     |
|--------------------------------------------------------------------------------------|---|--------------------------------------------|--------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Report Consultant in charge of implementing land tenure security                     |   |                                            |                          | Tables of indicators and register                             |                                                                                                                     |
| PMU Irrigation Reports                                                               |   |                                            |                          | Tables of indicators and register                             |                                                                                                                     |
| Location of Data Storage                                                             |   | Land and Institutional Reforms Directorate |                          |                                                               |                                                                                                                     |
| INDICATOR DATA QUALITY                                                               |   |                                            |                          |                                                               |                                                                                                                     |
| Date of Data Quality Review                                                          |   |                                            |                          | N/A                                                           |                                                                                                                     |
| Main findings of data quality review                                                 |   |                                            | Average Score (out of 4) | Recommendations                                               | <div><p><b>IWRM.17</b></p></div> |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |   |                                            | 2,4                      |                                                               |                                                                                                                     |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |   |                                            | 3,6                      |                                                               |                                                                                                                     |
| 3. TIMELINESS- Are the data current and frequently collected?                        |   |                                            | 3,2                      |                                                               |                                                                                                                     |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |   |                                            | 3,0                      |                                                               |                                                                                                                     |
| 5. INTEGRITY- Is the data free from manipulation?                                    |   |                                            | 2,0                      |                                                               |                                                                                                                     |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |   |                                            | 3,9                      |                                                               |                                                                                                                     |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |   |                                            | 4,0                      |                                                               |                                                                                                                     |
| Overall assessment                                                                   |   |                                            | 3,1                      |                                                               |                                                                                                                     |
| Action taken in response to data quality review                                      |   |                                            | Not Applicable           |                                                               |                                                                                                                     |
| Known data limitations and significance                                              |   |                                            | Not Applicable           |                                                               |                                                                                                                     |
| Actions taken to address data limitations                                            |   |                                            | Not Applicable           |                                                               |                                                                                                                     |
| INDICATOR BASELINE INFORMATION                                                       |   |                                            |                          |                                                               |                                                                                                                     |
| Old Baseline                                                                         | 0 | Old Baseline Year                          | 2011-2012                | Source of old Baseline                                        | DFRI Work plan and Registers of Land Disputes                                                                       |
| New Baseline                                                                         | 0 | New Baseline Year                          | 2011-2012                | Source of New Baseline                                        | DFRI Work plan and Registers of Land Disputes                                                                       |
| Justification for Baseline Change (if any)                                           |   |                                            |                          |                                                               |                                                                                                                     |
| INDICATOR TARGET CALCULATIONS                                                        |   |                                            |                          |                                                               |                                                                                                                     |
|                                                                                      |   | Target                                     |                          |                                                               |                                                                                                                     |
| YEAR 1                                                                               |   | Old                                        | New                      | Justification for changes to targets or calculations (if any) |                                                                                                                     |
| Oct 2010 - Sept. 2011                                                                |   | N/A                                        | N/A                      |                                                               |                                                                                                                     |

|                                                                     |        |     |                                                               |  |
|---------------------------------------------------------------------|--------|-----|---------------------------------------------------------------|--|
|                                                                     | Target |     |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |     |                                                               |  |
| YEAR 2                                                              | Old    | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2011 - Sept. 2012                                               | 0      | 0   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |     |                                                               |  |
| YEAR 3                                                              | Old    | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 0      | 0   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |     |                                                               |  |
| YEAR 4                                                              | Old    | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | N/A    | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |     |                                                               |  |
| YEAR 5                                                              | Old    | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | N/A    | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |     |                                                               |  |
| Long Term Target                                                    | Old    | New | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A    | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |     |                                                               |  |
| COMMENTS                                                            |        |     |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |        |     |                                                               |  |
|                                                                     |        |     |                                                               |  |

## 2.18. Indicator IWRM.18. Parcels corrected or incorporated in land system

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                |                                                                                                                                                                                                                    |                                   |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Parcels corrected or incorporated in land system                                                                                                                                                               |                                                                                                                                                                                                                    |                                   | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | (L-5)                                                                                                                                                                                                          | Current Indicator Number                                                                                                                                                                                           | IWRM.18                           | All Previous Indicator Numbers | IWRM.20                                                                 |
| Level                                                                                               | Output                                                                                                                                                                                                         | Classification                                                                                                                                                                                                     | Cumulative                        | Unit of Measure                | Parcels                                                                 |
| Detailed Definition                                                                                 | The number of parcels with relevant parcel information corrected or newly incorporated into an official land information system (whether a system for the property registry, cadaster or an integrated system) |                                                                                                                                                                                                                    |                                   |                                |                                                                         |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                      |                                                                                                                                                                                                                    | Reporting Period Covered          | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                             |                                                                                                                                                                                                                    | NO                                |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                |                                                                                                                                                                                                                    | NO                                |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                             |                                                                                                                                                                                                                    | NO                                |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                           |                                                                                                                                                                                                                    | YES (Delta / Podor)               |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                |                                                                                                                                                                                                                    |                                   |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                                                                                                                                                                | It is an indicator proposed on the list of common indicators. See "Guidance on Common Indicator, May 2012" MCC. The indicator will disclose the number of plots integrated into the land information system (SIF). |                                   |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                                                                                | Not Applicable                                                                                                                                                                                                     |                                   |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                                                                                                                                                                | Not Applicable                                                                                                                                                                                                     |                                   |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                                                                                | Not Applicable                                                                                                                                                                                                     |                                   |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                                                                                                                                                                | The indicator will be disaggregated by locality (Delta / Podor)                                                                                                                                                    |                                   |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                |                                                                                                                                                                                                                    |                                   |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                                                                                | Land and Institutional Reforms Directorate                                                                                                                                                                         |                                   |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                                                                                | Alain DIOUF                                                                                                                                                                                                        | Phone                             | 221.77.333.15.72               | E-mail <a href="mailto:adiouf@mcasenegal.org">adiouf@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                                                                                | Consultant responsible for the Land Tenure Security component LTS02                                                                                                                                                |                                   |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                                                                                | Count the number of plots integrated into the land information system or GIS by the project supporters reviewing the plot boundaries, rectified property rights, plots with newly formalized rights.               |                                   |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                                                                                | Not Applicable                                                                                                                                                                                                     |                                   |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                                                                                | The data provided by the Consultant in charge of land tenure security is transmitted by the Land and Institutional Reforms Directorate                                                                             |                                   |                                |                                                                         |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                                                                                | QUARTERLY                                                                                                                                                                                                          |                                   |                                |                                                                         |
| Names of verification sources                                                                       |                                                                                                                                                                                                                |                                                                                                                                                                                                                    | Means of verification             |                                |                                                                         |
| Report F&RI Directorate                                                                             |                                                                                                                                                                                                                |                                                                                                                                                                                                                    | Tables of indicators and register |                                |                                                                         |
| Report Consultant in charge of implementing land tenure security                                    |                                                                                                                                                                                                                |                                                                                                                                                                                                                    | Tables of indicators and register |                                |                                                                         |
| PMU Irrigation Reports                                                                              |                                                                                                                                                                                                                |                                                                                                                                                                                                                    | Tables of indicators and register |                                |                                                                         |
| Location of Data Storage                                                                            |                                                                                                                                                                                                                | Land and Institutional Reforms Directorate                                                                                                                                                                         |                                   |                                |                                                                         |

| INDICATOR DATA QUALITY                                                               |        |                          |                                                               |                        |                |
|--------------------------------------------------------------------------------------|--------|--------------------------|---------------------------------------------------------------|------------------------|----------------|
| Date of Data Quality Review                                                          |        |                          | N/A                                                           |                        |                |
| Main findings of data quality review                                                 |        | Average Score (out of 4) | Recommendations                                               |                        |                |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        | 3,6                      | N/A                                                           |                        |                |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        | 3,6                      | N/A                                                           |                        |                |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        | 3,5                      | N/A                                                           |                        |                |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        | 4,0                      | N/A                                                           |                        |                |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        | 4,0                      | N/A                                                           |                        |                |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        | 4,0                      | N/A                                                           |                        |                |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        | 4,0                      | N/A                                                           |                        |                |
| Overall assessment                                                                   |        | 3,8                      |                                                               |                        |                |
| Action taken in response to data quality review                                      |        | Not Applicable           |                                                               |                        |                |
| Known data limitations and significance                                              |        | Not Applicable           |                                                               |                        |                |
| Actions taken to address data limitations                                            |        | Not Applicable           |                                                               |                        |                |
| INDICATOR BASELINE INFORMATION                                                       |        |                          |                                                               |                        |                |
| Old Baseline                                                                         | 0      | Old Baseline Year        | 2011-2012                                                     | Source of old Baseline | DFRI Work Plan |
| New Baseline                                                                         | 0      | New Baseline Year        | 2011-2012                                                     | Source of New Baseline | DFRI Work Plan |
| Justification for Baseline Change (if any)                                           |        |                          |                                                               |                        |                |
| INDICATOR TARGET CALCULATIONS                                                        |        |                          |                                                               |                        |                |
|                                                                                      | Target |                          |                                                               |                        |                |
| YEAR 1                                                                               | Old    | New                      | Justification for changes to targets or calculations (if any) |                        |                |
| Oct 2010 - Sept. 2011                                                                | N/A    | N/A                      |                                                               |                        |                |
| Explanation of assumptions and inputs to target calculations                         |        |                          |                                                               |                        |                |
| YEAR 2                                                                               | Old    | New                      | Justification for changes to targets or calculations (if any) |                        |                |
| Oct 2011 - Sept. 2012                                                                | 0      | 0                        |                                                               |                        |                |

### IWRM.18

| Indicator     | Score |
|---------------|-------|
| Validite      | 4.0   |
| Fiabilite     | 3.0   |
| Opportunité   | 3.0   |
| Precision     | 3.0   |
| Integrité     | 3.0   |
| Adequation    | 3.0   |
| Praticabilité | 3.0   |

|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------|
|                                                                     | Target                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |
| YEAR 3                                                              | Old                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | New   | Justification for changes to targets or calculations (if any) |
| Oct 2012 - Sept. 2013                                               | 5 694                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5 694 |                                                               |
| Explanation of assumptions and inputs to target calculations        | This includes : Delta (5520 parcels) and Podor including 174 parcels in Ngalenka                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |                                                               |
| YEAR 4                                                              | Old                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | New   | Justification for changes to targets or calculations (if any) |
| Oct 2013 - Sept. 2014                                               | 5 787                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5 787 |                                                               |
| Explanation of assumptions and inputs to target calculations        | This includes : Delta (5580 parcels) and Podor (207 parcels)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |       |                                                               |
| YEAR 5                                                              | Old                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | New   | Justification for changes to targets or calculations (if any) |
| Oct 2014 - Sept. 2015                                               | 5 787                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5 787 |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |
| Long Term Target                                                    | Old                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | New   | Justification for changes to targets or calculations (if any) |
|                                                                     | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | N/A   |                                                               |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |
| COMMENTS                                                            | Note: For Ngalenka (Podor), 174 plots are currently occupied by EIG affected by the project (PAPs). The remaining area, i.e. about 366 ha will be subdivided into 33 development units distributed among 33 EIGs. For the Delta, 5520 plots are currently surveyed and integrated into the land data base. In this part, new allocations of about 3000 ha, i.e. about 60 plots of 50 ha are envisaged because the zone is primarily meant to be occupied by farmer organizations which farm around large areas (major development activities).). |       |                                                               |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |
|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |

## 2.19. Indicator IWRM.19. Land rights formalized

| <b>INDICATOR BASIC DETAILS</b>                                                                      |                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                              |                                   |                                |                                                                            |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------------------------|----------------------------------------------------------------------------|
| Indicator Name                                                                                      | Land rights formalized                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                              |                                   | Version                        | N° 03 /Sept 2015                                                           |
| Common Indicator Number                                                                             | (L-6)                                                                                                                                                                                                                                                                                                              | Current Indicator Number                                                                                                                                                                                                                                                                                                                                     | IWRM.19                           | All Previous Indicator Numbers | IWRM.21                                                                    |
| Level                                                                                               | Output                                                                                                                                                                                                                                                                                                             | Classification                                                                                                                                                                                                                                                                                                                                               | Cumulative                        | Unit of Measure                | Number                                                                     |
| Detailed Definition                                                                                 | The number of household, commercial and other legal entities (e.g. NGOs, churches, hospitals) receiving formal recognition of ownership and/or use rights through certificates, titles, leases, or other recorded documentation by government institutions or traditional authorities at national or local levels. |                                                                                                                                                                                                                                                                                                                                                              |                                   |                                |                                                                            |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                              | Reporting Period Covered          | Compact Duration               |                                                                            |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                              | NO                                |                                |                                                                            |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                              | NO                                |                                |                                                                            |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                              | NO                                |                                |                                                                            |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                              | YES (Delta / Podor)               |                                |                                                                            |
| <b>INDICATOR JUSTIFICATION DETAILS</b>                                                              |                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                              |                                   |                                |                                                                            |
| Justification for Including Indicator                                                               |                                                                                                                                                                                                                                                                                                                    | The indicator makes it possible to enumerate the number of households by locality that have benefitted from the formal recognition of ownership rights and/or the use of certificates, titles, leases or other documents registered with government or local institutions or traditional authorities with the support of bodies strengthened by the project. |                                   |                                |                                                                            |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                                                                                                                                                                                    | Not Applicable                                                                                                                                                                                                                                                                                                                                               |                                   |                                |                                                                            |
| How does the indicator link to the BA?                                                              |                                                                                                                                                                                                                                                                                                                    | Not Applicable                                                                                                                                                                                                                                                                                                                                               |                                   |                                |                                                                            |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                                                                                                                                                                                    | Not Applicable                                                                                                                                                                                                                                                                                                                                               |                                   |                                |                                                                            |
| Justification for Disaggregations                                                                   |                                                                                                                                                                                                                                                                                                                    | The data will be presented by locality (Delta / Podor)                                                                                                                                                                                                                                                                                                       |                                   |                                |                                                                            |
| <b>INDICATOR ACQUISITION PLAN</b>                                                                   |                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                              |                                   |                                |                                                                            |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                                                                                                                                                                                    | Land and Institutional Reforms Directorate                                                                                                                                                                                                                                                                                                                   |                                   |                                |                                                                            |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                                                                                                                                                                                    | Alain DIOUF                                                                                                                                                                                                                                                                                                                                                  | Phone                             | 221.77.333.15.72               | E-mail<br><a href="mailto:adiouf@mcasenegal.org">adiouf@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                                                                                                                                                                                    | Consultant responsible for the Land Tenure Security component LTS02                                                                                                                                                                                                                                                                                          |                                   |                                |                                                                            |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                                                                                                                                                                                    | Count the number of households that have benefitted from the formal recognition of ownership rights and/or the use of certificates, titles, leases or other documents.                                                                                                                                                                                       |                                   |                                |                                                                            |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                                                                                                                                                                                    | Not Applicable                                                                                                                                                                                                                                                                                                                                               |                                   |                                |                                                                            |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                                                                                                                                                                                    | The data is transmitted by the Land and Institutional Reforms Directorate                                                                                                                                                                                                                                                                                    |                                   |                                |                                                                            |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                                                                                                                                                                                    | QUARTERLY                                                                                                                                                                                                                                                                                                                                                    |                                   |                                |                                                                            |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                              | Means of verification             |                                |                                                                            |
| Report F&RI Directorate                                                                             |                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                              | Tables of indicators and register |                                |                                                                            |

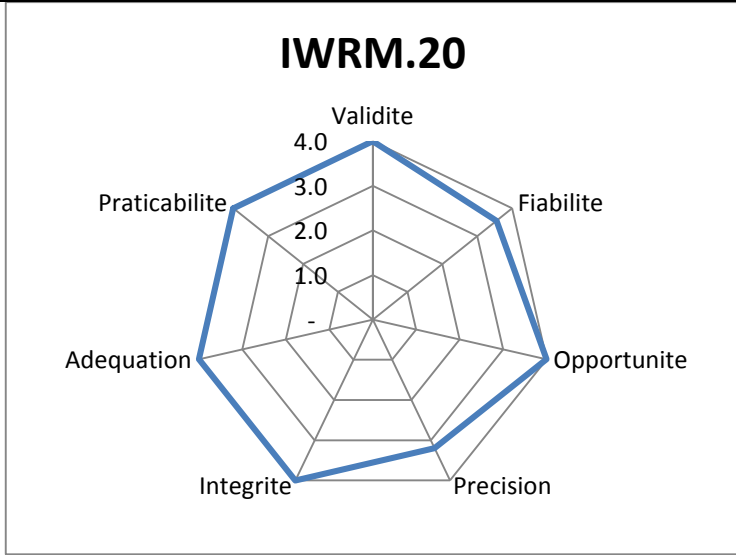


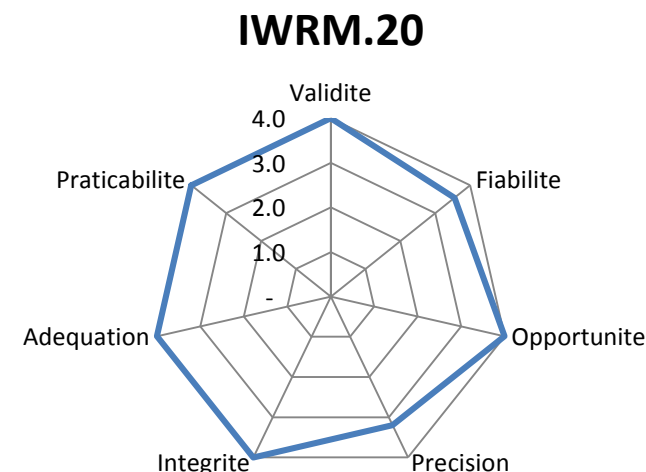
|                                                                                      |                                            |                                   |                                                                                                                                                                           |                        |                |
|--------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------|
| Report Consultant in charge of implementing land tenure security                     |                                            | Tables of indicators and register |                                                                                                                                                                           |                        |                |
| PMU Irrigation Reports                                                               |                                            | Tables of indicators and register |                                                                                                                                                                           |                        |                |
| Location of Data Storage                                                             | Land and Institutional Reforms Directorate |                                   |                                                                                                                                                                           |                        |                |
| <b>INDICATOR DATA QUALITY</b>                                                        |                                            |                                   |                                                                                                                                                                           |                        |                |
| Date of Data Quality Review                                                          |                                            | N/A                               |                                                                                                                                                                           |                        |                |
| Main findings of data quality review                                                 | Average Score (out of 4)                   | Recommendations                   | <p><b>IWRM.19</b></p> <p>Validite<br/>4.0<br/>3.0<br/>2.0<br/>1.0<br/>0</p> <p>Praticabilité<br/>Adequation<br/>Integrité<br/>Precision<br/>Opportunité<br/>Fiabilite</p> |                        |                |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 3,6                                        | N/A                               |                                                                                                                                                                           |                        |                |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 3,6                                        | N/A                               |                                                                                                                                                                           |                        |                |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 3,7                                        | N/A                               |                                                                                                                                                                           |                        |                |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 4,0                                        | N/A                               |                                                                                                                                                                           |                        |                |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                                        | N/A                               |                                                                                                                                                                           |                        |                |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 4,0                                        | N/A                               |                                                                                                                                                                           |                        |                |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 4,0                                        | N/A                               |                                                                                                                                                                           |                        |                |
| Overall assessment                                                                   | 3,8                                        |                                   |                                                                                                                                                                           |                        |                |
| Action taken in response to data quality review                                      |                                            | Not Applicable                    |                                                                                                                                                                           |                        |                |
| Known data limitations and significance                                              |                                            | Not Applicable                    |                                                                                                                                                                           |                        |                |
| Actions taken to address data limitations                                            |                                            | Not Applicable                    |                                                                                                                                                                           |                        |                |
| <b>INDICATOR BASELINE INFORMATION</b>                                                |                                            |                                   |                                                                                                                                                                           |                        |                |
| Old Baseline                                                                         | 0                                          | Old Baseline Year                 | 2011-2012                                                                                                                                                                 | Source of old Baseline | DFRI Work Plan |
| New Baseline                                                                         | 0                                          | New Baseline Year                 | 2011-2012                                                                                                                                                                 | Source of New Baseline | DFRI Work Plan |
| Justification for Baseline Change (if any)                                           |                                            |                                   |                                                                                                                                                                           |                        |                |
| <b>INDICATOR TARGET CALCULATIONS</b>                                                 |                                            |                                   |                                                                                                                                                                           |                        |                |
|                                                                                      | Target                                     |                                   |                                                                                                                                                                           |                        |                |
| YEAR 1                                                                               | Old                                        | New                               | Justification for changes to targets or calculations (if any)                                                                                                             |                        |                |
| Oct 2010 - Sept. 2011                                                                | N/A                                        | N/A                               |                                                                                                                                                                           |                        |                |
| Explanation of assumptions and inputs to target calculations                         |                                            |                                   |                                                                                                                                                                           |                        |                |
| YEAR 2                                                                               | Old                                        | New                               | Justification for changes to targets or calculations (if any)                                                                                                             |                        |                |
| Oct 2011 - Sept. 2012                                                                | 0                                          | 0                                 |                                                                                                                                                                           |                        |                |
| Explanation of assumptions and inputs to target calculations                         |                                            |                                   |                                                                                                                                                                           |                        |                |

|                                                                     |        |      |                                                               |  |
|---------------------------------------------------------------------|--------|------|---------------------------------------------------------------|--|
|                                                                     | Target |      |                                                               |  |
| YEAR 3                                                              | Old    | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 0      | 0    |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| YEAR 4                                                              | Old    | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 600    | 600  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| YEAR 5                                                              | Old    | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 2500   | 2500 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| Long Term Target                                                    | Old    | New  | Justification for changes to targets or calculations (if any) |  |
|                                                                     | 2500   | 2500 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| COMMENTS                                                            |        |      |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |        |      |                                                               |  |
|                                                                     |        |      |                                                               |  |

## 2.20. Indicator IWRM.20. Value of signed irrigation feasibility and design contracts

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                        |                          |                  |                                                                                                                                        |                                                                  |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Value of signed irrigation feasibility and design contracts                                                                                                                                                                                                                                            |                          |                  | Version                                                                                                                                | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | (AI-1)                                                                                                                                                                                                                                                                                                 | Current Indicator Number | IWRM.20          | All Previous Indicator Numbers                                                                                                         | IWRM.18. / IWRM.23.                                              |
| Level                                                                                               | Process                                                                                                                                                                                                                                                                                                | Classification           | Cumulative       | Unit of Measure*                                                                                                                       | US\$                                                             |
| Detailed Definition                                                                                 | The value of all signed feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments using 609g and compact funds. (In Senegal, this also includes contracts covering supervision, which cannot be separated from the other studies) |                          |                  |                                                                                                                                        |                                                                  |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                                                                                                              |                          |                  | Reporting Period Covered                                                                                                               | Duration of the Compact                                          |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                     |                          |                  | NO                                                                                                                                     |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                        |                          |                  | NO                                                                                                                                     |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                     |                          |                  | NO                                                                                                                                     |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                   |                          |                  | NO                                                                                                                                     |                                                                  |
|                                                                                                     | By Contract Type (YES/NO)                                                                                                                                                                                                                                                                              |                          |                  | YES (ODA & DAO Studies for the Delta/ODA & DAO Studies for Ngalenka/Ngalenka and Delta RAP/Environmental Audit/Environmental Auditing) |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                        |                          |                  |                                                                                                                                        |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the amount of studies and supervision contracts signed for the Delta and Ngalenka.                                                                                                                                                                               |                          |                  |                                                                                                                                        |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                                                                                                                                                                         |                          |                  |                                                                                                                                        |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                                                         |                          |                  |                                                                                                                                        |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                                                         |                          |                  |                                                                                                                                        |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                                                                                                                                         |                          |                  |                                                                                                                                        |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                        |                          |                  |                                                                                                                                        |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Irrigation Project Directorate                                                                                                                                                                                                                                                                         |                          |                  |                                                                                                                                        |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Cheikh T. SENE                                                                                                                                                                                                                                                                                         | Phone                    | 221.77.333.15.80 | E-mail                                                                                                                                 | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Project managers Delta and Ngalenka Irrigation Project Directorate                                                                                                                                                                                                                                     |                          |                  |                                                                                                                                        |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use data from different contracts (Detailed studies and Tender Documents, Environmental Monitoring, RAP) for the reference period                                                                                                                                                                      |                          |                  |                                                                                                                                        |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                                                                         |                          |                  |                                                                                                                                        |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the Irrigation Project Direction                                                                                                                                                                                                                                            |                          |                  |                                                                                                                                        |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                                                                                                                                                                              |                          |                  |                                                                                                                                        |                                                                  |
| Names of verification sources                                                                       | Means of verification                                                                                                                                                                                                                                                                                  |                          |                  |                                                                                                                                        |                                                                  |
| Contracts signed between MCA-S and the consultants charged with the studies                         | Value of the contract                                                                                                                                                                                                                                                                                  |                          |                  |                                                                                                                                        |                                                                  |
| Location of Data Storage                                                                            | Irrigation Project Directorate & Procurement Directorate                                                                                                                                                                                                                                               |                          |                  |                                                                                                                                        |                                                                  |

| INDICATOR DATA QUALITY                                                               |            |                          |                                                                                                                     |                                                                                                                                                                  |                        |  |
|--------------------------------------------------------------------------------------|------------|--------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--|
| Date of Data Quality Review                                                          |            |                          | November 2014                                                                                                       |                                                                                                                                                                  |                        |  |
| Main findings of data quality review                                                 |            | Average Score (out of 4) | Recommendations                                                                                                     |                                                                                                                                                                  |                        |  |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |            | 4,0                      | N/A                                                                                                                 |                                                                                                                                                                  |                        |  |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |            | 3,6                      | N/A                                                                                                                 |                                                                                                                                                                  |                        |  |
| 3. TIMELINESS- Are the data current and frequently collected?                        |            | 4,0                      | N/A                                                                                                                 |                                                                                                                                                                  |                        |  |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |            | 3,2                      | N/A                                                                                                                 |                                                                                                                                                                  |                        |  |
| 5. INTEGRITY- Is the data free from manipulation?                                    |            | 4,0                      | N/A                                                                                                                 |                                                                                                                                                                  |                        |  |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |            | 4,0                      | N/A                                                                                                                 |                                                                                                                                                                  |                        |  |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |            | 4,0                      | N/A                                                                                                                 |                                                                                                                                                                  |                        |  |
| Overall assessment                                                                   |            | 3,8                      | <div><p><b>IWRM.20</b></p></div> |                                                                                                                                                                  |                        |  |
| Action taken in response to data quality review                                      |            | Not Applicable           |                                                                                                                     |                                                                                                                                                                  |                        |  |
| Known data limitations and significance                                              |            | Not Applicable           |                                                                                                                     |                                                                                                                                                                  |                        |  |
| Actions taken to address data limitations                                            |            | Not Applicable           |                                                                                                                     |                                                                                                                                                                  |                        |  |
| INDICATOR BASELINE INFORMATION                                                       |            |                          |                                                                                                                     |                                                                                                                                                                  |                        |  |
| Old Baseline                                                                         | 0          | Old Baseline Year        | 2010-2011                                                                                                           | Source of old Baseline                                                                                                                                           | IWRM Project Work Plan |  |
| New Baseline                                                                         | 0          | New Baseline Year        | 2010-2011                                                                                                           | Source of New Baseline                                                                                                                                           | IWRM Project Work Plan |  |
| Justification for Baseline Change (if any)                                           |            |                          |                                                                                                                     |                                                                                                                                                                  |                        |  |
| INDICATOR TARGET CALCULATIONS                                                        |            |                          |                                                                                                                     |                                                                                                                                                                  |                        |  |
|                                                                                      | Target     |                          |                                                                                                                     |                                                                                                                                                                  |                        |  |
| YEAR 1                                                                               | Old        | New                      | Justification for changes to targets or calculations (if any)                                                       | Increased costs of certain contracts<br>Delays in procurement procedures                                                                                         |                        |  |
| Oct 2010 - Sept. 2011                                                                | 2 560 950  | 2 560 950                |                                                                                                                     |                                                                                                                                                                  |                        |  |
| Explanation of assumptions and inputs to target calculations                         |            |                          |                                                                                                                     |                                                                                                                                                                  |                        |  |
| YEAR 2                                                                               | Old        | New                      | Justification for changes to targets or calculations (if any)                                                       | Increased costs of certain contracts<br>Delays in procurement procedures                                                                                         |                        |  |
| Oct 2011 - Sept. 2012                                                                | 3 658 398  | 3 658 398                |                                                                                                                     |                                                                                                                                                                  |                        |  |
| Explanation of assumptions and inputs to target calculations                         |            |                          |                                                                                                                     |                                                                                                                                                                  |                        |  |
| YEAR 3                                                                               | Old        | New                      | Justification for changes to targets or calculations (if any)                                                       | Supervision contracts are now included in those studies. Year 3 corresponds to the works start-up year and thus to the signing of supervision-related contracts. |                        |  |
| Oct 2012 - Sept. 2013                                                                | 11 494 547 | 11 494 547               |                                                                                                                     |                                                                                                                                                                  |                        |  |

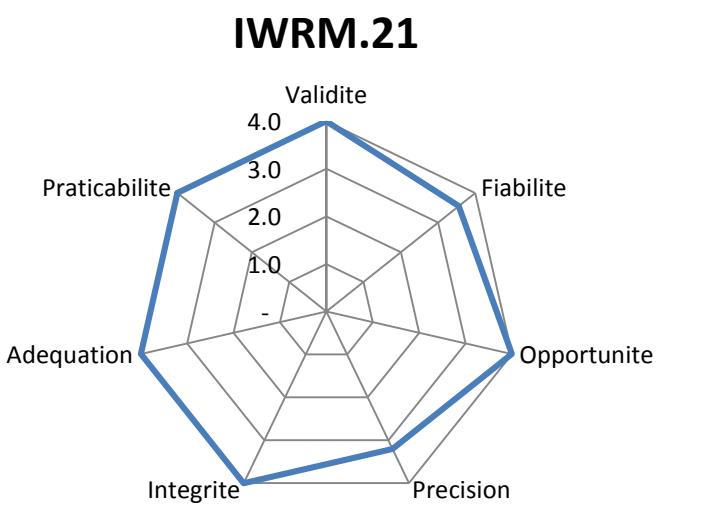


|                                                                     |            |            |                                                               |  |
|---------------------------------------------------------------------|------------|------------|---------------------------------------------------------------|--|
|                                                                     | Target     |            |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |            |            |                                                               |  |
| YEAR 4                                                              | Old        | New        | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 11 494 547 | 11 494 547 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |            |            |                                                               |  |
| YEAR 5                                                              | Old        | New        | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 11 494 547 | 11 494 547 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |            |            |                                                               |  |
| Long Term Target                                                    | Old        | New        | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A        | N/A        |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |            |            |                                                               |  |
| COMMENTS                                                            |            |            |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |            |            |                                                               |  |
|                                                                     |            |            |                                                               |  |

## 2.21. Indicator IWRM.21. Percent disbursed of irrigation feasibility and design contracts

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               |                                                                                                                                                                                |                                |                     |        |                                                                  |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Percent disbursed of irrigation feasibility and design contracts                                                                                                                                                            |                                                                                                                                                                                                                                                                               |                                                                                                                                                                                | Version                        | N° 03 / Sept 2015   |        |                                                                  |
| Common Indicator Number                                                                             | (AI-2)                                                                                                                                                                                                                      | Current Indicator Number                                                                                                                                                                                                                                                      | IWRM.21                                                                                                                                                                        | All Previous Indicator Numbers | IWRM.19. / IWRM.24. |        |                                                                  |
| Level                                                                                               | Process                                                                                                                                                                                                                     | Classification                                                                                                                                                                                                                                                                | Cumulative                                                                                                                                                                     | Unit of Measure*               | Percentage          |        |                                                                  |
| Detailed Definition                                                                                 | The total amount of all signed feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments disbursed divided by the total value of all signed contracts. |                                                                                                                                                                                                                                                                               |                                                                                                                                                                                |                                |                     |        |                                                                  |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                               | Reporting Period Covered                                                                                                                                                       | Compact Duration               |                     |        |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                               | NO                                                                                                                                                                             |                                |                     |        |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               | NO                                                                                                                                                                             |                                |                     |        |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                               | NO                                                                                                                                                                             |                                |                     |        |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                               | NO                                                                                                                                                                             |                                |                     |        |                                                                  |
|                                                                                                     | By Contract Type (YES/NO)                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                               | YES (ODA & DAO Studies for the Delta/ODA & DAO Studies for Ngalenka/Ngalenka and Delta RAP/Environmental Audit/Environmental Auditing)                                         |                                |                     |        |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               |                                                                                                                                                                                |                                |                     |        |                                                                  |
| Justification for Including Indicator                                                               |                                                                                                                                                                                                                             | The indicator provides information on the percentage disbursed for contracts relative to the detailed studies and Tender documents (reference period) and supervisions for the Delta and Ngalenka It is a Common Indicator. See "Guidance on Common Indicator, May 2012" MCC. |                                                                                                                                                                                |                                |                     |        |                                                                  |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                                                                                             | Not Applicable                                                                                                                                                                                                                                                                |                                                                                                                                                                                |                                |                     |        |                                                                  |
| How does the indicator link to the BA?                                                              |                                                                                                                                                                                                                             | Not Applicable                                                                                                                                                                                                                                                                |                                                                                                                                                                                |                                |                     |        |                                                                  |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                                                                                             | Not Applicable                                                                                                                                                                                                                                                                |                                                                                                                                                                                |                                |                     |        |                                                                  |
| Justification for Disaggregations                                                                   |                                                                                                                                                                                                                             | Not Applicable                                                                                                                                                                                                                                                                |                                                                                                                                                                                |                                |                     |        |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               |                                                                                                                                                                                |                                |                     |        |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               | Irrigation Project Directorate                                                                                                                                                 |                                |                     |        |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               | Cheikh T. SENE                                                                                                                                                                 | Phone                          | 221.77.333.15.80    | E-mail | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               | Project managers Delta and Ngalenka Irrigation Project Directorate                                                                                                             |                                |                     |        |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               | Percentage of disbursements made under the contracts concerned<br>Numerator = Disbursed amounts.<br>Denominator = Contract amounts. It is a proxy indicator for the completion |                                |                     |        |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               | Data obtained from the DAF of MCA-S                                                                                                                                            |                                |                     |        |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               | The data is transmitted by the DAF                                                                                                                                             |                                |                     |        |                                                                  |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               | QUARTERLY                                                                                                                                                                      |                                |                     |        |                                                                  |
| Names of verification sources                                                                       |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               | Means of verification                                                                                                                                                          |                                |                     |        |                                                                  |
| Contracts signed between MCA-S and the consultants in charge of studies                             |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               | Contracts and amendments                                                                                                                                                       |                                |                     |        |                                                                  |
| DAF Financial Report                                                                                |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               | Payment invoices                                                                                                                                                               |                                |                     |        |                                                                  |
| Location of Data Storage                                                                            |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                               | Administrative and Financial Directorate                                                                                                                                       |                                |                     |        |                                                                  |

**INDICATOR DATA QUALITY**

| Date of Data Quality Review                                                          |                          | November 2014   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
|--------------------------------------------------------------------------------------|--------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------|-----|-----------|-----|-------------|-----|-----------|-----|-----------|-----|------------|-----|---------------|-----|
| Main findings of data quality review                                                 | Average Score (out of 4) | Recommendations | <div><h3>IWRM.21</h3><table border="1"><caption>Data for IWRM.21 Radar Chart</caption><thead><tr><th>Category</th><th>Score</th></tr></thead><tbody><tr><td>Validite</td><td>4.0</td></tr><tr><td>Fiabilite</td><td>3.0</td></tr><tr><td>Opportunité</td><td>3.0</td></tr><tr><td>Precision</td><td>3.0</td></tr><tr><td>Integrité</td><td>3.0</td></tr><tr><td>Adequation</td><td>3.0</td></tr><tr><td>Praticabilité</td><td>3.0</td></tr></tbody></table></div> | Category | Score | Validite | 4.0 | Fiabilite | 3.0 | Opportunité | 3.0 | Precision | 3.0 | Integrité | 3.0 | Adequation | 3.0 | Praticabilité | 3.0 |
| Category                                                                             | Score                    |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Validite                                                                             | 4.0                      |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Fiabilite                                                                            | 3.0                      |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Opportunité                                                                          | 3.0                      |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Precision                                                                            | 3.0                      |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Integrité                                                                            | 3.0                      |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Adequation                                                                           | 3.0                      |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Praticabilité                                                                        | 3.0                      |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 4,0                      | N/A             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 3,6                      | N/A             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 4,0                      | N/A             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 3,2                      | N/A             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                      | N/A             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 4,0                      | N/A             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 4,0                      | N/A             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Overall assessment                                                                   | 3,8                      |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Action taken in response to data quality review                                      | N/A                      |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Known data limitations and significance                                              | N/A                      |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Actions taken to address data limitations                                            | N/A                      |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |

**INDICATOR BASELINE INFORMATION**

|                                            |    |                   |           |                        |                        |
|--------------------------------------------|----|-------------------|-----------|------------------------|------------------------|
| Old Baseline                               | 0% | Old Baseline Year | 2010-2011 | Source of old Baseline | IWRM Project Work Plan |
| New Baseline                               | 0% | New Baseline Year | 2010-2011 | Source of New Baseline | IWRM Project Work Plan |
| Justification for Baseline Change (if any) |    |                   |           |                        |                        |

**INDICATOR TARGET CALCULATIONS**

| YEAR 1                                                       | Target |       | Justification for changes to targets or calculations (if any) | Delays in the implementation of activities relative to the Irrigation infrastructure and Land Tenure Security of the Irrigation Project<br>Integration in the calculation of disbursements provided for under the works supervision contracts |
|--------------------------------------------------------------|--------|-------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                              | Old    | New   |                                                               |                                                                                                                                                                                                                                               |
| Oct 2010 - Sept. 2011                                        | 12,0%  | 12,0% |                                                               |                                                                                                                                                                                                                                               |
| Explanation of assumptions and inputs to target calculations |        |       |                                                               |                                                                                                                                                                                                                                               |
| YEAR 2                                                       | Old    | New   |                                                               |                                                                                                                                                                                                                                               |

|                                                                     |        |      |                                                               |  |
|---------------------------------------------------------------------|--------|------|---------------------------------------------------------------|--|
|                                                                     | Target |      |                                                               |  |
| Oct 2011 - Sept. 2012                                               | 32%    | 32%  | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| YEAR 3                                                              | Old    | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 54%    | 54%  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| YEAR 4                                                              | Old    | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 77%    | 77%  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| YEAR 5                                                              | Old    | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 100%   | 100% |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| Long Term Target                                                    | Old    | New  | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A    | N/A  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| COMMENTS                                                            |        |      |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |        |      |                                                               |  |
|                                                                     |        |      |                                                               |  |



## 2.22 Indicator IWRM.22. Value disbursed of irrigation feasibility and design contracts

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                     |                          |                                                                                                                                        |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Value disbursed of irrigation feasibility and design contracts                                                                                                                                                                                                                                                                                      |                          |                                                                                                                                        | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | (AI-2.1)                                                                                                                                                                                                                                                                                                                                            | Current Indicator Number | IWRM.22.                                                                                                                               | All Previous Indicator Numbers | New indicator                                                    |
| Level                                                                                               | Process                                                                                                                                                                                                                                                                                                                                             | Classification           | Cumulative                                                                                                                             | Unit of Measure*               | US\$                                                             |
| Detailed Definition                                                                                 | The value disbursed of all signed feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments using 609(g) and compact funds. In Senegal, this means the total disbursed of contracts for detailed studies and DAO (baseline period) and supervision for the Delta and Ngalenka. |                          |                                                                                                                                        |                                |                                                                  |
| Frequency of Reporting                                                                              | QUATERLY                                                                                                                                                                                                                                                                                                                                            |                          | Reporting Period Covered                                                                                                               | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                  |                          | NO                                                                                                                                     |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                     |                          | NO                                                                                                                                     |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                  |                          | NO                                                                                                                                     |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                |                          | NO                                                                                                                                     |                                |                                                                  |
|                                                                                                     | By Contract Type (YES/NO)                                                                                                                                                                                                                                                                                                                           |                          | YES (ODA & DAO Studies for the Delta/ODA & DAO Studies for Ngalenka/Ngalenka and Delta RAP/Environmental Audit/Environmental Auditing) |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                     |                          |                                                                                                                                        |                                |                                                                  |
| Justification for Including Indicator                                                               | This indicator provides information on the total amount of disbursements under the contracts for detailed studies and DAO (baseline period) and supervision for the Delta and Ngalenka. It is a common indicator. See "Guidance on Common Indicators, May 2012" MCC.                                                                                |                          |                                                                                                                                        |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | N/A                                                                                                                                                                                                                                                                                                                                                 |                          |                                                                                                                                        |                                |                                                                  |
| How does the indicator link to the BA?                                                              | N/A                                                                                                                                                                                                                                                                                                                                                 |                          |                                                                                                                                        |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | N/A                                                                                                                                                                                                                                                                                                                                                 |                          |                                                                                                                                        |                                |                                                                  |
| Justification for Disaggregations                                                                   | N/A                                                                                                                                                                                                                                                                                                                                                 |                          |                                                                                                                                        |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                     |                          |                                                                                                                                        |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Direction Projet Irrigation                                                                                                                                                                                                                                                                                                                         |                          |                                                                                                                                        |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Cheikh T. SENE                                                                                                                                                                                                                                                                                                                                      | Phone                    | 221.77.333.15.80                                                                                                                       | E-mail                         | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Project managers Delta and Ngalenka Irrigation Project Directorate                                                                                                                                                                                                                                                                                  |                          |                                                                                                                                        |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use data from different contracts (Detailed studies and Tender Documents, Environmental Monitoring, RAP) for the reference period                                                                                                                                                                                                                   |                          |                                                                                                                                        |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                                                                                                                      |                          |                                                                                                                                        |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the Irrigation Project Direction                                                                                                                                                                                                                                                                                         |                          |                                                                                                                                        |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                                                                                                                                                                                                                           |                          |                                                                                                                                        |                                |                                                                  |

|                                                                                      |        |                                          |                          |                        |                        |
|--------------------------------------------------------------------------------------|--------|------------------------------------------|--------------------------|------------------------|------------------------|
| Names of verification sources                                                        |        |                                          | Means of verification    |                        |                        |
| Contracts signed between MCA-S and the consultants in charge of studies              |        |                                          | Contracts and amendments |                        |                        |
| DAF Financial Report                                                                 |        |                                          | Payment invoices         |                        |                        |
| Location of Data Storage                                                             |        | Administrative and Financial Directorate |                          |                        |                        |
| <b>INDICATOR DATA QUALITY</b>                                                        |        |                                          |                          |                        |                        |
| Date of Data Quality Review                                                          |        | November 2014                            |                          |                        |                        |
| Main findings of data quality review                                                 |        | Average Score (out of 4)                 | Recommendations          |                        |                        |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        | 4,0                                      | N/A                      |                        |                        |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        | 3,6                                      | N/A                      |                        |                        |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        | 4,0                                      | N/A                      |                        |                        |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        | 3,2                                      | N/A                      |                        |                        |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        | 4,0                                      | N/A                      |                        |                        |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        | 4,0                                      | N/A                      |                        |                        |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        | 4,0                                      | N/A                      |                        |                        |
| Overall assessment                                                                   |        | 3,8                                      |                          |                        |                        |
| Action taken in response to data quality review                                      |        | N/A                                      |                          |                        |                        |
| Known data limitations and significance                                              |        | N/A                                      |                          |                        |                        |
| Actions taken to address data limitations                                            |        | N/A                                      |                          |                        |                        |
| <b>INDICATOR BASELINE INFORMATION</b>                                                |        |                                          |                          |                        |                        |
| Old Baseline                                                                         | NA     | Old Baseline Year                        | N/A                      | Source of old Baseline | N/A                    |
| New Baseline                                                                         | 0      | New Baseline Year                        | 2010-2011                | Source of New Baseline | IWRM Project Work Plan |
| Justification for Baseline Change (if any)                                           |        | New indicator                            |                          |                        |                        |
| <b>INDICATOR TARGET CALCULATIONS</b>                                                 |        |                                          |                          |                        |                        |
|                                                                                      | Target |                                          |                          |                        |                        |
| YEAR 1                                                                               | Old    | New                                      |                          | New indicator          |                        |

**IWRM.22**

|                                                                     |                |            |                                                               |               |
|---------------------------------------------------------------------|----------------|------------|---------------------------------------------------------------|---------------|
|                                                                     | Target         |            |                                                               |               |
| Oct 2010 - Sept. 2011                                               | NA             | 1 379 345  | Justification for changes to targets or calculations (if any) |               |
| Explanation of assumptions and inputs to target calculations        |                |            |                                                               |               |
| YEAR 2                                                              | Old            | New        | Justification for changes to targets or calculations (if any) | New indicator |
| Oct 2011 - Sept. 2012                                               | NA             | 3 678 255  |                                                               |               |
| Explanation of assumptions and inputs to target calculations        |                |            |                                                               |               |
| YEAR 3                                                              | Old            | New        | Justification for changes to targets or calculations (if any) | New indicator |
| Oct 2012 - Sept. 2013                                               | NA             | 6 207 055  |                                                               |               |
| Explanation of assumptions and inputs to target calculations        |                |            |                                                               |               |
| YEAR 4                                                              | Old            | New        | Justification for changes to targets or calculations (if any) | New indicator |
| Oct 2013 - Sept. 2014                                               | NA             | 8 850 801  |                                                               |               |
| Explanation of assumptions and inputs to target calculations        |                |            |                                                               |               |
| YEAR 5                                                              | Old            | New        | Justification for changes to targets or calculations (if any) | New indicator |
| Oct 2014 - Sept. 2015                                               | NA             | 11 494 547 |                                                               |               |
| Explanation of assumptions and inputs to target calculations        |                |            |                                                               |               |
| Post Compact Target                                                 | Not Applicable |            |                                                               |               |
| COMMENTS                                                            |                |            |                                                               |               |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                |            |                                                               |               |
|                                                                     |                |            |                                                               |               |

## 2.23. Indicator IWRM.23. Value of signed irrigation construction contracts

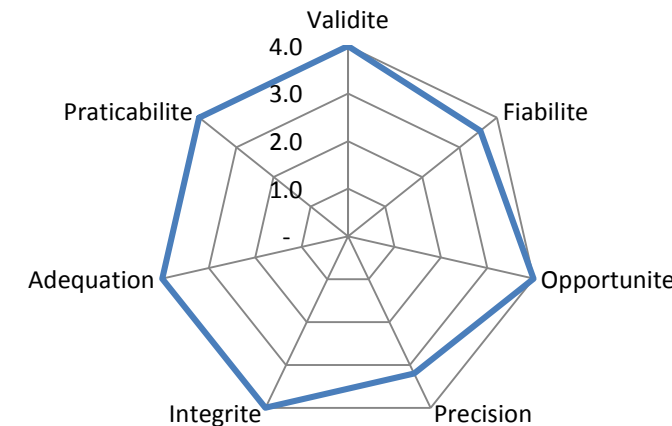
| INDICATOR BASIC DETAILS                                                                             |                                                                                                            |                                                                                                                                                                                                                             |                          |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Value of signed irrigation construction contracts                                                          |                                                                                                                                                                                                                             |                          | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | (AI-3)                                                                                                     | Current Indicator Number                                                                                                                                                                                                    | IWRM.23                  | All Previous Indicator Numbers | IWRM.20. / IWRM.25.                                                     |
| Level                                                                                               | Process                                                                                                    | Classification                                                                                                                                                                                                              | Cumulative               | Unit of Measure*               | US\$                                                                    |
| Detailed Definition                                                                                 | The value of all signed construction contracts for agricultural irrigation investments using compact funds |                                                                                                                                                                                                                             |                          |                                |                                                                         |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                  |                                                                                                                                                                                                                             | Reporting Period Covered | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                         |                                                                                                                                                                                                                             | NO                       |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                            |                                                                                                                                                                                                                             | NO                       |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                         |                                                                                                                                                                                                                             | NO                       |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                       |                                                                                                                                                                                                                             | YES (Delta / Ngalenka)   |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                            |                                                                                                                                                                                                                             |                          |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                                                            | This indicator provides information on the value of signed contracts for irrigation infrastructure works in the Delta and Ngalenka                                                                                          |                          |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                                                            | Not Applicable                                                                                                                                                                                                              |                          |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                                                            | Not Applicable                                                                                                                                                                                                              |                          |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                                                            | Not Applicable                                                                                                                                                                                                              |                          |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                                                            | The indicator will be disaggregated by lots (Delta Lot1, Delta Lot2, Delta Lot3, Delta Lot4, Ngalenka) and by locality for the different contracts relative to detailed studies and supervision for the Delta and Ngalenka. |                          |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                            |                                                                                                                                                                                                                             |                          |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                            | Irrigation Project Directorate                                                                                                                                                                                              |                          |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                            | Cheikh T. SENE                                                                                                                                                                                                              | Phone                    | 221.77.333.15.80               | E-mail <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                            | Project managers Delta and Ngalenka of the Irrigation Project Directorate                                                                                                                                                   |                          |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                            | Use data from signed works contracts                                                                                                                                                                                        |                          |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                            | Not Applicable                                                                                                                                                                                                              |                          |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                            | The data from the Administrative and Financial Directorate are transmitted by the Irrigation Project Directorate                                                                                                            |                          |                                |                                                                         |
| Frequency and timing of data acquisition                                                            |                                                                                                            | QUARTERLY                                                                                                                                                                                                                   |                          |                                |                                                                         |
| Names of verification sources                                                                       |                                                                                                            |                                                                                                                                                                                                                             | Means of verification    |                                |                                                                         |
| Contracts signed between MCA-S and the consultants in charge of studies                             |                                                                                                            |                                                                                                                                                                                                                             | Contract values          |                                |                                                                         |
| Location of Data Storage                                                                            |                                                                                                            | DAF, DPM & Irrigation Project Directorate                                                                                                                                                                                   |                          |                                |                                                                         |

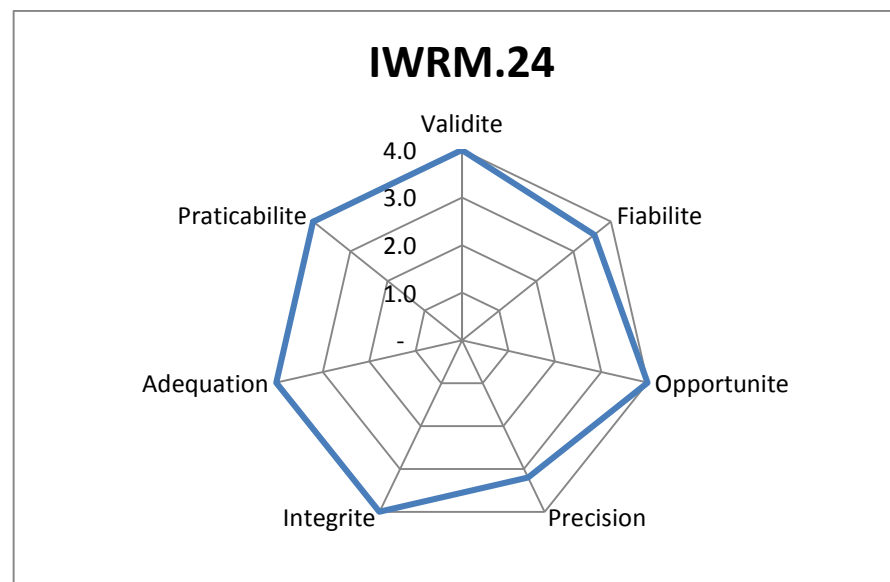
| INDICATOR DATA QUALITY                                                               |            |                          |                                                               |                             |                        |
|--------------------------------------------------------------------------------------|------------|--------------------------|---------------------------------------------------------------|-----------------------------|------------------------|
| Date of Data Quality Review                                                          |            |                          | November 2014                                                 |                             |                        |
| Main findings of data quality review                                                 |            | Average Score (out of 4) | Recommendations                                               | <div><h3>IWRM.23</h3></div> |                        |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |            | 4,0                      | N/A                                                           |                             |                        |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |            | 3,6                      | N/A                                                           |                             |                        |
| 3. TIMELINESS- Are the data current and frequently collected?                        |            | 4,0                      | N/A                                                           |                             |                        |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |            | 3,2                      | N/A                                                           |                             |                        |
| 5. INTEGRITY- Is the data free from manipulation?                                    |            | 4,0                      | N/A                                                           |                             |                        |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |            | 4,0                      | N/A                                                           |                             |                        |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |            | 4,0                      | N/A                                                           |                             |                        |
| Overall assessment                                                                   |            | 3,8                      |                                                               |                             |                        |
| Action taken in response to data quality review                                      |            | Not Applicable           |                                                               |                             |                        |
| Known data limitations and significance                                              |            | Not Applicable           |                                                               |                             |                        |
| Actions taken to address data limitations                                            |            | Not Applicable           |                                                               |                             |                        |
| INDICATOR BASELINE INFORMATION                                                       |            |                          |                                                               |                             |                        |
| Old Baseline                                                                         | 0          | Old Baseline Year        | 2010 - 2011                                                   | Source of old Baseline      | Work Plan IWRM Project |
| New Baseline                                                                         | 0          | New Baseline Year        | 2010 - 2011                                                   | Source of New Baseline      | Work Plan IWRM Project |
| Justification for Baseline Change (if any)                                           |            |                          |                                                               |                             |                        |
| INDICATOR TARGET CALCULATIONS                                                        |            |                          |                                                               |                             |                        |
|                                                                                      | Target     |                          |                                                               |                             |                        |
| YEAR 1                                                                               | Old        | New                      | Justification for changes to targets or calculations (if any) |                             |                        |
| Oct 2010 - Sept. 2011                                                                | 0          | 0                        |                                                               |                             |                        |
| Explanation of assumptions and inputs to target calculations                         |            |                          |                                                               |                             |                        |
| YEAR 2                                                                               | Old        | New                      | Justification for changes to targets or calculations (if any) |                             |                        |
| Oct 2011 - Sept. 2012                                                                | 19 153 347 | 19 153 347               |                                                               |                             |                        |
| Explanation of assumptions and inputs to target calculations                         |            |                          |                                                               |                             |                        |
| YEAR 3                                                                               | Old        | New                      |                                                               |                             |                        |

|                                                                     |             |             |                                                               |  |
|---------------------------------------------------------------------|-------------|-------------|---------------------------------------------------------------|--|
|                                                                     | Target      |             |                                                               |  |
| Oct 2012 - Sept. 2013                                               | 130 883 874 | 130 883 874 | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations        |             |             |                                                               |  |
| YEAR 4                                                              | Old         | New         | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 130 883 874 | 130 883 874 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |             |             |                                                               |  |
| YEAR 5                                                              | Old         | New         | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 130 883 874 | 130 883 874 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |             |             |                                                               |  |
| Long Term Target                                                    | Old         | New         | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A         | N/A         |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |             |             |                                                               |  |
| COMMENTS                                                            |             |             |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |             |             |                                                               |  |
|                                                                     |             |             |                                                               |  |

## 2.24. Indicator IWRM.24. Percent disbursed of irrigation construction contracts

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                             |                                                                                                                                                                                                                                 |                          |                                |                                                                           |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------|---------------------------------------------------------------------------|
| Indicator Name                                                                                      | Percent disbursed of irrigation construction contracts                                                                                                      |                                                                                                                                                                                                                                 |                          | Version                        | N° 03 / Sept 2015                                                         |
| Common Indicator Number                                                                             | (AI-4)                                                                                                                                                      | Current Indicator Number                                                                                                                                                                                                        | IWRM.24                  | All Previous Indicator Numbers | IWRM.21. / IWRM.26.                                                       |
| Level                                                                                               | Process                                                                                                                                                     | Classification                                                                                                                                                                                                                  | Level                    | Unit of Measure*               | Percentage                                                                |
| Detailed Definition                                                                                 | The total amount of all signed construction contracts for agricultural irrigation investments disbursed divided by the total value of all signed contracts. |                                                                                                                                                                                                                                 |                          |                                |                                                                           |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                   |                                                                                                                                                                                                                                 | Reporting Period Covered | Compact Duration               |                                                                           |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                          |                                                                                                                                                                                                                                 | NO                       |                                |                                                                           |
|                                                                                                     | By age (YES/NO)                                                                                                                                             |                                                                                                                                                                                                                                 | NO                       |                                |                                                                           |
|                                                                                                     | By income (YES/NO)                                                                                                                                          |                                                                                                                                                                                                                                 | NO                       |                                |                                                                           |
|                                                                                                     | By locality (YES/NO)                                                                                                                                        |                                                                                                                                                                                                                                 | YES (Delta / Ngalenka)   |                                |                                                                           |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                             |                                                                                                                                                                                                                                 |                          |                                |                                                                           |
| Justification for Including Indicator                                                               |                                                                                                                                                             | The indicator provides information on the percentage of disbursements under the signed contracts for irrigation infrastructure works in the Delta and Ngalenka A proxy indicator provides information on the progress of works. |                          |                                |                                                                           |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                             | Not Applicable                                                                                                                                                                                                                  |                          |                                |                                                                           |
| How does the indicator link to the BA?                                                              |                                                                                                                                                             | Not Applicable                                                                                                                                                                                                                  |                          |                                |                                                                           |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                             | Not Applicable                                                                                                                                                                                                                  |                          |                                |                                                                           |
| Justification for Disaggregations                                                                   |                                                                                                                                                             | The disaggregation will be made by locality (Delta / Ngalenka) and by lot because for each of these localities, the contracts are awarded by different lots.                                                                    |                          |                                |                                                                           |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                             |                                                                                                                                                                                                                                 |                          |                                |                                                                           |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                             | Irrigation Project Directorate                                                                                                                                                                                                  |                          |                                |                                                                           |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                             | Cheikh T. SENE                                                                                                                                                                                                                  | Phone                    | 221.77.333.15.80               | E-mail \| <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                             | Administrative and Finance Directorate                                                                                                                                                                                          |                          |                                |                                                                           |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                             | Use of data from signed works contracts<br>Numerator = amount disbursed.<br>Denominator = total contract amount. It is an proxy indicator for the completion                                                                    |                          |                                |                                                                           |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                             | Not Applicable                                                                                                                                                                                                                  |                          |                                |                                                                           |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                             | The data is transmitted by the DAF                                                                                                                                                                                              |                          |                                |                                                                           |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                             | QUARTERLY                                                                                                                                                                                                                       |                          |                                |                                                                           |
| Names of verification sources                                                                       |                                                                                                                                                             |                                                                                                                                                                                                                                 | Means of verification    |                                |                                                                           |
| Contracts signed between MCA-S and the consultants in charge of studies                             |                                                                                                                                                             |                                                                                                                                                                                                                                 | Contracts and amendments |                                |                                                                           |
| DAF Financial Report                                                                                |                                                                                                                                                             |                                                                                                                                                                                                                                 | Payment invoices         |                                |                                                                           |

|                                                                                      |    |                          |                 |                                                               |                                                                                                                |
|--------------------------------------------------------------------------------------|----|--------------------------|-----------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Location of Data Storage                                                             |    |                          |                 | Administrative and Financial Directorate                      |                                                                                                                |
| INDICATOR DATA QUALITY                                                               |    |                          |                 |                                                               |                                                                                                                |
| Date of Data Quality Review                                                          |    |                          | June 2013       |                                                               |                                                                                                                |
| Main findings of data quality review                                                 |    | Average Score (out of 4) | Recommendations |                                                               | <div><h3>IWRM.24</h3></div> |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |    | 4,0                      | N/A             |                                                               |                                                                                                                |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |    | 3,6                      | N/A             |                                                               |                                                                                                                |
| 3. TIMELINESS- Are the data current and frequently collected?                        |    | 4,0                      | N/A             |                                                               |                                                                                                                |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |    | 3,2                      | N/A             |                                                               |                                                                                                                |
| 5. INTEGRITY- Is the data free from manipulation?                                    |    | 4,0                      | N/A             |                                                               |                                                                                                                |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |    | 4,0                      | N/A             |                                                               |                                                                                                                |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |    | 4,0                      | N/A             |                                                               |                                                                                                                |
| Overall assessment                                                                   |    | 3,8                      |                 |                                                               |                                                                                                                |
| Action taken in response to data quality review                                      |    | Not Applicable           |                 |                                                               |                                                                                                                |
| Known data limitations and significance                                              |    | Not Applicable           |                 |                                                               |                                                                                                                |
| Actions taken to address data limitations                                            |    | Not Applicable           |                 |                                                               |                                                                                                                |
| INDICATOR BASELINE INFORMATION                                                       |    |                          |                 |                                                               |                                                                                                                |
| Old Baseline                                                                         | 0% | Old Baseline Year        | 2010-2011       | Source of old Baseline                                        | IWRM Project Work Plan                                                                                         |
| New Baseline                                                                         | 0% | New Baseline Year        | 2010-2011       | Source of New Baseline                                        | IWRM Project Work Plan                                                                                         |
| Justification for Baseline Change (if any)                                           |    |                          |                 |                                                               |                                                                                                                |
| INDICATOR TARGET CALCULATIONS                                                        |    |                          |                 |                                                               |                                                                                                                |
|                                                                                      |    | Target                   |                 |                                                               |                                                                                                                |
| YEAR 1                                                                               |    | Old                      | New             | Justification for changes to targets or calculations (if any) |                                                                                                                |
| Oct 2010 - Sept. 2011                                                                |    | 0%                       | 0%              |                                                               |                                                                                                                |
| Explanation of assumptions and inputs to target calculations                         |    |                          |                 |                                                               |                                                                                                                |
| YEAR 2                                                                               |    | Old                      | New             | Justification for changes to targets or calculations (if any) |                                                                                                                |
| Oct 2011 - Sept. 2012                                                                |    | 0%                       | 0%              |                                                               |                                                                                                                |

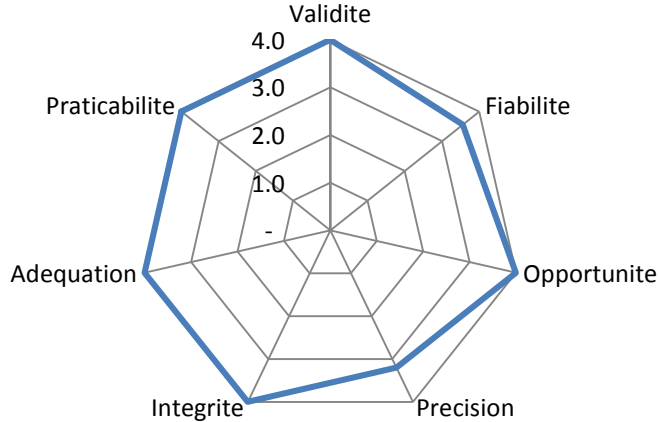




|                                                                     |        |      |                                                               |  |
|---------------------------------------------------------------------|--------|------|---------------------------------------------------------------|--|
|                                                                     | Target |      |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| YEAR 3                                                              | Old    | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 37%    | 37%  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| YEAR 4                                                              | Old    | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 80%    | 80%  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| YEAR 5                                                              | Old    | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 100%   | 100% |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| Long Term Target                                                    | Old    | New  | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A    | N/A  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |      |                                                               |  |
| COMMENTS                                                            |        |      |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |        |      |                                                               |  |
|                                                                     |        |      |                                                               |  |

## 2.25 Indicator IWRM.25. Value disbursed for irrigation construction contracts

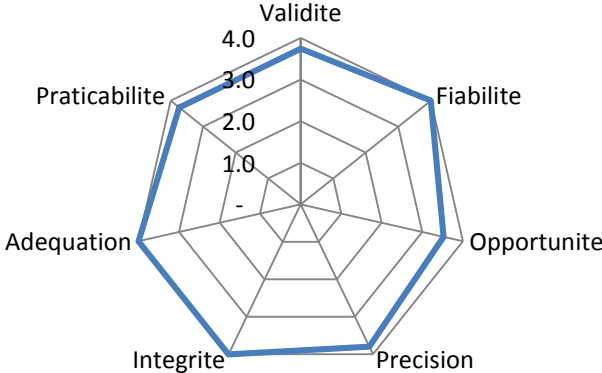
| <b>INDICATOR BASIC DETAILS</b>                                                                      |                                                                                                                                                                                            |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Value disbursed for irrigation construction contracts                                                                                                                                      |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | (AI-4.1)                                                                                                                                                                                   | Current Indicator Number | IWRM.25.                 | All Previous Indicator Numbers | New indicator                                                    |
| Level                                                                                               | Process                                                                                                                                                                                    | Classification           | Cumulative               | Unit of Measure*               | US\$                                                             |
| Detailed Definition                                                                                 | The total amount of disbursements under signed contracts for construction of irrigation infrastructure in the Delta and Ngalenka.                                                          |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                  |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                         |                          | NO                       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                            |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                         |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                       |                          | Yes (Delta / Ngalenka)   |                                |                                                                  |
| <b>INDICATOR JUSTIFICATION DETAILS</b>                                                              |                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | This indicator provides information on the total amount of disbursements under the signed contracts for construction of irrigation infrastructure in the Delta and Ngalenka.               |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | N/A                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | N/A                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | N/A                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | The disaggregation will be made by locality (Delta / Ngalenka) and by lot for amounts of disbursements on contracts work in irrigation infrastructure in the Delta and the signed Ngalenka |                          |                          |                                |                                                                  |
| <b>INDICATOR ACQUISITION PLAN</b>                                                                   |                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Direction Projet Irrigation                                                                                                                                                                |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Cheikh T. SENE                                                                                                                                                                             | Phone                    | 221.77.333.15.80         | E-mail                         | <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Project managers Delta and Ngalenka Irrigation Project Directorate                                                                                                                         |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use data from different contracts (Detailed studies and Tender Documents, Environmental Monitoring, RAP) for the reference period                                                          |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the Irrigation Project Direction                                                                                                                                |                          |                          |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| Names of verification sources                                                                       |                                                                                                                                                                                            |                          |                          | Means of verification          |                                                                  |
| Contracts signed between MCA-S and the consultants in charge of studies                             |                                                                                                                                                                                            |                          |                          | Contracts and amendments       |                                                                  |
| DAF Financial Report                                                                                |                                                                                                                                                                                            |                          |                          | Payment invoices               |                                                                  |
| Location of Data Storage                                                                            | Administrative and Financial Directorate                                                                                                                                                   |                          |                          |                                |                                                                  |
| <b>INDICATOR DATA QUALITY</b>                                                                       |                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| Date of Data Quality Review                                                                         | November 2014                                                                                                                                                                              |                          |                          |                                |                                                                  |

|                                                                                      |        |                             |                                                               |                                                                                                                |                        |                        |
|--------------------------------------------------------------------------------------|--------|-----------------------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------|------------------------|
| Main findings of data quality review                                                 |        | Average Score<br>(Out of 4) | Recommendations                                               | <div><h3>IWRM.25</h3></div> |                        |                        |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        | 4,0                         | N/A                                                           |                                                                                                                |                        |                        |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        | 3,6                         | N/A                                                           |                                                                                                                |                        |                        |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        | 4,0                         | N/A                                                           |                                                                                                                |                        |                        |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        | 3,2                         | N/A                                                           |                                                                                                                |                        |                        |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        | 4,0                         | N/A                                                           |                                                                                                                |                        |                        |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        | 4,0                         | N/A                                                           |                                                                                                                |                        |                        |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        | 4,0                         | N/A                                                           |                                                                                                                |                        |                        |
| Overall assessment                                                                   |        | 3,8                         |                                                               |                                                                                                                |                        |                        |
| Action taken in response to data quality review                                      |        | N/A                         |                                                               |                                                                                                                |                        |                        |
| Known data limitations and significance                                              |        | N/A                         |                                                               |                                                                                                                |                        |                        |
| Actions taken to address data limitations                                            |        | N/A                         |                                                               |                                                                                                                |                        |                        |
| INDICATOR BASELINE INFORMATION                                                       |        |                             |                                                               |                                                                                                                |                        |                        |
| Old Baseline                                                                         |        | NA                          | Old Baseline Year                                             | 2010-2011                                                                                                      | Source of old Baseline | IWRM Project Work Plan |
| New Baseline                                                                         |        | 0                           | New Baseline Year                                             | 2010-2011                                                                                                      | Source of New Baseline | IWRM Project Work Plan |
| Justification for Baseline Change (if any)                                           |        |                             |                                                               |                                                                                                                |                        |                        |
| INDICATOR TARGET CALCULATIONS                                                        |        |                             |                                                               |                                                                                                                |                        |                        |
|                                                                                      | Target |                             |                                                               | Integration in the calculation of disbursements provided for under the works supervision contracts             |                        |                        |
| YEAR 1                                                                               | Old    | New                         | Justification for changes to targets or calculations (if any) |                                                                                                                |                        |                        |
| Oct 2010 - Sept. 2011                                                                | NA     | 0                           |                                                               |                                                                                                                |                        |                        |
| Explanation of assumptions and inputs to target calculations                         |        |                             |                                                               |                                                                                                                |                        |                        |
| YEAR 2                                                                               | Old    | New                         | Justification for changes to targets or calculations (if any) |                                                                                                                |                        |                        |
| Oct 2011 - Sept. 2012                                                                | NA     | 0                           |                                                               |                                                                                                                |                        |                        |
| Explanation of assumptions and inputs to target calculations                         |        |                             |                                                               |                                                                                                                |                        |                        |
| YEAR 3                                                                               | Old    | New                         | Justification for changes to targets or calculations (if any) |                                                                                                                |                        |                        |
| Oct 2012 - Sept. 2013                                                                | NA     | 48 427 033                  |                                                               |                                                                                                                |                        |                        |

|                                                                     |                |             |                                                               |                                                                                                    |
|---------------------------------------------------------------------|----------------|-------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
|                                                                     | Target         |             |                                                               |                                                                                                    |
| Explanation of assumptions and inputs to target calculations        |                |             |                                                               |                                                                                                    |
| YEAR 4                                                              | Old            | New         | Justification for changes to targets or calculations (if any) |                                                                                                    |
| Oct 2013 - Sept. 2014                                               | NA             | 104 707 099 |                                                               |                                                                                                    |
| Explanation of assumptions and inputs to target calculations        |                |             |                                                               |                                                                                                    |
| YEAR 5                                                              | Old            | New         | Justification for changes to targets or calculations (if any) | Integration in the calculation of disbursements provided for under the works supervision contracts |
| Oct 2014 - Sept. 2015                                               | NA             | 130 883 874 |                                                               |                                                                                                    |
| Explanation of assumptions and inputs to target calculations        |                |             |                                                               |                                                                                                    |
| Cible Post Compact                                                  | Non applicable |             |                                                               |                                                                                                    |
| COMMENTS                                                            |                |             |                                                               |                                                                                                    |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                |             |                                                               |                                                                                                    |
|                                                                     |                |             |                                                               |                                                                                                    |

## 2.26. Indicator IWRM.26. Number of training sessions on land tenure security tools

| <b>INDICATOR BASIC DETAILS</b>                                                                      |                                                                                                                                                   |                          |                                       |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Number of training sessions on land tenure security tools                                                                                         |                          |                                       | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                    | Current Indicator Number | IWRM.26                               | All Previous Indicator Numbers | IWRM.22. / IWRM.27.                                              |
| Level                                                                                               | Process                                                                                                                                           | Classification           | Cumulative                            | Unit of Measure*               | Number                                                           |
| Detailed Definition                                                                                 | Count the training sessions on land tenure security tools organized by DFRI through the consultant in charge of implementing land tenure security |                          |                                       |                                |                                                                  |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                         |                          | Reporting Period Covered              | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                |                          | NO                                    |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                   |                          | NO                                    |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                |                          | NO                                    |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                              |                          | NO                                    |                                |                                                                  |
| <b>INDICATOR JUSTIFICATION DETAILS</b>                                                              |                                                                                                                                                   |                          |                                       |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the number of training sessions on land tenure security tools organized by DFRI                             |                          |                                       |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                    |                          |                                       |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                    |                          |                                       |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                    |                          |                                       |                                |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                    |                          |                                       |                                |                                                                  |
| <b>INDICATOR ACQUISITION PLAN</b>                                                                   |                                                                                                                                                   |                          |                                       |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Land and Institutional Reforms Directorate                                                                                                        |                          |                                       |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Alain DIOUF                                                                                                                                       | Phone                    | 221.77.333.15.72                      | E-mail                         | <a href="mailto:adiouf@mcasenegal.org">adiouf@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Consultant responsible for Land Tenure Security component LTS02                                                                                   |                          |                                       |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use data from the land tenure security implementation contract                                                                                    |                          |                                       |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                    |                          |                                       |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the DFRI                                                                                                               |                          |                                       |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                         |                          |                                       |                                |                                                                  |
| Names of verification sources                                                                       |                                                                                                                                                   |                          | Means of verification                 |                                |                                                                  |
| DFRI Report                                                                                         |                                                                                                                                                   |                          | Training Sheets & Table of indicators |                                |                                                                  |
| Implementation Consultant's Report                                                                  |                                                                                                                                                   |                          | Training session                      |                                |                                                                  |
| PMU Irrigation Report                                                                               |                                                                                                                                                   |                          | Table of indicators                   |                                |                                                                  |
| Location of Data Storage                                                                            | Land and Institutional Reforms Directorate                                                                                                        |                          |                                       |                                |                                                                  |
| <b>INDICATOR DATA QUALITY</b>                                                                       |                                                                                                                                                   |                          |                                       |                                |                                                                  |
| Date of Data Quality Review                                                                         | June 2013                                                                                                                                         |                          |                                       |                                |                                                                  |

|                                                                                      |                          |                   |                                                                                                                |                        |                |  |
|--------------------------------------------------------------------------------------|--------------------------|-------------------|----------------------------------------------------------------------------------------------------------------|------------------------|----------------|--|
| Main findings of data quality review                                                 | Average Score (out of 4) | Recommendations   | <div><h3>IWRM.26</h3></div> |                        |                |  |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 3,7                      | N/A               |                                                                                                                |                        |                |  |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 4,0                      | N/A               |                                                                                                                |                        |                |  |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 3,5                      | N/A               |                                                                                                                |                        |                |  |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 3,8                      | N/A               |                                                                                                                |                        |                |  |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                      | N/A               |                                                                                                                |                        |                |  |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 4,0                      | N/A               |                                                                                                                |                        |                |  |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 3,7                      | N/A               |                                                                                                                |                        |                |  |
| Overall assessment                                                                   | 3,8                      |                   |                                                                                                                |                        |                |  |
| Action taken in response to data quality review                                      | Not Applicable           |                   |                                                                                                                |                        |                |  |
| Known data limitations and significance                                              | Not Applicable           |                   |                                                                                                                |                        |                |  |
| Actions taken to address data limitations                                            | Not Applicable           |                   |                                                                                                                |                        |                |  |
| INDICATOR BASELINE INFORMATION                                                       |                          |                   |                                                                                                                |                        |                |  |
| Old Baseline                                                                         | 0                        | Old Baseline Year | 2010 - 2011                                                                                                    | Source of old Baseline | DFRI Work Plan |  |
| New Baseline                                                                         | 0                        | New Baseline Year | 2010 - 2011                                                                                                    | Source of New Baseline | DFRI Work Plan |  |
| Justification for Baseline Change (if any)                                           |                          |                   |                                                                                                                |                        |                |  |
| INDICATOR TARGET CALCULATIONS                                                        |                          |                   |                                                                                                                |                        |                |  |
|                                                                                      | Target                   |                   |                                                                                                                |                        |                |  |
| YEAR 1                                                                               | Old                      | New               | Justification for changes to targets or calculations (if any)                                                  |                        |                |  |
| Oct 2010 - Sept. 2011                                                                | 0                        | 0                 |                                                                                                                |                        |                |  |
| Explanation of assumptions and inputs to target calculations                         |                          |                   |                                                                                                                |                        |                |  |
| YEAR 2                                                                               | Old                      | New               | Justification for changes to targets or calculations (if any)                                                  |                        |                |  |
| Oct 2011 - Sept. 2012                                                                | 0                        | 0                 |                                                                                                                |                        |                |  |
| Explanation of assumptions and inputs to target calculations                         |                          |                   |                                                                                                                |                        |                |  |
| YEAR 3                                                                               | Old                      | New               | Justification for changes to targets or calculations (if any)                                                  |                        |                |  |
| Oct 2012 - Sept. 2013                                                                | 30                       | 30                |                                                                                                                |                        |                |  |
| Explanation of assumptions and inputs to target calculations                         |                          |                   |                                                                                                                |                        |                |  |
| YEAR 4                                                                               | Old                      | New               |                                                                                                                |                        |                |  |

|                                                                     |                                                                                                                              |     |                                                               |  |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----|---------------------------------------------------------------|--|
|                                                                     | Target                                                                                                                       |     |                                                               |  |
| Oct 2013 - Sept. 2014                                               | 54                                                                                                                           | 54  | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                              |     |                                                               |  |
| YEAR 5                                                              | Old                                                                                                                          | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 72                                                                                                                           | 72  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                              |     |                                                               |  |
| Long Term Target                                                    | Old                                                                                                                          | New | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A                                                                                                                          | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                              |     |                                                               |  |
| COMMENTS                                                            | N.B. 4 tools for at least 2 passages in 9 RC : mapping and GPS, Land Register, POAS and CDI, manual of procedures and others |     |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                                                                                              |     |                                                               |  |
|                                                                     |                                                                                                                              |     |                                                               |  |

## 2.27. Indicator IWRM.27. Number of man/days of training on land tenure security tools

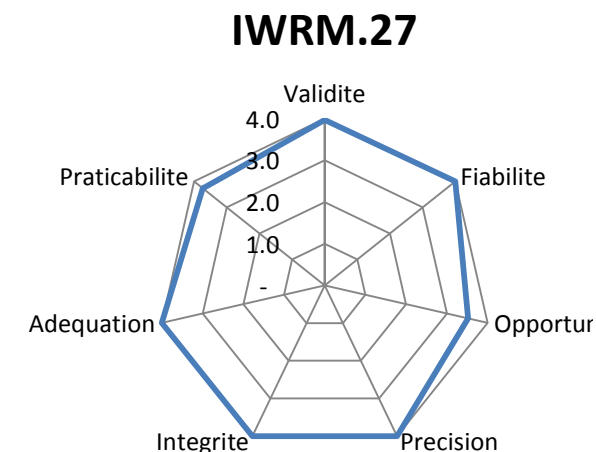
| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Number of man/days of training on land tenure security tools                                                                                                                                                                                                                                                                           |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                         | Current Indicator Number | IWRM.27                  | All Previous Indicator Numbers | IWRM.28.                                                         |
| Level                                                                                               | Process                                                                                                                                                                                                                                                                                                                                | Classification           | Cumulative               | Unit of Measure*               | Number                                                           |
| Detailed Definition                                                                                 | Number of man/days of training on land tenure security tools conducted by the Consultant                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                                                                                                                                              |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                     |                          | YES (Male, Female)       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                        |                          | YES (<35 / >35)          |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                     |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                   |                          | YES (Delta / Podor)      |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the number of man/days of training conducted by the Consultant to the different targets. Thus, for each participant, taking into account his/her sex, age and locality, the number of days during which he/she participated in the training session on land tenure security tools will be added. |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                                                                                                                                                                                                         |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                                                                                         |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                                                                                         |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | The disaggregation will be made by locality (Delta / Podor), gender and age                                                                                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Land and Institutional Reforms Directorate                                                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Alain DIOUF                                                                                                                                                                                                                                                                                                                            | Phone                    | 221.77.333.15.72         | E-mail                         | <a href="mailto:adiouf@mcasenegal.org">adiouf@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Consultant responsible for the Land Tenure Security component LTS02                                                                                                                                                                                                                                                                    |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use the training reports of the Consultant in charge of implementing land tenure security<br>Number of man/days = Number of people trained during a session X duration of session                                                                                                                                                      |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                                                                                                         |                          |                          |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the Consultant responsible for implementing Land Tenure Security at the DFRI follow-up sheets                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Names of verification sources                                                                       | Means of verification                                                                                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| DFRI Report                                                                                         | Training Sheets & Table of indicators                                                                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| Implementation Consultant's Report                                                                  | Training Sheets & Table of indicators                                                                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| PMU Irrigation Report                                                                               | Table of indicators                                                                                                                                                                                                                                                                                                                    |                          |                          |                                |                                                                  |
| Location of Data Storage                                                                            | Land and Institutional Reforms Directorate                                                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| INDICATOR DATA QUALITY                                                                              |                                                                                                                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |



|                                                                                      |               |                   |                          |                                                               |                |
|--------------------------------------------------------------------------------------|---------------|-------------------|--------------------------|---------------------------------------------------------------|----------------|
| Date of Data Quality Review                                                          |               |                   |                          | N/A                                                           |                |
| Main findings of data quality review                                                 |               |                   | Average Score (out of 4) | Recommendations                                               |                |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |               |                   | 4,0                      | N/A                                                           |                |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |               |                   | 4,0                      | N/A                                                           |                |
| 3. TIMELINESS- Are the data current and frequently collected?                        |               |                   | 3,5                      | N/A                                                           |                |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |               |                   | 4,0                      | N/A                                                           |                |
| 5. INTEGRITY- Is the data free from manipulation?                                    |               |                   | 4,0                      | N/A                                                           |                |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |               |                   | 4,0                      | N/A                                                           |                |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |               |                   | 3,7                      | N/A                                                           |                |
| Overall assessment                                                                   |               |                   | 3,8                      |                                                               |                |
| Action taken in response to data quality review                                      |               |                   | Not Applicable           |                                                               |                |
| Known data limitations and significance                                              |               |                   | Not Applicable           |                                                               |                |
| Actions taken to address data limitations                                            |               |                   | Not Applicable           |                                                               |                |
| INDICATOR BASELINE INFORMATION                                                       |               |                   |                          |                                                               |                |
| Old Baseline                                                                         | 0             | Old Baseline Year | 2011-2012                | Source of old Baseline                                        | Not Applicable |
| New Baseline                                                                         | 0             | New Baseline Year | 2011-2012                | Source of New Baseline                                        | DFRI Work Plan |
| Justification for Baseline Change (if any)                                           | New Indicator |                   |                          |                                                               |                |
| INDICATOR TARGET CALCULATIONS                                                        |               |                   |                          |                                                               |                |
|                                                                                      |               | Target            |                          |                                                               |                |
| YEAR 1                                                                               |               | Old               | New                      | Justification for changes to targets or calculations (if any) |                |
| Oct 2010 - Sept. 2011                                                                |               | N/A               | N/A                      |                                                               |                |
| Explanation of assumptions and inputs to target calculations                         |               |                   |                          |                                                               |                |
| YEAR 2                                                                               |               | Old               | New                      | Justification for changes to targets or calculations (if any) |                |
| Oct 2011 - Sept. 2012                                                                |               | 0                 | 0                        |                                                               |                |

**IWRM.27**

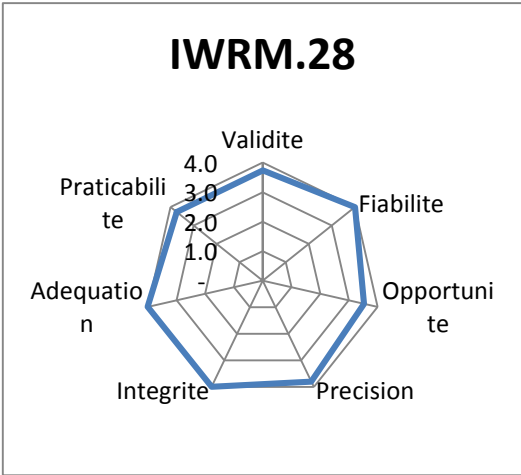
| Indicator            | Score      |
|----------------------|------------|
| Validite             | 4.0        |
| Fiabilite            | 4.0        |
| Opportunité          | 4.0        |
| Precision            | 4.0        |
| Integrité            | 4.0        |
| Adequation           | 3.5        |
| Praticabilité        | 3.7        |
| <b>Average Score</b> | <b>3.8</b> |



|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |  |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------|--|
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |  |
| YEAR 3                                                              | Old                                                                                                                                                                                                                                                                                                                                                                              | New   | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 2 400                                                                                                                                                                                                                                                                                                                                                                            | 2 400 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |  |
| YEAR 4                                                              | Old                                                                                                                                                                                                                                                                                                                                                                              | New   | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 4 800                                                                                                                                                                                                                                                                                                                                                                            | 4 800 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |  |
| YEAR 5                                                              | Old                                                                                                                                                                                                                                                                                                                                                                              | New   | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 6 400                                                                                                                                                                                                                                                                                                                                                                            | 6 400 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |  |
| Long Term Target                                                    | Old                                                                                                                                                                                                                                                                                                                                                                              | New   | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A                                                                                                                                                                                                                                                                                                                                                                              | N/A   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |  |
| COMMENTS                                                            | N.B. : The consultant will have to deliver six (6) training modules on the following themes: "Good land governance" (Manual of procedures, Organization and management techniques for farmer organizations, Conflict prevention and settlement) and "Mastering land tenure security tools " (Keeping and storage of property records; Data base, mapping and GPS ; POAS and CDI) |       |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |  |
|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                               |  |

## 2.28. Indicator IWRM.29. Number of participants in the training modules on land tenure security tools

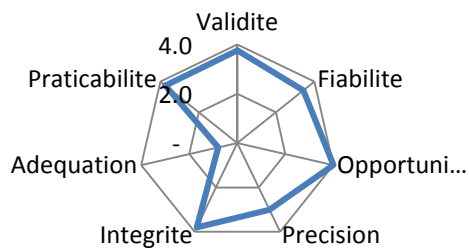
| INDICATOR BASIC DETAILS                                                                             |                                                                              |                                                                                                                                                                                                                                                    |                                            |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Number of participants in the training modules on land tenure security tools |                                                                                                                                                                                                                                                    |                                            | Version                        | N° 03 /Sept 2015                                                        |
| Common Indicator Number                                                                             | Not Applicable                                                               | Current Indicator Number                                                                                                                                                                                                                           | IWRM28.                                    | All Previous Indicator Numbers | New Indicator                                                           |
| Level                                                                                               | Process                                                                      | Classification                                                                                                                                                                                                                                     | Cumulative                                 | Unit of Measure*               | Number                                                                  |
| Detailed Definition                                                                                 | Number of participants in the training modules on land tenure security tools |                                                                                                                                                                                                                                                    |                                            |                                |                                                                         |
| Frequency of Reporting                                                                              | QUARTERLY                                                                    |                                                                                                                                                                                                                                                    | Reporting Period Covered                   | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                           |                                                                                                                                                                                                                                                    | YES (Male, Female)                         |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                              |                                                                                                                                                                                                                                                    | YES (<35 / >35)                            |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                           |                                                                                                                                                                                                                                                    | NO                                         |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                         |                                                                                                                                                                                                                                                    | YES (Delta / Podor)                        |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                              |                                                                                                                                                                                                                                                    |                                            |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                              | The indicator provides information on the number of participants by gender, by age and by locality in the training modules on land tenure security tools conducted by the Consultant in charge of implementation.                                  |                                            |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                              | Not Applicable                                                                                                                                                                                                                                     |                                            |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                              | Not Applicable                                                                                                                                                                                                                                     |                                            |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                              | Not Applicable                                                                                                                                                                                                                                     |                                            |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                              | The indicator will be disaggregated by gender, age and locality (Delta / Podor)                                                                                                                                                                    |                                            |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                              |                                                                                                                                                                                                                                                    |                                            |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                              | Land and Institutional Reforms Directorate                                                                                                                                                                                                         |                                            |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                              | Alain DIOUF                                                                                                                                                                                                                                        | Phone                                      | 221.77.333.15.72               | E-mail <a href="mailto:adiouf@mcasenegal.org">adiouf@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                              | Consultant responsible for Land Tenure Security LTS02                                                                                                                                                                                              |                                            |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                              | Use training reports of the Consultant in charge of land tenure security implementation<br>Number of participants = Number of people who effectively pursued module training.<br>Training concern all local governments of the project area (9 LG) |                                            |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                              | Not Applicable                                                                                                                                                                                                                                     |                                            |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                              | The data is transmitted by the Consultant responsible for implementing land tenure security at the DFRI through reports and follow-up sheets                                                                                                       |                                            |                                |                                                                         |
| Frequency and timing of data acquisition                                                            |                                                                              | QUARTERLY                                                                                                                                                                                                                                          |                                            |                                |                                                                         |
| Names of verification sources                                                                       |                                                                              |                                                                                                                                                                                                                                                    | Means of verification                      |                                |                                                                         |
| DFRI Report                                                                                         |                                                                              |                                                                                                                                                                                                                                                    | Training Sheets & Table of indicators      |                                |                                                                         |
| Implementation Consultant's Report                                                                  |                                                                              |                                                                                                                                                                                                                                                    | Training sessions                          |                                |                                                                         |
| PMU Irrigation Report                                                                               |                                                                              |                                                                                                                                                                                                                                                    | Table of indicators                        |                                |                                                                         |
| Location of Data Storage                                                                            |                                                                              |                                                                                                                                                                                                                                                    | Land and Institutional Reforms Directorate |                                |                                                                         |
| INDICATOR DATA QUALITY                                                                              |                                                                              |                                                                                                                                                                                                                                                    |                                            |                                |                                                                         |
| Date of Data Quality Review                                                                         |                                                                              |                                                                                                                                                                                                                                                    | N/A                                        |                                |                                                                         |

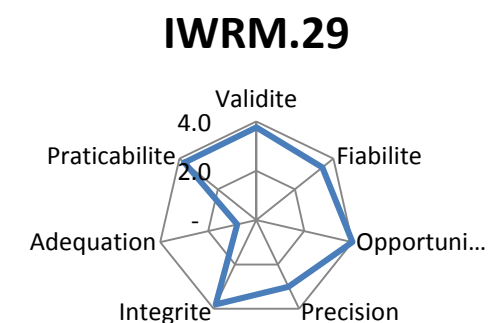
|                                                                                      |        |                   |                                                               |                             |                           |                                                                                                                  |
|--------------------------------------------------------------------------------------|--------|-------------------|---------------------------------------------------------------|-----------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------|
| Main findings of data quality review                                                 |        |                   |                                                               | Average Score<br>(out of 4) | Recommendations           | <div><div>IWRM.28</div></div> |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        |                   |                                                               | 3,7                         | N/A                       |                                                                                                                  |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        |                   |                                                               | 4,0                         | N/A                       |                                                                                                                  |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        |                   |                                                               | 3,5                         | N/A                       |                                                                                                                  |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        |                   |                                                               | 3,8                         | N/A                       |                                                                                                                  |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        |                   |                                                               | 4,0                         | N/A                       |                                                                                                                  |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        |                   |                                                               | 4,0                         | N/A                       |                                                                                                                  |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        |                   |                                                               | 3,7                         | N/A                       |                                                                                                                  |
| Overall assessment                                                                   |        |                   |                                                               | 3,8                         |                           |                                                                                                                  |
| Action taken in response to data quality review                                      |        |                   |                                                               | Not Applicable              |                           |                                                                                                                  |
| Known data limitations and significance                                              |        |                   |                                                               | Not Applicable              |                           |                                                                                                                  |
| Actions taken to address data limitations                                            |        |                   |                                                               | Not Applicable              |                           |                                                                                                                  |
| INDICATOR BASELINE INFORMATION                                                       |        |                   |                                                               |                             |                           |                                                                                                                  |
| Old Baseline                                                                         | 0      | Old Baseline Year | 2011 - 2012                                                   | Source of old Baseline      | FRI Directorate Work plan |                                                                                                                  |
| New Baseline                                                                         | 0      | New Baseline Year | 2011 - 2012                                                   | Source of New Baseline      | FRI Directorate Work plan |                                                                                                                  |
| Justification for Baseline Change (if any)                                           |        | New Indicator     |                                                               |                             |                           |                                                                                                                  |
| INDICATOR TARGET CALCULATIONS                                                        |        |                   |                                                               |                             |                           |                                                                                                                  |
|                                                                                      | Target |                   |                                                               |                             |                           |                                                                                                                  |
| YEAR 1                                                                               | Old    | New               | Justification for changes to targets or calculations (if any) |                             |                           |                                                                                                                  |
| Oct 2010 - Sept. 2011                                                                | N/A    | N/A               |                                                               |                             |                           |                                                                                                                  |
| Explanation of assumptions and inputs to target calculations                         |        |                   |                                                               |                             |                           |                                                                                                                  |
| YEAR 2                                                                               | Old    | New               | Justification for changes to targets or calculations (if any) |                             |                           |                                                                                                                  |
| Oct 2011 - Sept. 2012                                                                | 0      | 0                 |                                                               |                             |                           |                                                                                                                  |
| Explanation of assumptions and inputs to target calculations                         |        |                   |                                                               |                             |                           |                                                                                                                  |
| YEAR 3                                                                               | Old    | New               | Justification for changes to targets or calculations (if any) |                             |                           |                                                                                                                  |
| Oct 2012 - Sept. 2013                                                                | 600    | 600               |                                                               |                             |                           |                                                                                                                  |

|                                                                     |        |       |                                                               |  |
|---------------------------------------------------------------------|--------|-------|---------------------------------------------------------------|--|
|                                                                     | Target |       |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |       |                                                               |  |
| YEAR 4                                                              | Old    | New   | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 1 200  | 1 200 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |       |                                                               |  |
| YEAR 5                                                              | Old    | New   | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 1 600  | 1 600 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |       |                                                               |  |
| Long Term Target                                                    | Old    | New   | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A    | N/A   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |       |                                                               |  |
| COMMENTS                                                            |        |       |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |        |       |                                                               |  |
|                                                                     |        |       |                                                               |  |

## 2.29. Indicator IWRM.29. Temporary employment generated in irrigation

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                |                                                                                                                                                                                                                                                              |                                         |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Temporary employment generated in irrigation                                                                                                   |                                                                                                                                                                                                                                                              |                                         | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | (AI-5)                                                                                                                                         | Current Indicator Number                                                                                                                                                                                                                                     | IWRM.29                                 | All Previous Indicator Numbers | IWRM.30.                                                                |
| Level                                                                                               | Process                                                                                                                                        | Classification                                                                                                                                                                                                                                               | Cumulative                              | Unit of Measure*               | Number                                                                  |
| Detailed Definition                                                                                 | The number of people temporarily employed or contracted by MCA-contracted construction companies to work on construction of irrigation systems |                                                                                                                                                                                                                                                              |                                         |                                |                                                                         |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                      |                                                                                                                                                                                                                                                              | Reporting Period Covered                | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                             |                                                                                                                                                                                                                                                              | YES                                     |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                                                                |                                                                                                                                                                                                                                                              | NO                                      |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                                                             |                                                                                                                                                                                                                                                              | NO                                      |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                                                           |                                                                                                                                                                                                                                                              | YES (Delta / Ngalenka)                  |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                |                                                                                                                                                                                                                                                              |                                         |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                                                                                                | The indicator provides information on the number of temporary jobs generated by the construction of irrigation infrastructure. It is an indicator proposed on the list of common indicators. See "Guidance on Common Indicator, May 2012" MCC.               |                                         |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                | Not Applicable                                                                                                                                                                                                                                               |                                         |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                                                                                                | Not Applicable                                                                                                                                                                                                                                               |                                         |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                | Not Applicable                                                                                                                                                                                                                                               |                                         |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                                                                                                | The indicator will be disaggregated by gender and by locality in order to better grasp the contribution of firms contracted by the Program in creating jobs and especially, those directed at women.                                                         |                                         |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                |                                                                                                                                                                                                                                                              |                                         |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                | Irrigation Project Directorate                                                                                                                                                                                                                               |                                         |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                | Cheikh T. SENE                                                                                                                                                                                                                                               | Phone                                   | 221.77.333.15.80               | E-mail <a href="mailto:ctsene@mcasenegal.org">ctsene@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                | Offices of Engineers in charge of supervising the irrigation infrastructure construction works                                                                                                                                                               |                                         |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                | Use employment forms of firms responsible for the construction of the different irrigation infrastructure lots. Each person (local and foreigner) is counted only once. Informal jobs generated by the construction works, are not taken into consideration. |                                         |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                | Not Applicable                                                                                                                                                                                                                                               |                                         |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                | The data is transmitted by Consultants responsible for Delta and Ngalenka works supervision at the Irrigation Directorate through reports and data sheets on the temporary workers                                                                           |                                         |                                |                                                                         |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                | QUARTERLY                                                                                                                                                                                                                                                    |                                         |                                |                                                                         |
| Names of verification sources                                                                       |                                                                                                                                                |                                                                                                                                                                                                                                                              | Means of verification                   |                                |                                                                         |
| Reports of Construction Firms                                                                       |                                                                                                                                                |                                                                                                                                                                                                                                                              | Monthly reports: ME sheet and data base |                                |                                                                         |
| Reports of Consultants in charge of Supervision                                                     |                                                                                                                                                |                                                                                                                                                                                                                                                              | Monthly reports                         |                                |                                                                         |

|                                                                                      |        |                   |                                                               |                        |                                         |                                                                                                                  |
|--------------------------------------------------------------------------------------|--------|-------------------|---------------------------------------------------------------|------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------|
| PMU-SAED Reports                                                                     |        |                   |                                                               |                        | Monthly reports: Table of indicators    |                                                                                                                  |
| Location of Data Storage                                                             |        |                   |                                                               |                        | Irrigation Project Directorate          |                                                                                                                  |
| INDICATOR DATA QUALITY                                                               |        |                   |                                                               |                        |                                         |                                                                                                                  |
| Date of Data Quality Review                                                          |        |                   |                                                               | N/A                    |                                         |                                                                                                                  |
| Main findings of data quality review                                                 |        |                   | Average Score (out of 4)                                      | Recommendations        |                                         | <div><div>IWRM.29</div></div> |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        |                   | 3,8                                                           | N/A                    |                                         |                                                                                                                  |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        |                   | 3,4                                                           | N/A                    |                                         |                                                                                                                  |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        |                   | 4,0                                                           | N/A                    |                                         |                                                                                                                  |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        |                   | 3,0                                                           | N/A                    |                                         |                                                                                                                  |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        |                   | 3,8                                                           | N/A                    |                                         |                                                                                                                  |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        |                   | 0,8                                                           | N/A                    |                                         |                                                                                                                  |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        |                   | 3,7                                                           | N/A                    |                                         |                                                                                                                  |
| Overall assessment                                                                   |        |                   | 3,2                                                           |                        |                                         |                                                                                                                  |
| Action taken in response to data quality review                                      |        |                   | Not Applicable                                                |                        |                                         |                                                                                                                  |
| Known data limitations and significance                                              |        |                   | Not Applicable                                                |                        |                                         |                                                                                                                  |
| Actions taken to address data limitations                                            |        |                   | Not Applicable                                                |                        |                                         |                                                                                                                  |
| INDICATOR BASELINE INFORMATION                                                       |        |                   |                                                               |                        |                                         |                                                                                                                  |
| Old Baseline                                                                         | 0      | Old Baseline Year | 2011-2012                                                     | Source of old Baseline | Work Plan of the Irrigation Directorate |                                                                                                                  |
| New Baseline                                                                         | 0      | New Baseline Year | 2011-2012                                                     | Source of New Baseline | Work Plan of the Irrigation Directorate |                                                                                                                  |
| Justification for Baseline Change (if any)                                           |        | New Indicator     |                                                               |                        |                                         |                                                                                                                  |
| INDICATOR TARGET CALCULATIONS                                                        |        |                   |                                                               |                        |                                         |                                                                                                                  |
|                                                                                      | Target |                   |                                                               |                        |                                         |                                                                                                                  |
| YEAR 1                                                                               | Old    | New               | Justification for changes to targets or calculations (if any) |                        |                                         |                                                                                                                  |
| Oct 2010 - Sept. 2011                                                                | N/A    | N/A               |                                                               |                        |                                         |                                                                                                                  |
| Explanation of assumptions and inputs to target calculations                         |        |                   |                                                               |                        |                                         |                                                                                                                  |
| YEAR 2                                                                               | Old    | New               | Justification for changes to targets or calculations (if any) |                        |                                         |                                                                                                                  |
| Oct 2011 - Sept. 2012                                                                | N/A    | N/A               |                                                               |                        |                                         |                                                                                                                  |
| Explanation of assumptions and inputs to target calculations                         |        |                   |                                                               |                        |                                         |                                                                                                                  |
| YEAR 3                                                                               | Old    | New               | Justification for changes to targets or calculations (if any) |                        |                                         |                                                                                                                  |
| Oct 2012 - Sept. 2013                                                                | N/A    | N/A               |                                                               |                        |                                         |                                                                                                                  |
| Explanation of assumptions and inputs to target calculations                         |        |                   |                                                               |                        |                                         |                                                                                                                  |



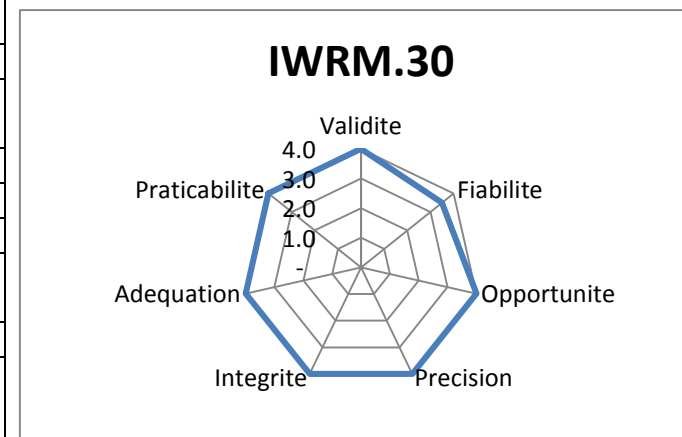
|                                                                     |        |     |                                                               |  |
|---------------------------------------------------------------------|--------|-----|---------------------------------------------------------------|--|
|                                                                     | Target |     |                                                               |  |
| YEAR 4                                                              | Old    | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | N/A    | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |     |                                                               |  |
| YEAR 5                                                              | Old    | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | N/A    | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |     |                                                               |  |
| Long Term Target                                                    | Old    | New | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A    | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |        |     |                                                               |  |
| COMMENTS                                                            |        |     |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |        |     |                                                               |  |
|                                                                     |        |     |                                                               |  |




## 2.30. Indicator IWRM.30. Number of land management committees and commissions set up or improved upon

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                 |                          |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Number of land management committees and commissions set up or improved upon.                                                             |                                                                                                                                                                                                                                                                                                                                                                 |                          | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                            | Current Indicator Number                                                                                                                                                                                                                                                                                                                                        | IWRM.30                  | All Previous Indicator Numbers | IWRM.23. / IWRM.31.                                                     |
| Level                                                                                               | Output                                                                                                                                    | Classification                                                                                                                                                                                                                                                                                                                                                  | Cumulative               | Unit of Measure*               | Number                                                                  |
| Detailed Definition                                                                                 | Count the number of technical committees in support of land tenure security and dispute mediation commissions set up by prefectural order |                                                                                                                                                                                                                                                                                                                                                                 |                          |                                |                                                                         |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                 | Reporting Period Covered | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                 | NO                       |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                 | NO                       |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                 | NO                       |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                 | NO                       |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                 |                          |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                                                                                           | Technical committees in support of land tenure security and dispute mediation commissions are set up in the different Local Communities to facilitate the implementation of land tenure security activities. These committees take a very active part in training and mediation activities but especially in the allocation of land in their local communities. |                          |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                                                                                           | Not Applicable                                                                                                                                                                                                                                                                                                                                                  |                          |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                                                                                           | Not Applicable                                                                                                                                                                                                                                                                                                                                                  |                          |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                           | Not Applicable                                                                                                                                                                                                                                                                                                                                                  |                          |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                                                                                           | Not Applicable                                                                                                                                                                                                                                                                                                                                                  |                          |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                 |                          |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                           | Land and Institutional Reforms Directorate                                                                                                                                                                                                                                                                                                                      |                          |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                           | Alain DIOUF                                                                                                                                                                                                                                                                                                                                                     | Phone                    | 221.77.333.15.72               | E-mail <a href="mailto:adiouf@mcasenegal.org">adiouf@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                           | Consultant in charge of the land Tenure Security Component LTS02                                                                                                                                                                                                                                                                                                |                          |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                           | Count the number of committees and commissions supported by the consultant in charge of implementing land tenure security in the Irrigation Project zone                                                                                                                                                                                                        |                          |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                           | Not Applicable                                                                                                                                                                                                                                                                                                                                                  |                          |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                           | The data is transmitted by the Consultant responsible for implementing land tenure security through the DFRI form                                                                                                                                                                                                                                               |                          |                                |                                                                         |
| Frequency and timing of data acquisition                                                            |                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                 | ANNUAL                   |                                |                                                                         |
| Names of verification sources                                                                       |                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                 | Means of verification    |                                |                                                                         |
| Report of the consultant in charge of implementing land tenure security                             |                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                 | Prefectural Order        |                                |                                                                         |

|                                                                                      |        |                                            |                                                               |                        |                                       |
|--------------------------------------------------------------------------------------|--------|--------------------------------------------|---------------------------------------------------------------|------------------------|---------------------------------------|
| PMU Irrigation Reports                                                               |        |                                            |                                                               | Table of indicators    |                                       |
| DFRI Report                                                                          |        |                                            |                                                               | Table of indicators    |                                       |
| Location of Data Storage                                                             |        | Land and Institutional Reforms Directorate |                                                               |                        |                                       |
| INDICATOR DATA QUALITY                                                               |        |                                            |                                                               |                        |                                       |
| Date of Data Quality Review                                                          |        |                                            |                                                               | N/A                    |                                       |
| Main findings of data quality review                                                 |        |                                            | Average Score (out of 3)                                      | Recommendations        | <div><h3>IWRM.30</h3></div>           |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        |                                            | 4,0                                                           | N/A                    |                                       |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        |                                            | 3,5                                                           | N/A                    |                                       |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        |                                            | 4,0                                                           | N/A                    |                                       |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        |                                            | 4,0                                                           | N/A                    |                                       |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        |                                            | 4,0                                                           | N/A                    |                                       |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        |                                            | 4,0                                                           | N/A                    |                                       |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        |                                            | 4,0                                                           | N/A                    |                                       |
| Overall assessment                                                                   |        |                                            | 3,9                                                           |                        |                                       |
| Action taken in response to data quality review                                      |        |                                            | Not Applicable                                                |                        |                                       |
| Known data limitations and significance                                              |        |                                            | Not Applicable                                                |                        |                                       |
| Actions taken to address data limitations                                            |        |                                            | Not Applicable                                                |                        |                                       |
| INDICATOR BASELINE INFORMATION                                                       |        |                                            |                                                               |                        |                                       |
| Old Baseline                                                                         | 0      | Old Baseline Year                          | 2010-2011                                                     | Source of old Baseline | Compact, initial source not available |
| New Baseline                                                                         | 0      | New Baseline Year                          | 2010-2011                                                     | Source of New Baseline | Work Plan of the FRI Directorate      |
| Justification for Baseline Change (if any)                                           |        |                                            |                                                               |                        |                                       |
| INDICATOR TARGET CALCULATIONS                                                        |        |                                            |                                                               |                        |                                       |
|                                                                                      | Target |                                            |                                                               |                        |                                       |
| YEAR 1                                                                               | Old    | New                                        | Justification for changes to targets or calculations (if any) |                        |                                       |
| Oct 2010 - Sept. 2011                                                                | 1      | 9                                          |                                                               |                        |                                       |
| Explanation of assumptions and inputs to target calculations                         |        |                                            |                                                               |                        |                                       |
| YEAR 2                                                                               | Old    | New                                        | Justification for changes to targets or calculations (if any) |                        |                                       |
| Oct 2011 - Sept. 2012                                                                | 9      | 9                                          |                                                               |                        |                                       |



|                                                                     |     |     |                                                               |  |
|---------------------------------------------------------------------|-----|-----|---------------------------------------------------------------|--|
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 3                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 9   | 9   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 4                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 9   | 9   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 5                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 9   | 9   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| Long Term Target                                                    | Old | New | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| COMMENTS                                                            |     |     |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |     |     |                                                               |  |
|                                                                     |     |     |                                                               |  |



Roads Rehabilitation Project

### 3. Performance indicators and targets of the Roads Rehabilitation Project

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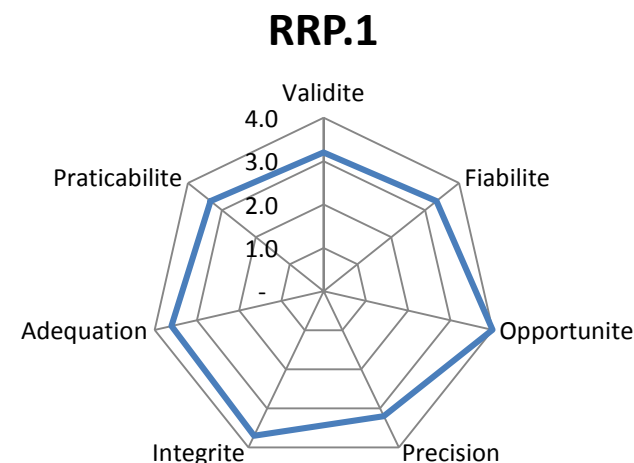
## 3.1. Indicator RRP.1. Average annual daily traffic (AADT) Richard-Toll – Ndioum

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Average annual daily traffic (AADT) Richard-Toll – Ndioum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | R-10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Current Indicator Number | RRP.1.                   | All Previous Indicator Numbers | RRP.1.                                                           |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Classification           | Level                    | Unit of Measure*               | Number                                                           |
| Detailed Definition                                                                                 | The average number and type of vehicles per day, averaged over different times (day and night) and over different seasons to arrive at an annualized daily average                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | Twice (commencement and end of Compact)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          | NO                       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          | NO                       |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | RN2 Richard Toll - Ndioum (around 120 km) and the Ndioum Bridge will be built by the Compact. The rehabilitation of this stretch will impact on traffic in this Northern part of Senegal by facilitating travelling to the Region of Matam but also to the other parts of the Republic of Mauritania and that of Mali.                                                                                                                                                                                                                                                                     |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | The increase in traffic on this road will help reduce the costs and duration of travels and promote the transportation and export of products from the irrigated zones along River Senegal and those with the Republics of Mauritania and Mali.                                                                                                                                                                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | The rehabilitated RN2 Richard Toll - Ndioum (around 120 km) and Ndioum Bridge will benefit about 21, 000 households or 251,000 people in year 20. About 9,290 households, i.e. 111,500 people currently live within a radius of 5km on either side of RN#2. The rehabilitation of this road will help increase trade but also reduce the costs and duration of travels and daily consumption by 7% for people with less than \$2 a day, by 10% for those having between \$2 and \$4 and by 20% for those with more than \$4.                                                               |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | The indicator will show the traffic trends between the pre-works period and post-works period. The cost and duration of travels and the trade in agricultural products will be affected, as will access to basic social services for the populations living within a radius of less than 5 kilometers on either side of the road.                                                                                                                                                                                                                                                          |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Roads Rehabilitation Project Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Abdoulaye SYLLA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Phone                    | 77.740.66.72             | E-mail                         | <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | AGEROUTE (2012) and Consultant to be selected by MCA-S (2015)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | The indicator will be collected during the collection campaign of representative week in the month at the counting stations selected rationally based on whether there is local traffic or not. The count should distinguish between passenger traffic and cargo traffic and take into account the different silhouettes considered in the CNCE conducted by AGEROUTE. An estimation of potential induced traffic (generated and diverted) may be made by using statistical data (available at ANSD), the analysis of competing routes and the development programs planned for this zone. |                          |                          |                                |                                                                  |

|                                                                                      |                                                                                                                                                                                                                                                                                              |                                                                                     |
|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                      | The count is done on each post, by teams of three to four people with at least a 12th grade level of education, working in shifts throughout the day and using a count form designed and tested beforehand. Team members will be selected after prior training and full-scale tests.         |                                                                                     |
|                                                                                      | $T_{ij}^{ajustés} = a + b \cdot T_{ij}^{observés}$ <p>The calculation formula applied is :<br/>T<sub>ij</sub> being the traffic between the origin i and the destination j and a, b being calibration constants</p>                                                                          |                                                                                     |
| If survey data, verbatim question(s) posed to respondent                             | The indicator will be collected in the field through manual counting with no respondents. The data is collected per vehicle type and by traffic hour.                                                                                                                                        |                                                                                     |
| Detailed description of how data is transmitted from source to MCA                   | Data is transmitted in the form of data bases and analysis report presenting the results for the concerned section                                                                                                                                                                           |                                                                                     |
| Frequency and timing of data acquisition                                             | Data will be obtained twice: at the commencement and at the end of the Compact.                                                                                                                                                                                                              |                                                                                     |
| Names of verification sources                                                        |                                                                                                                                                                                                                                                                                              | Means of verification :                                                             |
| National Road Traffic Counting Campaign and Origin / Destination Survey/ AGEROUTE    |                                                                                                                                                                                                                                                                                              | Data base, analysis report, cross-tabulations                                       |
| Counting and Origin / Destination Survey in 2015                                     |                                                                                                                                                                                                                                                                                              | Data base, analysis report, cross-tabulations                                       |
| Location of Data Storage                                                             |                                                                                                                                                                                                                                                                                              | AGEROUTE and MCA-Senegal                                                            |
| INDICATOR DATA QUALITY                                                               |                                                                                                                                                                                                                                                                                              |                                                                                     |
| Date of Data Quality Review                                                          |                                                                                                                                                                                                                                                                                              | November 2014                                                                       |
| Main findings of data quality review                                                 | Average Score (out of 4)                                                                                                                                                                                                                                                                     | Recommendations                                                                     |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 3,2                                                                                                                                                                                                                                                                                          | Ensure time consistency of estimation methods; Take nocturnal counting into account |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 3,3                                                                                                                                                                                                                                                                                          | N/A                                                                                 |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 4,0                                                                                                                                                                                                                                                                                          | N/A                                                                                 |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 3,2                                                                                                                                                                                                                                                                                          | N/A                                                                                 |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 3,7                                                                                                                                                                                                                                                                                          | N/A                                                                                 |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 3,6                                                                                                                                                                                                                                                                                          | N/A                                                                                 |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 3,3                                                                                                                                                                                                                                                                                          | N/A                                                                                 |
| Overall assessment                                                                   | 3,5                                                                                                                                                                                                                                                                                          |                                                                                     |
| Action taken in response to data quality review                                      | - Collection procedure clarified and harmonized with AGEROUTE and incorporating nocturnal counting                                                                                                                                                                                           |                                                                                     |
| Known data limitations and significance                                              | - The key limitation concerns the clarification of data in the light of the daily, weekly, monthly and seasonal variability of data                                                                                                                                                          |                                                                                     |
| Actions taken to address data limitations                                            | The monthly variability constraint that will be lifted on the assumption that during the month, the weeks and days reoccur in exactly the same way. The seasonal variability constraint will be lifted by integrating an extra-seasonal factor based on fuel consumption (super and diesel). |                                                                                     |

**RRP.1**

| Indicator     | Score |
|---------------|-------|
| Validite      | 3.2   |
| Fiabilite     | 3.3   |
| Opportunité   | 4.0   |
| Precision     | 3.2   |
| Integrité     | 3.7   |
| Adequation    | 3.6   |
| Praticabilité | 3.3   |



**INDICATOR BASELINE INFORMATION**

|                                            |       |                                                                                                    |             |                        |                                                                                                                                              |
|--------------------------------------------|-------|----------------------------------------------------------------------------------------------------|-------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Old Baseline                               | 1029  | Old Baseline Year                                                                                  | 2011 - 2012 | Source of old Baseline | <a href="#">Results Survey on Traffic and Origin– Destination – AGEROUTE, Sept. 2012 : Report CNCE Surveys and O/D Surveys AGEROUTE 2012</a> |
| New Baseline                               | 1 029 | New Baseline Year                                                                                  | 2011 - 2012 | Source of New Baseline | <a href="#">Results Survey on Traffic and Origin– Destination – AGEROUTE, Sept. 2012 : Report CNCE Surveys and O/D Surveys AGEROUTE 2012</a> |
| Justification for Baseline Change (if any) |       | The Count and O/D Survey was finally conducted by AGEROUTE in 2012 at sections of RNRN2 and RNRN6. |             |                        |                                                                                                                                              |

**INDICATOR TARGET CALCULATIONS**

|                                                              |       | Target |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|--------------------------------------------------------------|-------|--------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| YEAR 1                                                       | Old   | New    | Justification for changes to targets or calculations (if any) | The annual survey scheduled by AGEROUTE in 2010-2011 did not take place.                                                                                                                                                                                                                                                                                                                                                 |  |
| Oct 2010 - Sept. 2011                                        | N/A   | N/A    |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| Explanation of assumptions and inputs to target calculations |       |        |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| YEAR 2                                                       | Old   | New    | Justification for changes to targets or calculations (if any) | The survey conducted from 24 to 29 September 2012 by AGEROUTE for this stretch with post N° 621 situated at the exit of Dagana gives an AADT of 1029 vehicles/day. Source: Mid-term report. National Road Count and Origin / Destination Survey Campaign on all the classified road networks of Senegal, January 2013. Refer To <a href="#">Results Survey on Traffic and Origin– Destination – AGEROUTE, Sept. 2012</a> |  |
| Oct 2011 - Sept. 2012                                        | 1 029 | 1 029  |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| Explanation of assumptions and inputs to target calculations |       |        |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| YEAR 3                                                       | Old   | New    | Justification for changes to targets or calculations (if any) | AGEROUTE will now conduct annual surveys but the roads being rehabilitated with MCC funds will not be included                                                                                                                                                                                                                                                                                                           |  |
| Oct 2012 - Sept. 2013                                        | N/A   | N/A    |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| Explanation of assumptions and inputs to target calculations |       |        |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| YEAR 4                                                       | Old   | New    | Justification for changes to targets or calculations (if any) | AGEROUTE will now conduct annual surveys but the roads being rehabilitated with MCC funds will not be included                                                                                                                                                                                                                                                                                                           |  |
| Oct 2013 - Sept. 2014                                        | N/A   | N/A    |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| Explanation of assumptions and inputs to target calculations |       |        |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| YEAR 5                                                       | Old   | New    | Justification for changes to targets or calculations (if any) | The survey in year 5 will be conducted by MCA-S according to the same methodology as the one used by AGEROUTE in 2012. Updated target based on 3.5% growth rate from the measured 2012 value.                                                                                                                                                                                                                            |  |
| Oct 2014 - Sept. 2015                                        | 1 140 | 1 116  |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| Explanation of assumptions and inputs to target calculations |       |        |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| Long Term Target                                             | Old   | New    | Justification for changes to targets or calculations (if any) | Based on ERR estimation, 2015                                                                                                                                                                                                                                                                                                                                                                                            |  |
|                                                              | N/A   | 2029   |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| Explanation of assumptions and inputs to target calculations |       |        |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                          |  |

**COMMENTS****SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required)**

[Rapport à mi-parcours de la CNCE et Enquêtes O/D AGEROUTE, Janvier 2013](#)

[Rapport Technique d'orientation Version Finale de la CNCE de l'AGEROUTE, avril 2012](#)

RN2 Model [to be provided by MCC]

## 3.2. Indicator RRP.2. Average annual daily traffic (AADT) Ziguinchor – Tanaff

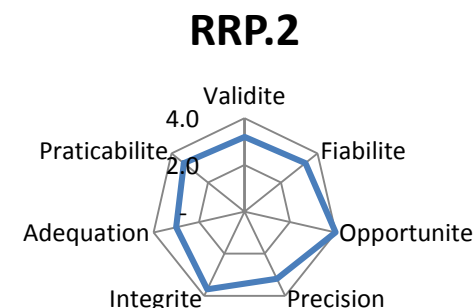
| INDICATOR BASIC DETAILS                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                               | Average annual daily traffic (AADT) Ziguinchor – Tanaff                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                      | (R-10)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Current Indicator Number | RRP.2                    | All Previous Indicator Numbers | RRP.2.                                                           |
| Level                                                        | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Classification           | Level                    | Unit of Measure                | Number                                                           |
| Detailed Definition                                          | The average number and type of vehicles per day, averaged over different times (day and night) and over different seasons to arrive at an annualized daily average                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| Frequency of Reporting                                       | ANNUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                              | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          | NO                       |                                |                                                                  |
|                                                              | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          | NO                       |                                |                                                                  |
|                                                              | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          | NO                       |                                |                                                                  |
|                                                              | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          | NO                       |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| Justification for Including Indicator                        | Lot 1 of RN6 Ziguinchor - Tanaff (116 km) will be rehabilitated by the Compact. The rehabilitation of this section will impact on traffic in this Southern part of Senegal by facilitating travelling to the Regions of Ziguinchor and Sedhiou and promoting trade with the Republics of Guinea and Guinea Bissau. RN#6 is also a strategic road that facilitates the transportation of local agricultural products and other goods and services from Casamance to other Senegalese cities, without having to go through Gambia. RN#6 is the only national land access to and from Casamance. |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                      | The increase in traffic on this section will help reduce the cost and duration of travels and promote the transportation and export of local agricultural products and other goods and services from Casamance to other Senegalese cities, without having to go through Gambia. RN#6 is the only national land access to and from Casamance.                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                       | The rehabilitation of RN6 Ziguinchor - Kounkané (around 256 km) and of the Kolda Bridge will benefit close to 120,000 households or 1,277,000 people in year 20. About 44,000 households, i.e. 474,000 people currently live within a radius of 5km on either side of RN#6. The rehabilitation of this road will help increase trade but also reduce the costs and duration of travels and daily consumption by 75% for people with less than \$2 a day, by 21% for those having between \$2 and \$4 and by 4% for those with more than \$4.                                                  |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?        | The indicator will show the traffic trends between the pre-works period and post-works period. The cost and duration of travels and the trade in agricultural products will be affected, as will access to basic social services for the populations living within a radius of less than 5 kilometers on either side of the road.                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Justification for Disaggregations                            | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                | Roads Rehabilitation Project Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA: | Abdoulaye SYLLA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Phone                    | 77.740.66.72             | E-mail                         | <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data        | AGEROUTE (2012) and Consultant to be selected by MCA-S (2015)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |



|                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                     |  |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
| Detailed description of data collection methodology (including any calculations computed by source) | The indicator will be collected during the collecting campaigns of a representative week at the counting stations chosen rationally because of the presence or otherwise of local traffic. In fact, closer to urban centers, because of the risk involved in counting local domestic traffic, there is a tendency to over-estimate the exchange traffic on this section. Further from the urban centers, because of the dwindling local traffic, the tendency is to under-estimate. Besides, the monthly variability constraint that will be lifted on the assumption that during the month, the weeks and days reoccur in exactly the same way. The seasonal variability constraint will be lifted by integrating an extra-seasonal factor based on fuel consumption (super and diesel).                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     |  |
| If survey data, verbatim question(s) posed to respondent                                            | The indicator will be collected at the end of the field survey by manual counting, and thus with no respondent. The data is collected by type of vehicle and the time of day.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                     |  |
| Detailed description of how data is transmitted from source to MCA                                  | <p>The indicator will be collected during the collection campaign of representative week in the month at the counting stations selected rationally based on whether there is local traffic or not. The count should distinguish between passenger traffic and cargo traffic and take into account the different silhouettes considered in the CNCE conducted by AGEROUTE. An estimation of potential induced traffic (generated and derivative) may be made by using statistical data (available at ANSD), the analysis of competing routes and the development programs planned for this zone.</p> <p>The count is done on each post, by teams of three to four people with at least a 12th grade level of education, working in shifts throughout the day and using a count form designed and tested beforehand. Team members will be selected after prior training and a full-scale tests.</p> <p>The calculation formula applied is : <math>T_{ij}^{ajustés} = a + b \cdot T_{ij}^{observés}</math></p> <p><math>T_{ij}</math> being the traffic between the origin <math>i</math> and the destination <math>j</math> and <math>a</math>, <math>b</math> being calibration constants</p> |                                                                                     |  |
| Frequency and timing of data acquisition                                                            | The data will be classified by year and made available no later than March of that year for the traffic data of the preceding year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                     |  |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Means of verification                                                               |  |
| National Road Traffic Counting Campaign and Origin / Destination Survey/ AGEROUTE                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Data base, analysis report, cross-tabulations                                       |  |
| Counting and Origin / Destination Survey in 2015                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Data base, analysis report, cross-tabulations                                       |  |
| Location of Data Storage                                                                            | AGEROUTE and MCA-Senegal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                     |  |
| INDICATOR DATA QUALITY                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                     |  |
| Date of Data Quality Review                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | June 2013                                                                           |  |
| Main findings of data quality review                                                                | Average Score (out of 4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Recommendations                                                                     |  |
| 1. VALIDITY – Does the data clearly represent the desired results?                                  | 3,2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Ensure time consistency of estimation methods; Take nocturnal counting into account |  |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time?                | 3,3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | N/A                                                                                 |  |
| 3. TIMELINESS- Are the data current and frequently collected?                                       | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | N/A                                                                                 |  |
| 4. PRECISION – Does the data have an acceptable margin of error?                                    | 3,2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | N/A                                                                                 |  |
| 5. INTEGRITY- Is the data free from manipulation?                                                   | 3,7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | N/A                                                                                 |  |

**RRP.2**

| Dimension     | Score |
|---------------|-------|
| Validite      | 4.0   |
| Fiabilité     | 3.0   |
| Opportunité   | 3.0   |
| Précision     | 3.0   |
| Intégrité     | 3.7   |
| Praticabilité | 3.3   |



|                                                                                  |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results? | 3,0                                                                                                                                                                                                                                                                                            | N/A               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| 7. PRACTICABILITY- Is the data current and frequently collected?                 | 3,3                                                                                                                                                                                                                                                                                            | N/A               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| Overall assessment                                                               | 3,4                                                                                                                                                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| Action taken in response to data quality review                                  | - Collection procedure clarified and harmonized with AGEROUTE and incorporating nocturnal counting                                                                                                                                                                                             |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| Known data limitations and significance                                          | - The key limitation concerns the clarification of data in the light of the daily, weekly, monthly and seasonal variability of data                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| Actions taken to address data limitations                                        | - The monthly variability constraint that will be lifted on the assumption that during the month, the weeks and days reoccur in exactly the same way. The seasonal variability constraint will be lifted by integrating an extra-seasonal factor based on fuel consumption (super and diesel). |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| INDICATOR BASELINE INFORMATION                                                   |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| Old Baseline                                                                     | 181                                                                                                                                                                                                                                                                                            | Old Baseline Year | 2011 - 2012                                                   | Source of old Baseline                                                                                                                                                                                                                       | Refer To <a href="#">Results Survey on Traffic and Origin– Destination – AGEROUTE, Sept. 2012</a> :<br>Report CNCE Surveys and O/D Surveys AGEROUTE 2012 |
| New Baseline                                                                     | 571                                                                                                                                                                                                                                                                                            | New Baseline Year | 2007                                                          | Source of New Baseline                                                                                                                                                                                                                       | Due Diligence study (2008)                                                                                                                               |
| Justification for Baseline Change (if any)                                       | MCC recalculated the ERR on the basis of the oriinal Due Diligence study (2008) study due to concerns about the 2012 AGEROUTE study                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| INDICATOR TARGET CALCULATIONS                                                    |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
|                                                                                  | Target                                                                                                                                                                                                                                                                                         |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| YEAR 1                                                                           | Old                                                                                                                                                                                                                                                                                            | New               | Justification for changes to targets or calculations (if any) | The annual survey scheduled by AGEROUTE in 2010-2011 did not take place.                                                                                                                                                                     |                                                                                                                                                          |
| Oct 2010 - Sept. 2011                                                            | N/A                                                                                                                                                                                                                                                                                            | N/A               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| Explanation of assumptions and inputs to target calculations                     |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| YEAR 2                                                                           | Old                                                                                                                                                                                                                                                                                            | New               | Justification for changes to targets or calculations (if any) | Observations on the road placed the 2012 study in doubt, AGEROUTE was unable to provide any details on how the study was done (who was sent, length of counts, methodology, etc.). Reverting to due diligence counts as last reliable count. |                                                                                                                                                          |
| Oct 2011 - Sept. 2012                                                            | 181                                                                                                                                                                                                                                                                                            | 571               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| Explanation of assumptions and inputs to target calculations                     |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| YEAR 3                                                                           | Old                                                                                                                                                                                                                                                                                            | New               | Justification for changes to targets or calculations (if any) | A traffic count survey is not planned for 2013                                                                                                                                                                                               |                                                                                                                                                          |
| Oct 2012 - Sept. 2013                                                            | N/A                                                                                                                                                                                                                                                                                            | N/A               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| Explanation of assumptions and inputs to target calculations                     |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |
| YEAR 4                                                                           | Old                                                                                                                                                                                                                                                                                            | New               | Justification for changes to targets or calculations (if any) | A traffic count survey is not planned for 2014                                                                                                                                                                                               |                                                                                                                                                          |
| Oct 2013 - Sept. 2014                                                            | N/A                                                                                                                                                                                                                                                                                            | N/A               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                          |

|                                                                                                                                                                                                |                                                                                                                                                                                |      |                                                               |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------------------------------------------------|--------------------------|
| Explanation of assumptions and inputs to target calculations                                                                                                                                   |                                                                                                                                                                                |      |                                                               |                          |
| YEAR 5                                                                                                                                                                                         | Old                                                                                                                                                                            | New  | Justification for changes to targets or calculations (if any) | HDM4 modeled predictions |
| Oct 2014 - Sept. 2015                                                                                                                                                                          | 680                                                                                                                                                                            | 963  |                                                               |                          |
| Explanation of assumptions and inputs to target calculations                                                                                                                                   |                                                                                                                                                                                |      |                                                               |                          |
| Long Term Target                                                                                                                                                                               | Old                                                                                                                                                                            | New  | Justification for changes to targets or calculations (if any) | HDM4 modeled predictions |
|                                                                                                                                                                                                | N/A                                                                                                                                                                            | 1501 |                                                               |                          |
| Explanation of assumptions and inputs to target calculations                                                                                                                                   |                                                                                                                                                                                |      |                                                               |                          |
| COMMENTS                                                                                                                                                                                       | MCC and MCA are considering the implications of the low traffic counts and delays in road project for end-of-compact targets, but have not set new targets as of this M&E Plan |      |                                                               |                          |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required)                                                                                                                            |                                                                                                                                                                                |      |                                                               |                          |
| <a href="#">Rapport Technique d'orientation Version Finale de la CNCE de l'AGEROUTE, avril 2012</a><br><a href="#">Rapport à mi-parcours de la CNCE et Enquêtes O/D AGEROUTE, Janvier 2013</a> |                                                                                                                                                                                |      |                                                               |                          |

## 3.3. Indicator RRP.3. Average annual daily traffic (AADT) Tanaff - Kolda

| INDICATOR BASIC DETAILS                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                               | Average annual daily traffic (AADT) Tanaff - Kolda                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                      | (R-10)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Current Indicator Number | RRP.3.                   | All Previous Indicator Numbers | RRP.3.                                                           |
| Level                                                        | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Classification           | Level                    | Unit of Measure                | Number                                                           |
| Detailed Definition                                          | The average number and type of vehicles per day, averaged over different times (day and night) and over different seasons to arrive at an annualized daily average                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Frequency of Reporting                                       | ANNUAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                              | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          | NO                       |                                |                                                                  |
|                                                              | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          | NO                       |                                |                                                                  |
|                                                              | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          | NO                       |                                |                                                                  |
|                                                              | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          | NO                       |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| Justification for Including Indicator                        | Lot 2 of RN6 Tanaff - Kolda (72 km) and the Kolda Bridge will be rehabilitated by the Compact. The rehabilitation of this section will impact on traffic in this Southern part of Senegal by facilitating travelling to the Region of Ziguinchor and Sedhiou and within the City of Kolda. It will also foster trade with the Republics of Guinea and Guinea Bissau. RN#6 is also a strategic road that facilitates the transportation of local agricultural products and other goods and services from Casamance to other cities of Senegal, without having to go through Gambia. RN#6 is the only national land access to and from Casamance. |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                      | The increase in traffic on this section will help reduce the cost and duration of travels and promote the transportation and export of local agricultural products and other goods and services from Casamance to other Senegalese cities, without having to go through Gambia. RN#6 is the only national land access to and from Casamance.                                                                                                                                                                                                                                                                                                    |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                       | The rehabilitation of RN6 Ziguinchor - Kounkané (around 256 km) and of the Kolda Bridge will benefit close to 120,000 households or 1,277,000 people in year 20. About 44,000 households, i.e. 474,000 people currently live within a radius of 5km on either side of RN#2. The rehabilitation of this road will help increase trade but also reduce the costs and duration of travels and daily consumption by 75% for people with less than \$2 a day, by 21% for those having between \$2 and \$4 and by 4% for those with more than \$4.                                                                                                    |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?        | The indicator will show the traffic trends between the pre-works period and post-works period. The cost and duration of travels and the trade in agricultural products will be affected, as will access to basic social services for the populations living within a radius of less than 5 kilometers on either side of the road.                                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| Justification for Disaggregations                            | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                | Direction Roads Rehabilitation Project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA: | Abdoulaye SYLLA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Phone                    | 77.740.66.72             | E-mail                         | <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data        | AGEROUTE (2012) and the Consultant selected by MCA-S (2015)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                          |                                |                                                                  |

| Detailed description of data collection methodology (including any calculations computed by source) | The indicator will be collected during the collection campaign of representative week in the month at the counting stations selected rationally based on whether there is local traffic or not. The count should distinguish between passenger traffic and cargo traffic and take into account the different silhouettes considered in the CNCE conducted by AGEROUTE. An estimation of potential induced traffic (generated and derivative) may be made by using statistical data (available at ANSD), the analysis of competing routes and the development programs planned for this zone. The count is done on each post, by teams of three to four people with at least a 12th grade level of education, working in shifts throughout the day and using a count form designed and tested beforehand. Team members will be selected after prior training and full-scale tests.<br>$T_{ij}^{ajustés} = a + b \cdot T_{ij}^{observés}$<br>The calculation formula applied is :<br>$T_{ij}$ being the traffic between the origin i and the destination j and a, b being calibration constants. |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------|-----|-----------|-----|-------------|-----|-----------|-----|-----------|-----|------------|-----|---------------|-----|
| If survey data, verbatim question(s) posed to respondent                                            | The indicator will be collected at the end of the field survey by manual counting, and thus with no respondent. The data is collected by type of vehicle and the time of day.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted in the form of data base and analysis report showing the findings for the section under study.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Frequency and timing of data acquisition                                                            | The data will be classified by year and made available no later than March of that year for the traffic data of the preceding year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Means of verification :                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| National Road Traffic Counting Campaign and Origin / Destination Survey/ AGEROUTE                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Data base, analysis report, cross-tabulations                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Counting and Origin / Destination Survey in 2015                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Data base, analysis report, cross-tabulations                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Location of Data Storage                                                                            | AGEROUTE and MCA-Senegal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| INDICATOR DATA QUALITY                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Date of Data Quality Review                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | November 2014                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Main findings of data quality review                                                                | Average Score (out of 3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Recommendations                                                                     | <div><h3>RRP.3</h3><table><caption>Data Quality Scores for RRP.3</caption><thead><tr><th>Category</th><th>Score</th></tr></thead><tbody><tr><td>Validite</td><td>3,2</td></tr><tr><td>Fiabilite</td><td>N/A</td></tr><tr><td>Opportunité</td><td>N/A</td></tr><tr><td>Precision</td><td>N/A</td></tr><tr><td>Integrité</td><td>3,3</td></tr><tr><td>Adequation</td><td>3,7</td></tr><tr><td>Praticabilité</td><td>4,0</td></tr></tbody></table></div> | Category | Score | Validite | 3,2 | Fiabilite | N/A | Opportunité | N/A | Precision | N/A | Integrité | 3,3 | Adequation | 3,7 | Praticabilité | 4,0 |
| Category                                                                                            | Score                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Validite                                                                                            | 3,2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Fiabilite                                                                                           | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Opportunité                                                                                         | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Precision                                                                                           | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Integrité                                                                                           | 3,3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Adequation                                                                                          | 3,7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Praticabilité                                                                                       | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 1. VALIDITY – Does the data clearly represent the desired results?                                  | 3,2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Ensure time consistency of estimation methods; Take nocturnal counting into account |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time?                | 3,3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N/A                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 3. TIMELINESS- Are the data current and frequently collected?                                       | 4,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N/A                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 4. PRECISION – Does the data have an acceptable margin of error?                                    | 3,2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N/A                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 5. INTEGRITY- Is the data free from manipulation?                                                   | 3,7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N/A                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?                    | 3,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N/A                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| 7. PRACTICABILITY- Is the data current and frequently collected?                                    | 3,3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N/A                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |
| Overall assessment                                                                                  | 3,2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |       |          |     |           |     |             |     |           |     |           |     |            |     |               |     |

|                                                              |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action taken in response to data quality review              | - Collection procedure clarified and harmonized with AGEROUTE and incorporating nocturnal counting                                                                                                                                                                                             |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| Known data limitations and significance                      | - The key limitation concerns the clarification of data in the light of the daily, weekly, monthly and seasonal variability of data                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| Actions taken to address data limitations                    | - The monthly variability constraint that will be lifted on the assumption that during the month, the weeks and days reoccur in exactly the same way. The seasonal variability constraint will be lifted by integrating an extra-seasonal factor based on fuel consumption (super and diesel). |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| INDICATOR BASELINE INFORMATION                               |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| Old Baseline                                                 | 23                                                                                                                                                                                                                                                                                             | Old Baseline Year | 2011-2012                                                     | Source of old Baseline                                                                                                                                                                                                                       | Refer To <a href="#">Results Survey on Traffic and Origin– Destination – AGEROUTE, Sept. 2012</a> : Report CNCE Surveys and O/D Surveys AGEROUTE 2012 |
| New Baseline                                                 | 301                                                                                                                                                                                                                                                                                            | New Baseline Year | 2007                                                          | Source of New Baseline                                                                                                                                                                                                                       | Due Diligence study (2008)                                                                                                                            |
| Justification for Baseline Change (if any)                   | MCC recalculated the ERR on the basis of the oriinal Due Diligence study (2008) study due to concerns about the 2012 AGEROUTE study                                                                                                                                                            |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| INDICATOR TARGET CALCULATIONS                                |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
|                                                              | Target                                                                                                                                                                                                                                                                                         |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| YEAR 1                                                       | Old                                                                                                                                                                                                                                                                                            | New               | Justification for changes to targets or calculations (if any) |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| Oct 2010 - Sept. 2011                                        | N/A                                                                                                                                                                                                                                                                                            | N/A               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| Explanation of assumptions and inputs to target calculations |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| YEAR 2                                                       | Old                                                                                                                                                                                                                                                                                            | New               | Justification for changes to targets or calculations (if any) | The updated economic modeling does not provide an estimated traffic count for Year 2.                                                                                                                                                        |                                                                                                                                                       |
| Oct 2011 - Sept. 2012                                        | 23                                                                                                                                                                                                                                                                                             | 301               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| Explanation of assumptions and inputs to target calculations |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| YEAR 3                                                       | Old                                                                                                                                                                                                                                                                                            | New               | Justification for changes to targets or calculations (if any) | A traffic count survey is not planned for 2013                                                                                                                                                                                               |                                                                                                                                                       |
| Oct 2012 - Sept. 2013                                        | N/A                                                                                                                                                                                                                                                                                            | N/A               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| Explanation of assumptions and inputs to target calculations |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| YEAR 4                                                       | Old                                                                                                                                                                                                                                                                                            | New               | Justification for changes to targets or calculations (if any) | A traffic count survey is not planned for 2014                                                                                                                                                                                               |                                                                                                                                                       |
| Oct 2013 - Sept. 2014                                        | N/A                                                                                                                                                                                                                                                                                            | N/A               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| Explanation of assumptions and inputs to target calculations |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| YEAR 5                                                       | Old                                                                                                                                                                                                                                                                                            | New               | Justification for changes to targets or calculations (if any) | Observations on the road placed the 2012 study in doubt, AGEROUTE was unable to provide any details on how the study was done (who was sent, length of counts, methodology, etc.). Reverting to due diligence counts as last reliable count. |                                                                                                                                                       |
| Oct 2014 - Sept. 2015                                        | 1490                                                                                                                                                                                                                                                                                           | 562               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| Explanation of assumptions and inputs to target calculations |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| Long Term Target                                             | Old                                                                                                                                                                                                                                                                                            | New               | Justification for changes to targets or calculations (if any) | Based on economic modeling, 2015                                                                                                                                                                                                             |                                                                                                                                                       |
|                                                              | N/A                                                                                                                                                                                                                                                                                            | 849               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |
| Explanation of assumptions and inputs to target calculations |                                                                                                                                                                                                                                                                                                |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                       |

|                                                                                                     |                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| COMMENTS                                                                                            | MCC and MCA are considering the implications of the low traffic counts and delays in road project for end-of-compact targets, but have not set new targets as of this M&E Plan |
| <b>SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required)</b>                          |                                                                                                                                                                                |
| <a href="#">Rapport Technique d'orientation Version Finale de la CNCE de l'AGEROUTE, avril 2012</a> |                                                                                                                                                                                |
| <a href="#">Rapport à mi-parcours de la CNCE et Enquêtes O/D AGEROUTE, Janvier 2013</a>             |                                                                                                                                                                                |

## 3.4. Indicator RRP.4. Average annual daily traffic (AADT) Kolda-Kounkané

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Average annual daily traffic (AADT) Kolda-Kounkané                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                          | Version                        | N° 03 /Sept 2015                                                 |
| Common Indicator Number                                                                             | (R-10)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Current Indicator Number | RRP.4.                   | All Previous Indicator Numbers | RRP.4.                                                           |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Classification           | Level                    | Unit of Measure                | Number                                                           |
| Detailed Definition                                                                                 | The average number and type of vehicles per day, averaged over different times (day and night) and over different seasons to arrive at an annualized daily average                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | Twice (start and end of the compact)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          | Reporting Period Covered | Duration of the Compact        |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          | NO                       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          | NO                       |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | Lot 3 of RN6 Kolda -Kounkané (64 km) will be rehabilitated by the Compact. The rehabilitation of this section will impact on traffic in this Southern part of Senegal by facilitating travelling to the Region of Ziguinchor and Sedhiou and promoting trade with the Republics of Guinea and Guinea Bissau. RN#6 is also a strategic road that facilitates the transportation of local agricultural products and other goods and services from Casamance to other cities of Senegal, without having to go through Gambia. RN#6 is the only national land access to and from Casamance.      |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | The increase in traffic on this section will help reduce the cost and duration of travels and promote the transportation and export of local agricultural products and other goods and services from Casamance to other Senegalese cities, without having to go through Gambia. RN#6 is the only national land access to and from Casamance. The economic rate of return is 12.3% over a period of 20 years.                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | The rehabilitation of RN6 Ziguinchor - Kounkané (around 256 km) and of the Kolda Bridge will benefit close to 120,000 households or 1, 277, 000 people in year 20. About 44,000 households, i.e. 474,000 people currently live within a radius of 5km on either side of RN#6. The rehabilitation of this road will help increase trade but also reduce the costs and duration of travels and daily consumption by 75% for people with less than \$2 a day, by 21% for those having between \$2 and \$4 and by 4% for those with more than \$4.                                               |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | The indicator will show the traffic trends between the pre-works period and post-works period. The cost and duration of travels and the trade in agricultural products will be affected, as will access to basic social services for the populations living within a radius of less than 5 kilometers on either side of the road.                                                                                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Roads Rehabilitation Project Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Abdoulaye SYLLA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Phone                    | 77.740.66.72             | E-mail                         | <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | AGEROUTE (2012) and Consultant to be selected by MCA-S (2015)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | The indicator will be collected during the collection campaign of representative week in the month at the counting stations selected rationally based on whether there is local traffic or not. The count should distinguish between passenger traffic and cargo traffic and take into account the different silhouettes considered in the CNCE conducted by AGEROUTE. An estimation of potential induced traffic (generated and derivative) may be made by using statistical data (available at ANSD), the analysis of competing routes and the development programs planned for this zone. |                          |                          |                                |                                                                  |



|                                                                                      |                                                                                                                                                                                                                                                                                                |                                                                                         |  |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--|
|                                                                                      | The count is done on each post, by teams of three to four people with at least a 12th grade level of education, working in shifts throughout the day and using a count form designed and tested beforehand. Team members will be selected after prior training and full-scale tests.           |                                                                                         |  |
|                                                                                      | The calculation formula applied is : $T_{ij}^{ajustés} = a + b \cdot T_{ij}^{observés}$<br>T <sub>ij</sub> being the traffic between the origin i and the destination j and a, b being calibration constants.                                                                                  |                                                                                         |  |
| If survey data, verbatim question(s) posed to respondent                             | The indicator will be collected at the end of the field survey by manual counting, and thus with no respondent. The data is collected by type of vehicle and the time of day.                                                                                                                  |                                                                                         |  |
| Detailed description of how data is transmitted from source to MCA                   | The data is transmitted in the form of data base and analysis report showing the findings for the section under study.                                                                                                                                                                         |                                                                                         |  |
| Frequency and timing of data acquisition                                             | Two measurements will be made: at the commencement (before the works in 2012) and at the end of the Compact.                                                                                                                                                                                   |                                                                                         |  |
| Names of verification sources                                                        |                                                                                                                                                                                                                                                                                                | Means of verification                                                                   |  |
| National Road Traffic Counting Campaign and Origin / Destination Survey/ AGEROUTE    |                                                                                                                                                                                                                                                                                                | Data base, analysis report, cross-tabulations                                           |  |
| Counting and Origin / Destination Survey in 2015                                     |                                                                                                                                                                                                                                                                                                | Data base, analysis report, cross-tabulations                                           |  |
| Location of Data Storage                                                             | AGEROUTE and MCA-Senegal                                                                                                                                                                                                                                                                       |                                                                                         |  |
| INDICATOR DATA QUALITY                                                               |                                                                                                                                                                                                                                                                                                |                                                                                         |  |
| Date of Data Quality Review                                                          |                                                                                                                                                                                                                                                                                                | November 2014                                                                           |  |
| Main findings of data quality review                                                 | Average Score (out of 4)                                                                                                                                                                                                                                                                       | Recommendations                                                                         |  |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 3,2                                                                                                                                                                                                                                                                                            | Ensure time consistency of estimation methods; Take the nocturnal counting into account |  |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 3,3                                                                                                                                                                                                                                                                                            | N/A                                                                                     |  |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 4,0                                                                                                                                                                                                                                                                                            | N/A                                                                                     |  |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 3,2                                                                                                                                                                                                                                                                                            | N/A                                                                                     |  |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 3,7                                                                                                                                                                                                                                                                                            | N/A                                                                                     |  |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 3,0                                                                                                                                                                                                                                                                                            | N/A                                                                                     |  |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 3,3                                                                                                                                                                                                                                                                                            | N/A                                                                                     |  |
| Overall assessment                                                                   | 3,4                                                                                                                                                                                                                                                                                            |                                                                                         |  |
| Action taken in response to data quality review                                      | - Collection procedure clarified and harmonized with AGEROUTE and incorporating nocturnal counting                                                                                                                                                                                             |                                                                                         |  |
| Known data limitations and significance                                              | - The key limitation concerns the clarification of data in the light of the daily, weekly, monthly and seasonal variability of data                                                                                                                                                            |                                                                                         |  |
| Actions taken to address data limitations                                            | - The monthly variability constraint that will be lifted on the assumption that during the month, the weeks and days reoccur in exactly the same way. The seasonal variability constraint will be lifted by integrating an extra-seasonal factor based on fuel consumption (super and diesel). |                                                                                         |  |
| INDICATOR BASELINE INFORMATION                                                       |                                                                                                                                                                                                                                                                                                |                                                                                         |  |

|                                                                                                                                                                                         |                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Old Baseline                                                                                                                                                                            | 716                                                                                                                                 | Old Baseline Year | 2011-2012                                                     | Source of old Baseline                                                                                                                                                                                                                       | Refer To <a href="#">Résultats d'enquête Trafic et Origin – Destination – AGEROUTE, Sept. 2012</a> : CNCE Surveys report and O/D Surveys AGEROUTE 2012 |
| New Baseline                                                                                                                                                                            | 798                                                                                                                                 | New Baseline Year | 2007                                                          | Source of New Baseline                                                                                                                                                                                                                       | Due Diligence study (2008)                                                                                                                             |
| Justification for Baseline Change (if any)                                                                                                                                              | MCC recalculated the ERR on the basis of the oriinal Due Diligence study (2008) study due to concerns about the 2012 AGEROUTE study |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| INDICATOR TARGET CALCULATIONS                                                                                                                                                           |                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
|                                                                                                                                                                                         | Target                                                                                                                              |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| YEAR 1                                                                                                                                                                                  | Old                                                                                                                                 | New               | Justification for changes to targets or calculations (if any) | The annual survey scheduled by AGEROUTE in 2010-2011 did not take place.                                                                                                                                                                     |                                                                                                                                                        |
| Oct 2010 - Sept. 2011                                                                                                                                                                   | N/A                                                                                                                                 | N/A               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                                            |                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| YEAR 2                                                                                                                                                                                  | Old                                                                                                                                 | New               | Justification for changes to targets or calculations (if any) | Updated economic model does not include an estimated traffic count for Year 2.                                                                                                                                                               |                                                                                                                                                        |
| Oct 2011 - Sept. 2012                                                                                                                                                                   | 716                                                                                                                                 | 798               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                                            |                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| YEAR 3                                                                                                                                                                                  | Old                                                                                                                                 | New               | Justification for changes to targets or calculations (if any) | A traffic count survey is not planned for 2013                                                                                                                                                                                               |                                                                                                                                                        |
| Oct 2012 - Sept. 2013                                                                                                                                                                   | N/A                                                                                                                                 | N/A               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                                            |                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| YEAR 4                                                                                                                                                                                  | Old                                                                                                                                 | New               | Justification for changes to targets or calculations (if any) | A traffic count survey is not planned for 2014                                                                                                                                                                                               |                                                                                                                                                        |
| Oct 2013 - Sept. 2014                                                                                                                                                                   | N/A                                                                                                                                 | N/A               |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                                            |                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| YEAR 5                                                                                                                                                                                  | Old                                                                                                                                 | New               | Justification for changes to targets or calculations (if any) | Observations on the road placed the 2012 study in doubt, AGEROUTE was unable to provide any details on how the study was done (who was sent, length of counts, methodology, etc.). Reverting to due diligence counts as last reliable count. |                                                                                                                                                        |
| Oct 2014 - Sept. 2015                                                                                                                                                                   | 1850                                                                                                                                | 1426              |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                                            |                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| Long Term Target                                                                                                                                                                        | Old                                                                                                                                 | New               | Justification for changes to targets or calculations (if any) | Based on the ERR model                                                                                                                                                                                                                       |                                                                                                                                                        |
|                                                                                                                                                                                         | N/A                                                                                                                                 | 2095              |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                                            |                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| COMMENTS MCC and MCA are considering the implications of the low traffic counts and delays in road project for end-of-compact targets, but have not set new targets as of this M&E Plan |                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required)                                                                                                                     |                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| <a href="#">Rapport Technique d'orientation Version Finale de la CNCE de l'AGEROUTE, avril 2012</a>                                                                                     |                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |
| <a href="#">Rapport à mi-parcours de la CNCE et Enquêtes O/D AGEROUTE, Janvier 2013</a>                                                                                                 |                                                                                                                                     |                   |                                                               |                                                                                                                                                                                                                                              |                                                                                                                                                        |

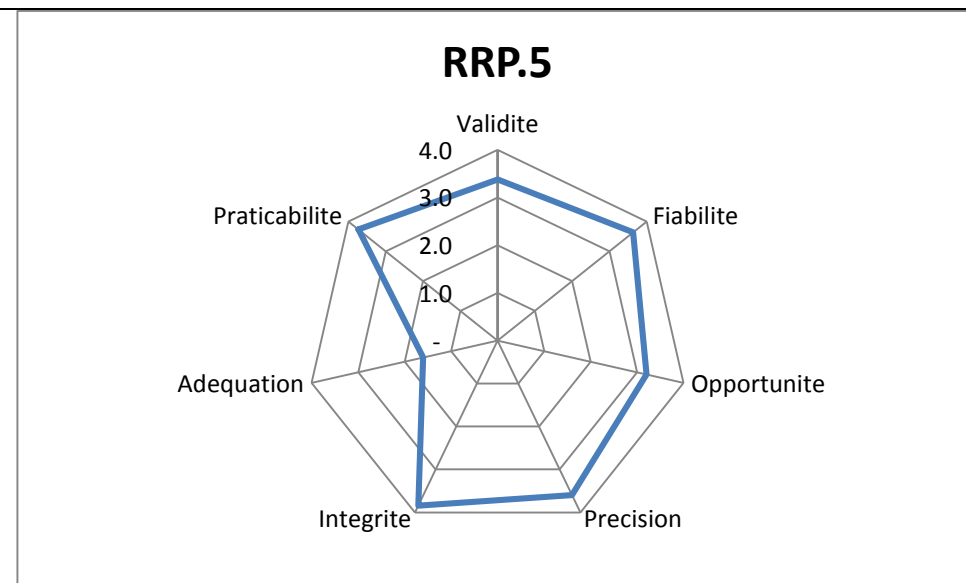
### 3.5. Indicator RRP.5 Rate of change in the duration of travel time on RN#2

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                            |                          |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Rate of change in the duration of travel time on RN#2                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                            |                          | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                | Current Indicator Number                                                                                                                                                                                                                                                                                                                                                   | RRP.5.                   | All Previous Indicator Numbers | RRP.5.                                                                  |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                       | Classification                                                                                                                                                                                                                                                                                                                                                             | Level                    | Unit of Measure*               | Percentage                                                              |
| Detailed Definition                                                                                 | Rate of reduction of travel time on RN#2. Travel time will be estimated in terms of percentage of reduction or increase of the travel duration in view of the differences in routes and the difficulty to express it in time (hours, minutes) |                                                                                                                                                                                                                                                                                                                                                                            |                          |                                |                                                                         |
| Frequency of Reporting                                                                              | TWICE                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                            | Reporting Period Covered | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                            | NO                       |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                            | NO                       |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                            | NO                       |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                            | NO                       |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                            |                          |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                                                                                                                                                                                               | The indicator provides information on the reduction of travel time resulting from the improvement of the quality of rehabilitated roads. Actually, with the degree of degradation of RN2 Richard Toll - Ndoum, travel time increases. However, after the rehabilitation of the NR, the beneficiaries will have their journeys improved because of the reduction in travel. |                          |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                                                                                                               | Not Applicable                                                                                                                                                                                                                                                                                                                                                             |                          |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                                                                                                                                                                                               | Not Applicable                                                                                                                                                                                                                                                                                                                                                             |                          |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                                                                                                               | Not Applicable                                                                                                                                                                                                                                                                                                                                                             |                          |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                                                                                                                                                                                               | Not Applicable                                                                                                                                                                                                                                                                                                                                                             |                          |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                            |                          |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA at MCA                                                |                                                                                                                                                                                                                                               | Monitoring - Evaluation Directorate                                                                                                                                                                                                                                                                                                                                        |                          |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                                                                                                               | Sidiki Diombana DIOP                                                                                                                                                                                                                                                                                                                                                       | Phone                    | 221.77.333.15.88               | E-mail <a href="mailto:sddiop@mcasenegal.org">sddiop@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                                                                                                               | MCA-S in 2012 and 2015                                                                                                                                                                                                                                                                                                                                                     |                          |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                                                                                                               | Calculation of Rate of change of travel time. Done using data from investigation (CNCE AGEROUTE 2012) and final (MCA -S Year 5). Made from the survey of travel time conducted by the MCA- S AGEROUTE on demand in 2012 at the CNCE. in 2015), MCA will conduct the same survey of travel time (see methodology course time / AGEROUTE)                                    |                          |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                                                                                                               | Cf travel time surveys                                                                                                                                                                                                                                                                                                                                                     |                          |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                            |                          |                                |                                                                         |

|                                                                                      |                                                                                                                                                                            |                                                               |                 |                        |                                                                                        |
|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------|------------------------|----------------------------------------------------------------------------------------|
| Frequency and timing of data acquisition                                             |                                                                                                                                                                            | Twice: Years 2 (2012) and 5 (2015)                            |                 |                        |                                                                                        |
| Names of verification sources                                                        |                                                                                                                                                                            | Means of verification                                         |                 |                        |                                                                                        |
| Origin and Destination Survey interpretation Report and travel time survey 2012      |                                                                                                                                                                            | CNCE of AGEROUTE 2012                                         |                 |                        |                                                                                        |
| Origin and Destination Survey interpretation Report and travel time survey in year 5 |                                                                                                                                                                            | MCA-Senegal.                                                  |                 |                        |                                                                                        |
| Location of Data Storage                                                             |                                                                                                                                                                            | MCA-Senegal                                                   |                 |                        |                                                                                        |
| INDICATOR DATA QUALITY                                                               |                                                                                                                                                                            |                                                               |                 |                        |                                                                                        |
| Date of Data Quality Review                                                          |                                                                                                                                                                            | November 2014                                                 |                 |                        |                                                                                        |
| Main findings of data quality review                                                 |                                                                                                                                                                            | Average Score (out of 4)                                      | Recommendations |                        |                                                                                        |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |                                                                                                                                                                            | 3,4                                                           | N/A             |                        |                                                                                        |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |                                                                                                                                                                            | 3,6                                                           | N/A             |                        |                                                                                        |
| 3. TIMELINESS- Are the data current and frequently collected?                        |                                                                                                                                                                            | 3,2                                                           | N/A             |                        |                                                                                        |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |                                                                                                                                                                            | 3,6                                                           | N/A             |                        |                                                                                        |
| 5. INTEGRITY- Is the data free from manipulation?                                    |                                                                                                                                                                            | 3,8                                                           | N/A             |                        |                                                                                        |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |                                                                                                                                                                            | 1,6                                                           | N/A             |                        |                                                                                        |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |                                                                                                                                                                            | 3,7                                                           | N/A             |                        |                                                                                        |
| Overall assessment                                                                   |                                                                                                                                                                            | 3,3                                                           |                 |                        |                                                                                        |
| Action taken in response to data quality review                                      |                                                                                                                                                                            | - Collection procedure clarified and harmonized with AGEROUTE |                 |                        |                                                                                        |
| Known data limitations and significance                                              |                                                                                                                                                                            | -                                                             |                 |                        |                                                                                        |
| Actions taken to address data limitations                                            |                                                                                                                                                                            | Not Applicable                                                |                 |                        |                                                                                        |
| INDICATOR BASELINE INFORMATION                                                       |                                                                                                                                                                            |                                                               |                 |                        |                                                                                        |
| Old Baseline                                                                         | 0%                                                                                                                                                                         | Old Baseline Year                                             | 2011-2012       | Source of old Baseline | Data Bases of Baseline surveys for RRP Project                                         |
| New Baseline                                                                         | 0%                                                                                                                                                                         | New Baseline Year                                             | 2011-2012       | Source of New Baseline | Data Bases and Report on Baseline Surveys of Roads Rehabilitation Project done in 2012 |
| Justification for Baseline Change (if any)                                           | The baseline year is 2011-2012 during which the Origin / Destination study was undertaken by AGEROUTE on the sections whose rehabilitation will be financed with MCC funds |                                                               |                 |                        |                                                                                        |
| INDICATOR TARGET CALCULATIONS                                                        |                                                                                                                                                                            |                                                               |                 |                        |                                                                                        |
|                                                                                      | Target                                                                                                                                                                     |                                                               |                 |                        |                                                                                        |

**RRP.5**

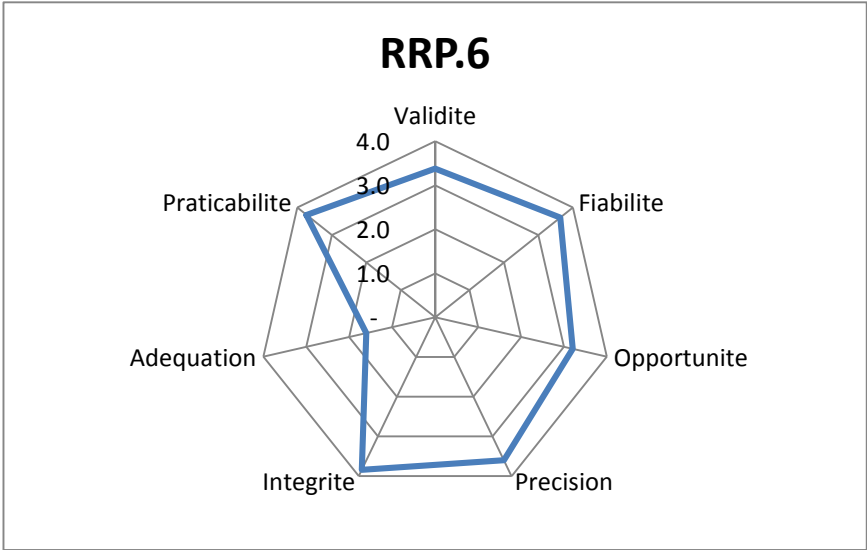
| Indicator     | Score |
|---------------|-------|
| Validite      | 3.0   |
| Fiabilite     | 3.0   |
| Opportunité   | 3.0   |
| Precision     | 3.0   |
| Integrité     | 3.8   |
| Adequation    | 3.6   |
| Praticabilité | 3.2   |

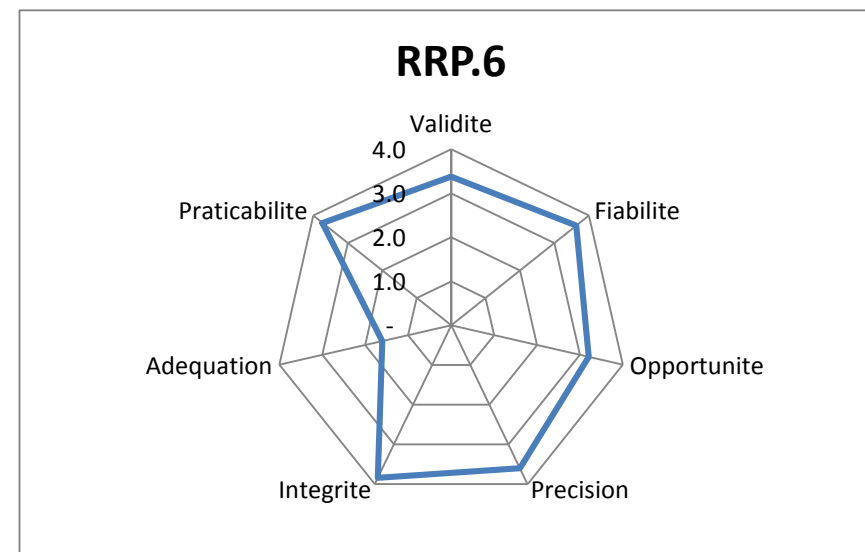


|                                                                     |      |      |                                                               |                                                                                                 |
|---------------------------------------------------------------------|------|------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| YEAR 1                                                              | Old  | New  | Justification for changes to targets or calculations (if any) | The baseline survey of the Roads Rehabilitation Project was conducted in 2012 for RN#2 and RN#6 |
| Oct 2010 - Sept. 2011                                               | N/A  | N/A  |                                                               |                                                                                                 |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |                                                                                                 |
| YEAR 2                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |                                                                                                 |
| Oct 2011 - Sept. 2012                                               | 0%   | 0%   |                                                               |                                                                                                 |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |                                                                                                 |
| YEAR 3                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |                                                                                                 |
| Oct 2012 - Sept. 2013                                               | N/A  | N/A  |                                                               |                                                                                                 |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |                                                                                                 |
| YEAR 4                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |                                                                                                 |
| Oct 2013 - Sept. 2014                                               | N/A  | N/A  |                                                               |                                                                                                 |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |                                                                                                 |
| YEAR 5                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |                                                                                                 |
| Oct 2014 - Sept. 2015                                               | -15% | -15% |                                                               |                                                                                                 |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |                                                                                                 |
| Long Term Target                                                    | Old  | New  | Justification for changes to targets or calculations (if any) |                                                                                                 |
|                                                                     | -15% | -15% |                                                               |                                                                                                 |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |                                                                                                 |
| COMMENTS                                                            |      |      |                                                               |                                                                                                 |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |      |      |                                                               |                                                                                                 |
|                                                                     |      |      |                                                               |                                                                                                 |

## 3.6. Indicator RRP.6. Rate of change in the duration of travel time on the RN#6

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Rate of change in the duration of travel time on the RN#6                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                            |                          | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                 | Current Indicator Number                                                                                                                                                                                                                                                                                                                                                                   | RRP.6.                   | All Previous Indicator Numbers | RRP.6.                                                                  |
| Level                                                                                               | Outcome                                                                                                                                        | Classification                                                                                                                                                                                                                                                                                                                                                                             | Level                    | Unit of Measure*               | Percentage                                                              |
| Detailed Definition                                                                                 | Rate of reduction of travel time on RN#6. Travel time will be estimated in terms of percentage of reduction or increase of the travel duration |                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                |                                                                         |
| Frequency of Reporting                                                                              | TWICE                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                            | Reporting Period Covered | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                            | NO                       |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                            | NO                       |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                            | NO                       |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                            | NO                       |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                                                                                                | The indicator provides information on the reduction of travel time resulting from the improvement of the quality of rehabilitated roads. Actually, with the degree of degradation of RN6 Ziguinchor – Kounkané, travel time increases. However, after the rehabilitation of the RN6, the beneficiaries will have their conditions of movement improved because of the reduction in travel. |                          |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                | Not Applicable                                                                                                                                                                                                                                                                                                                                                                             |                          |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                                                                                                | Not Applicable                                                                                                                                                                                                                                                                                                                                                                             |                          |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                | Not Applicable                                                                                                                                                                                                                                                                                                                                                                             |                          |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                                                                                                | Not Applicable                                                                                                                                                                                                                                                                                                                                                                             |                          |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                | Monitoring - Evaluation Directorate                                                                                                                                                                                                                                                                                                                                                        |                          |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                | Sidiki Diombana DIOP                                                                                                                                                                                                                                                                                                                                                                       | Phone                    | 221.78 637 02 32               | E-mail <a href="mailto:sddiop@mcasenegal.org">sddiop@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                | MCA-S in 2012 and 2015                                                                                                                                                                                                                                                                                                                                                                     |                          |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                | Done using data from investigation (CNCE AGEROUTE 2012) and final (MCA -S Year 5). Made from the survey of travel time conducted by the MCA- S AGEROUTE on demand in 2012 at the CNCE. in 2015), MCA will conduct the same survey of travel time (see methodology course time / AGEROUTE)                                                                                                  |                          |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                |                                                                         |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                | Twice: Years 2 and 5                                                                                                                                                                                                                                                                                                                                                                       |                          |                                |                                                                         |
| Names of verification sources                                                                       |                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                            | Means of verification    |                                |                                                                         |
| Origin and Destination Survey interpretation Report and survey data base                            |                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                            | CNCE of AGEROUTE 2012    |                                |                                                                         |

|                                                                                      |    |                                                                                                                                                                             |                                                               |                        |                                                                                                                                                                  |  |                                                                                     |  |  |
|--------------------------------------------------------------------------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|--|
| Origin and Destination Survey interpretation Report and survey data base in year 5   |    |                                                                                                                                                                             |                                                               |                        | MCA-Senegal.                                                                                                                                                     |  |                                                                                     |  |  |
| Location of Data Storage                                                             |    |                                                                                                                                                                             | AGEROUTE and MCA-Senegal                                      |                        |                                                                                                                                                                  |  |                                                                                     |  |  |
| INDICATOR DATA QUALITY                                                               |    |                                                                                                                                                                             |                                                               |                        |                                                                                                                                                                  |  |                                                                                     |  |  |
| Date of Data Quality Review                                                          |    |                                                                                                                                                                             |                                                               | November 2014          |                                                                                                                                                                  |  |                                                                                     |  |  |
| Main findings of data quality review                                                 |    |                                                                                                                                                                             | Average Score<br>(out of 4)                                   |                        | Recommendations                                                                                                                                                  |  |  |  |  |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |    |                                                                                                                                                                             | 3,4                                                           |                        | None                                                                                                                                                             |  |                                                                                     |  |  |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |    |                                                                                                                                                                             | 3,6                                                           |                        | None                                                                                                                                                             |  |                                                                                     |  |  |
| 3. TIMELINESS- Are the data current and frequently collected?                        |    |                                                                                                                                                                             | 3,2                                                           |                        | None                                                                                                                                                             |  |                                                                                     |  |  |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |    |                                                                                                                                                                             | 3,6                                                           |                        | None                                                                                                                                                             |  |                                                                                     |  |  |
| 5. INTEGRITY- Is the data free from manipulation?                                    |    |                                                                                                                                                                             | 3,8                                                           |                        | None                                                                                                                                                             |  |                                                                                     |  |  |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |    |                                                                                                                                                                             | 1,6                                                           |                        | None                                                                                                                                                             |  |                                                                                     |  |  |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |    |                                                                                                                                                                             | 3,7                                                           |                        | None                                                                                                                                                             |  |                                                                                     |  |  |
| Overall assessment                                                                   |    |                                                                                                                                                                             | 3,3                                                           |                        |                                                                                                                                                                  |  |                                                                                     |  |  |
| Action taken in response to data quality review                                      |    |                                                                                                                                                                             | - Collection procedure clarified and harmonized with AGEROUTE |                        |                                                                                                                                                                  |  |                                                                                     |  |  |
| Known data limitations and significance                                              |    |                                                                                                                                                                             |                                                               |                        |                                                                                                                                                                  |  |                                                                                     |  |  |
| Actions taken to address data limitations                                            |    |                                                                                                                                                                             | Not Applicable                                                |                        |                                                                                                                                                                  |  |                                                                                     |  |  |
| INDICATOR BASELINE INFORMATION                                                       |    |                                                                                                                                                                             |                                                               |                        |                                                                                                                                                                  |  |                                                                                     |  |  |
| Old Baseline                                                                         | 0% | Old Baseline Year                                                                                                                                                           | 2011-2012                                                     | Source of old Baseline | Data Bases and Report of Baseline Surveys of the Roads Rehabilitation Project done in 2012                                                                       |  |                                                                                     |  |  |
| New Baseline                                                                         | 0% | New Baseline Year                                                                                                                                                           | 2011-2012                                                     | Source of New Baseline | Data Bases and Report of Baseline Surveys of the Roads Rehabilitation Project done in 2012<br>Origin and Destination Survey Report and database survey in year 5 |  |                                                                                     |  |  |
| Justification for Baseline Change (if any)                                           |    | The baseline year is 2011-2012 during which the Origin / Destination study was undertaken by AGEROUTE on the sections whose rehabilitation will be financed with MCC funds. |                                                               |                        |                                                                                                                                                                  |  |                                                                                     |  |  |
| INDICATOR TARGET CALCULATIONS                                                        |    |                                                                                                                                                                             |                                                               |                        |                                                                                                                                                                  |  |                                                                                     |  |  |
|                                                                                      |    | Target                                                                                                                                                                      |                                                               |                        |                                                                                                                                                                  |  |                                                                                     |  |  |
| YEAR 1                                                                               |    | Old                                                                                                                                                                         | New                                                           |                        |                                                                                                                                                                  |  |                                                                                     |  |  |

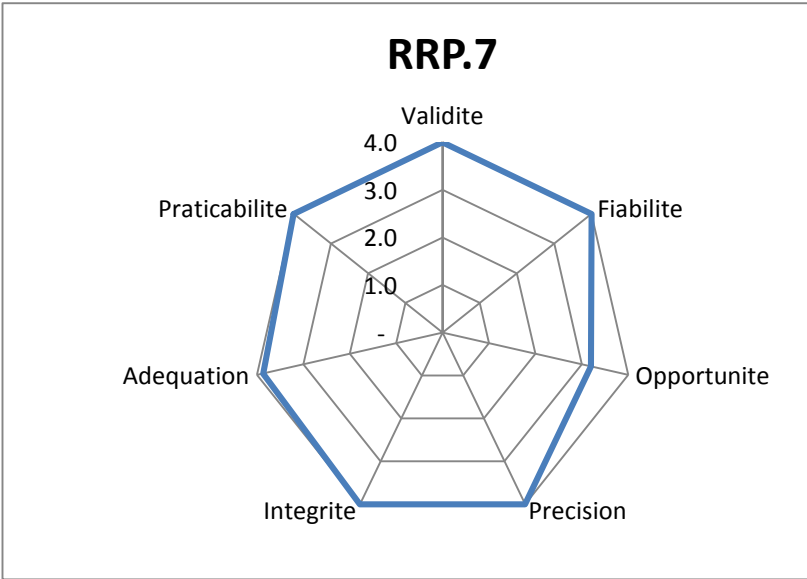


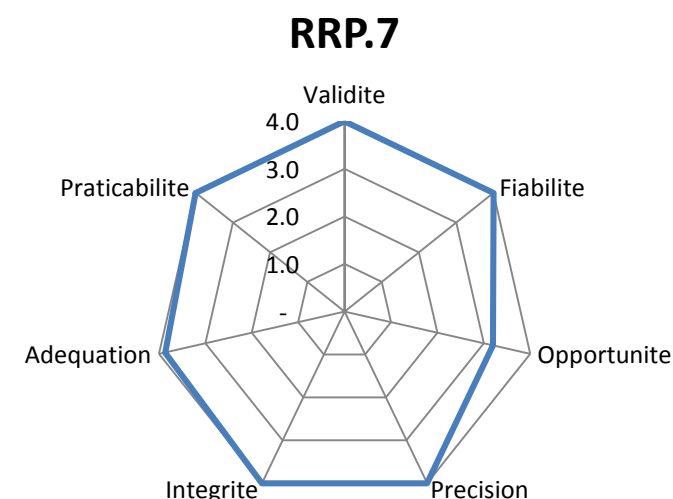
|                                                                     |      |      |                                                               |  |
|---------------------------------------------------------------------|------|------|---------------------------------------------------------------|--|
| Oct 2010 - Sept. 2011                                               | N/A  | N/A  | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| YEAR 2                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2011 - Sept. 2012                                               | 0%   | 0%   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| YEAR 3                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | N/A  | N/A  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| YEAR 4                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | N/A  | N/A  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| YEAR 5                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | -50% | -50% |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| Long Term Target                                                    | Old  | New  | Justification for changes to targets or calculations (if any) |  |
|                                                                     | -50% | -50% |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| COMMENTS                                                            |      |      |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |      |      |                                                               |  |
|                                                                     |      |      |                                                               |  |



## 3.7. Indicator RRP.7.Roughness (RN2)

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Roughness (RN2)                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | (R-9)                                                                                                                                                                   | Current Indicator Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | RRP.7.                   | All Previous Indicator Numbers | RRP.7.                                                                  |
| Level                                                                                               | Outcome                                                                                                                                                                 | Classification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Level                    | Unit of Measure*               | m/km                                                                    |
| Detailed Definition                                                                                 | The measure of the roughness of the road surface, in meters of height per kilometer of distance traveled (this instance of the indicator relates to the RN2 in Senegal) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                                |                                                                         |
| Frequency of Reporting                                                                              | TWICE                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Reporting Period Covered | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | NO                       |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | NO                       |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | NO                       |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | NO                       |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                                                                                                                         | Roughness is an indicator used to measure road quality. It calculates the travel suspension of a car when it covers a kilometer of road at a speed of 80 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                                         | The quality of the road has a significant impact on the use of the road and thus on the traffic. The latter is strongly correlated with profitability.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                                                                                                                         | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                                         | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                                                                                                                         | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                                         | Roads Project Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                                         | Abdoulaye SYLLA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Phone                    | 77.740.66.72                   | E-mail <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                                         | AGEROUTE in 2012 ; Firm and Engineer RN2 in 2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                                         | There is need to distinguish between the Roughness measurements made on the basis of the progression of works and which facilitates the acceptance of the surfacing works and the Roughness measurements to be made during the provisional delivery and which will help characterize the initial state of the pavement. To ensure that these measurements are completely accurate, the calibration of high-performance measurement devices on the control road segments at least 500 long, will be made. Surveys will be conducted on these control sections (or calibration instruments like the Dipstick used) to determine the Roughness before measuring it with the help of the high-performance instrument in order to calibrate them. The use of Roughness values along each of the road segments of RN2 will help define the initial state of the road. This Roughness value will be compared to the one measured by AGEROUTE after the works are completed to determine the improvement due to the rehabilitation project. It will then be compared with the periodic measurements to be done by AGEROUTE to judiciously define the maintenance program: Refer to Roughness calculation principle extract of: Roughness measurement campaign on the classified road network, Rapport de phase, Phase Report AGEROUTE /MSILAB 2012. |                          |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                                         | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                                |                                                                         |

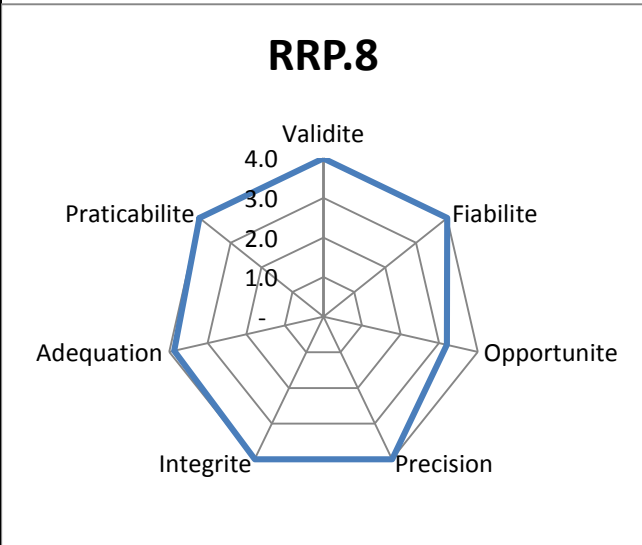
|                                                                                      |                                                               |                                                                                                                                                                        |                                                                                      |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Detailed description of how data is transmitted from source to MCA                   |                                                               | The data will be provided by the enterprise in charge of construction and by the Engineer in charge of works supervision.                                              |                                                                                      |
| Frequency and timing of data acquisition                                             |                                                               | Twice: Before the works (2012) and after the works (2015)                                                                                                              |                                                                                      |
| Names of verification sources                                                        |                                                               | Means of verification                                                                                                                                                  |                                                                                      |
| Report of the Roads Rehabilitation Firm                                              |                                                               | Table of indicators, Roughness measurement data                                                                                                                        |                                                                                      |
| Report of the Engineer in charge of supervision                                      |                                                               | Table of indicators, Roughness measurement data                                                                                                                        |                                                                                      |
| PMU AGEROUTE Report                                                                  |                                                               | Table of indicators, Roughness measurement data                                                                                                                        |                                                                                      |
| Location of Data Storage                                                             |                                                               | AGEROUTE and MCA-Senegal                                                                                                                                               |                                                                                      |
| INDICATOR DATA QUALITY                                                               |                                                               |                                                                                                                                                                        |                                                                                      |
| Date of Data Quality Review                                                          |                                                               | November 2014                                                                                                                                                          |                                                                                      |
| Main findings of data quality review                                                 | Average Score (out of 4)                                      | Recommendations                                                                                                                                                        |  |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 4,0                                                           | Incentives to ensure that construction firms upgrade the roads to expected Roughness standards trigger hopes that this indicator and its data will be of good quality; |                                                                                      |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 4,0                                                           | N/A                                                                                                                                                                    |                                                                                      |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 3,2                                                           | N/A                                                                                                                                                                    |                                                                                      |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 4,0                                                           | N/A                                                                                                                                                                    |                                                                                      |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                                                           | N/A                                                                                                                                                                    |                                                                                      |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 3,9                                                           | N/A                                                                                                                                                                    |                                                                                      |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 4,0                                                           | N/A                                                                                                                                                                    |                                                                                      |
| Overall assessment                                                                   | 3,9                                                           |                                                                                                                                                                        |                                                                                      |
| Action taken in response to data quality review                                      | - Collection procedure clarified and harmonized with AGEROUTE |                                                                                                                                                                        |                                                                                      |
| Known data limitations and significance                                              | Not Applicable                                                |                                                                                                                                                                        |                                                                                      |
| Actions taken to address data limitations                                            | Not Applicable                                                |                                                                                                                                                                        |                                                                                      |
| INDICATOR BASELINE INFORMATION                                                       |                                                               |                                                                                                                                                                        |                                                                                      |



|                                                                                                                                                                          |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Old Baseline                                                                                                                                                             | 3.2    | Old Baseline Year | 2011-2012                                                     | Source of old Baseline                                                                                                                                                                                                                                                                                    | Compact, initial source not available                                                                                                                                  |
| New Baseline                                                                                                                                                             | 3.2    | New Baseline Year | 2011-2012                                                     | Source of New Baseline                                                                                                                                                                                                                                                                                    | MCC Report, October 2012 : <a href="#">TD-37 – ERR Indicators – Roughness data collection, traffic counts and calculation of VOC and TTC with sensitivity analysis</a> |
| Justification for Baseline Change (if any)                                                                                                                               |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| INDICATOR TARGET CALCULATIONS                                                                                                                                            |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
|                                                                                                                                                                          | Target |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| YEAR 1                                                                                                                                                                   | Old    | New               | Justification for changes to targets or calculations (if any) | The Roughness measurement study was not done in 2010-2011                                                                                                                                                                                                                                                 |                                                                                                                                                                        |
| Oct 2010 - Sept. 2011                                                                                                                                                    | N/A    | N/A               |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                             |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| YEAR 2                                                                                                                                                                   | Old    | New               | Justification for changes to targets or calculations (if any) | The MCC Report, October 2012 ( <a href="#">TD-37 – ERR Indicators – Roughness data collection, traffic counts and calculation of VOC and TTC with sensitivity analysis</a> ) gives an Roughness of 9.4 (for 5.6 km or 5%), of 4.0 (for 4 km or 4%) and 2.8 (for 103.6 km or 91%), i.e. an average of 3.2. |                                                                                                                                                                        |
| Oct 2011 - Sept. 2012                                                                                                                                                    | 3,2    | 3.2               |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                             |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| YEAR 3                                                                                                                                                                   | Old    | New               | Justification for changes to targets or calculations (if any) | New measurements of the Roughness will not be taken until the end of the compact                                                                                                                                                                                                                          |                                                                                                                                                                        |
| Oct 2012 - Sept. 2013                                                                                                                                                    | N/A    | N/A               |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                             |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| YEAR 4                                                                                                                                                                   | Old    | New               | Justification for changes to targets or calculations (if any) | New measurements of the Roughness will not be taken until the end of the compact                                                                                                                                                                                                                          |                                                                                                                                                                        |
| Oct 2013 - Sept. 2014                                                                                                                                                    | N/A    | N/A               |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                             |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| YEAR 5                                                                                                                                                                   | Old    | New               | Justification for changes to targets or calculations (if any) |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| Oct 2014 - Sept. 2015                                                                                                                                                    | 2.4    | 2.4               |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                             |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| Long Term Target                                                                                                                                                         | Old    | New               | Justification for changes to targets or calculations (if any) |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
|                                                                                                                                                                          | N/A    | N/A               |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                             |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| COMMENTS                                                                                                                                                                 |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required)                                                                                                      |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| Roughness Calculation : Roughness <a href="#">Principle Calculation, AGEROUTE, 2012</a>                                                                                  |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |
| MCC Report, October 2012 ( <a href="#">TD-37 – ERR Indicators – Roughness data collection, traffic counts and calculation of VOC and TTC with sensitivity analysis</a> ) |        |                   |                                                               |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                        |

### 3.8. Indicator RRP.8.Roughness (RN6)

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Roughness (RN6)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | (R-9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Current Indicator Number | RRP.8.                   | All Previous Indicator Numbers | RRP.8.                                                           |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Classification           | Level                    | Unit of Measure*               | m/km                                                             |
| Detailed Definition                                                                                 | The measure of the roughness of the road surface, in meters of height per kilometer of distance traveled (this instance of the indicator relates to the RN6 in Senegal)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | TWICE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          | NO                       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          | NO                       |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | Roughness is an indicator used to measure road quality. It calculates the travel suspension of a car when it covers a kilometer of road at a speed of 80 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | The quality of the road has a significant impact on the use of the road and thus on the traffic. The latter is strongly correlated with profitability.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Roads Project Directorate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Abdoulaye SYLLA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Phone                    | 77.740.66.72             | E-mail                         | <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | AGEROUTE in 2012 ; Engineer and Firm RN6 in 2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | <p>There is need to distinguish between the Roughness measurements made on the basis of the progression of works and which facilitates the acceptance of the surfacing works and the Roughness measurements to be made during the provisional delivery and which will help characterize the initial state of the pavement. To ensure that these measurements are completely accurate, the calibration of high-performance measurement devices on the control road segments at least 500 long, will be made. Surveys will be conducted on these control sections (or calibration instruments like the Dipstick used) to determine the Roughness before measuring it with the help of the high-performance instrument in order to calibrate them.</p> <p>The use of Roughness values along each of the road segments of RN6 will help define the initial state of the road. This Roughness value will be compared to the one measured after the works are completed to determine the improvement caused by the rehabilitation project. It will then be compared with the periodic measurements to be done by AGEROUTE to judiciously define the maintenance program: Refer to Roughness calculation principle extract of: Roughness measurement campaign on the classified road network, Rapport de phase, Phase Report AGEROUTE /MSILAB 2012.</p> |                          |                          |                                |                                                                  |

|                                                                                      |    |                                                                                                                                           |                                                                                                                                                                        |                        |                                                                                      |
|--------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------|
| If survey data, verbatim question(s) posed to respondent                             |    | Not Applicable                                                                                                                            |                                                                                                                                                                        |                        |                                                                                      |
| Detailed description of how data is transmitted from source to MCA                   |    | The data will be provided by the enterprise in charge of construction and by the engineer in charge of supervision of road rehabilitation |                                                                                                                                                                        |                        |                                                                                      |
| Frequency and timing of data acquisition                                             |    | Twice : Before the works began (2012) and after the works are completed (2015)                                                            |                                                                                                                                                                        |                        |                                                                                      |
| Names of verification sources                                                        |    |                                                                                                                                           | Means of verification                                                                                                                                                  |                        |                                                                                      |
| Report of the Roads Rehabilitation Firm                                              |    |                                                                                                                                           | Table of indicators, Roughness measurement data                                                                                                                        |                        |                                                                                      |
| Report of the Engineer in charge of supervision                                      |    |                                                                                                                                           | Table of indicators, Roughness measurement data                                                                                                                        |                        |                                                                                      |
| PMU AGEROUTE Report                                                                  |    |                                                                                                                                           | Table of indicators, Roughness measurement data                                                                                                                        |                        |                                                                                      |
| Location of Data Storage                                                             |    | AGEROUTE and MCA-Senegal                                                                                                                  |                                                                                                                                                                        |                        |                                                                                      |
| INDICATOR DATA QUALITY                                                               |    |                                                                                                                                           |                                                                                                                                                                        |                        |                                                                                      |
| Date of Data Quality Review                                                          |    | November 2014                                                                                                                             |                                                                                                                                                                        |                        |                                                                                      |
| Main findings of data quality review                                                 |    | Average Score (out of 4)                                                                                                                  | Recommendations                                                                                                                                                        |                        |  |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |    | 4,0                                                                                                                                       | Incentives to ensure that construction firms upgrade the roads to expected Roughness standards trigger hopes that this indicator and its data will be of good quality; |                        |                                                                                      |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |    | 4,0                                                                                                                                       | N/A                                                                                                                                                                    |                        |                                                                                      |
| 3. TIMELINESS- Are the data current and frequently collected?                        |    | 3,2                                                                                                                                       | N/A                                                                                                                                                                    |                        |                                                                                      |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |    | 4,0                                                                                                                                       | N/A                                                                                                                                                                    |                        |                                                                                      |
| 5. INTEGRITY- Is the data free from manipulation?                                    |    | 4,0                                                                                                                                       | N/A                                                                                                                                                                    |                        |                                                                                      |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |    | 3,9                                                                                                                                       | N/A                                                                                                                                                                    |                        |                                                                                      |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |    | 4,0                                                                                                                                       | N/A                                                                                                                                                                    |                        |                                                                                      |
| Overall assessment                                                                   |    | 3,9                                                                                                                                       |                                                                                                                                                                        |                        |                                                                                      |
| Action taken in response to data quality review                                      |    | - Collection procedure clarified and harmonized with AGEROUTE                                                                             |                                                                                                                                                                        |                        |                                                                                      |
| Known data limitations and significance                                              |    | Not Applicable                                                                                                                            |                                                                                                                                                                        |                        |                                                                                      |
| Actions taken to address data limitations                                            |    | Not Applicable                                                                                                                            |                                                                                                                                                                        |                        |                                                                                      |
| INDICATOR BASELINE INFORMATION                                                       |    |                                                                                                                                           |                                                                                                                                                                        |                        |                                                                                      |
| Old Baseline                                                                         | 13 | Old Baseline Year                                                                                                                         | 2011-2012                                                                                                                                                              | Source of old Baseline | Compact, initial source not available                                                |

|                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                           |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| New Baseline                                                                                                                                                             | 13                                                                                                                                                                                                                                                                                                                                        | New Baseline Year | 2011-2012                                                     | Source of New Baseline                                                                                                                                                                                                                                            | MCC Report, October 2012 : <a href="#">TD-37 – ERR Indicators – Roughness data collection, traffic counts and calculation of VOC and TTC with sensitivity analysis</a> |
| Justification for Baseline Change (if any)                                                                                                                               |                                                                                                                                                                                                                                                                                                                                           |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| INDICATOR TARGET CALCULATIONS                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                           |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
|                                                                                                                                                                          | Target                                                                                                                                                                                                                                                                                                                                    |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| YEAR 1                                                                                                                                                                   | Old                                                                                                                                                                                                                                                                                                                                       | New               | Justification for changes to targets or calculations (if any) | The Roughness measurement study was not done in 2010-2011                                                                                                                                                                                                         |                                                                                                                                                                        |
| Oct 2010 - Sept. 2011                                                                                                                                                    | N/A                                                                                                                                                                                                                                                                                                                                       | N/A               |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                             |                                                                                                                                                                                                                                                                                                                                           |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| YEAR 2                                                                                                                                                                   | Old                                                                                                                                                                                                                                                                                                                                       | New               | Justification for changes to targets or calculations (if any) | MCC Report, October 2012 ( <a href="#">TD-37 – ERR Indicators – Roughness data collection, traffic counts and calculation of VOC and TTC with sensitivity analysis</a> ) gives an IRI of 5 for Zone I, 13 for Zone II and 21 for Zone III, i.e. an average of 13. |                                                                                                                                                                        |
| Oct 2011 - Sept. 2012                                                                                                                                                    | 13                                                                                                                                                                                                                                                                                                                                        | 13                |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                             |                                                                                                                                                                                                                                                                                                                                           |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| YEAR 3                                                                                                                                                                   | Old                                                                                                                                                                                                                                                                                                                                       | New               | Justification for changes to targets or calculations (if any) | The Roughness will not be calculated in 2013                                                                                                                                                                                                                      |                                                                                                                                                                        |
| Oct 2012 - Sept. 2013                                                                                                                                                    | N/A                                                                                                                                                                                                                                                                                                                                       | N/A               |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                             |                                                                                                                                                                                                                                                                                                                                           |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| YEAR 4                                                                                                                                                                   | Old                                                                                                                                                                                                                                                                                                                                       | New               | Justification for changes to targets or calculations (if any) | The Roughness will not be calculated in 2014                                                                                                                                                                                                                      |                                                                                                                                                                        |
| Oct 2013 - Sept. 2014                                                                                                                                                    | N/A                                                                                                                                                                                                                                                                                                                                       | N/A               |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                             |                                                                                                                                                                                                                                                                                                                                           |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| YEAR 5                                                                                                                                                                   | Old                                                                                                                                                                                                                                                                                                                                       | New               | Justification for changes to targets or calculations (if any) | The Compact estimates a final Roughness for the RN6 to be 2.5, not 2.4                                                                                                                                                                                            |                                                                                                                                                                        |
| Oct 2014 - Sept. 2015                                                                                                                                                    | 2,5                                                                                                                                                                                                                                                                                                                                       | 2.5               |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                             |                                                                                                                                                                                                                                                                                                                                           |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| Long Term Target                                                                                                                                                         | Old                                                                                                                                                                                                                                                                                                                                       | New               | Justification for changes to targets or calculations (if any) |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
|                                                                                                                                                                          | N/A                                                                                                                                                                                                                                                                                                                                       | N/A               |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| Explanation of assumptions and inputs to target calculations                                                                                                             |                                                                                                                                                                                                                                                                                                                                           |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| COMMENTS                                                                                                                                                                 | Zone I : Lot 1: 20,9 km (17,2% of Lot 1), Lot 2: 41,4 km (57,1% of Lot 2), Lot 3: 18,3 km (19,7% of Lot 3)<br>Zone II : Lot 1: 56,6 km (48,6% of Lot 1), Lot 2: 31,0 km (42,8% of Lot 2) et Lot 3: 72,2 km (77,8% of Lot 3)<br>Zone III : Lot 1: 39,9 km (34,2% of Lot 1), Lot 2: 0,1 km (0.1% of Lot 2) et Lot 3: 2,3 km (2,5% of Lot 3) |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required)                                                                                                      |                                                                                                                                                                                                                                                                                                                                           |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| IRI Calculation Method : Roughness <a href="#">calculation principle, AGEROUTE, 2012</a>                                                                                 |                                                                                                                                                                                                                                                                                                                                           |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |
| MCC Report, October 2012 ( <a href="#">TD-37 – ERR Indicators – Roughness data collection, traffic counts and calculation of VOC and TTC with sensitivity analysis</a> ) |                                                                                                                                                                                                                                                                                                                                           |                   |                                                               |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |

## 3.9. Indicator RRP.9. Road Traffic Fatalities

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Road Traffic Fatalities                                                                                                                                                                                                                                                                                     |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | (R-11)                                                                                                                                                                                                                                                                                                      | Current Indicator Number | RRP.9.                   | All Previous Indicator Numbers | New Indicator                                                    |
| Level                                                                                               | Outcome                                                                                                                                                                                                                                                                                                     | Classification           | Level                    | Unit of Measure*               | Number                                                           |
| Detailed Definition                                                                                 | The number of road traffic fatalities per year on roads constructed, rehabilitated or improved with MCC funding                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | ANNUAL                                                                                                                                                                                                                                                                                                      |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                          |                          | YES                      |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                             |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                          |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                        |                          | YES (RN2/RN6)            |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on number of people who lost their lives in accidents that occurred on RN2 and RN6 sections to be rehabilitated by the Compact. This is a new indicator proposed by the Guidance on Common Indicator, May 2012.                                                          |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | The data will be disaggregated locality (RN2 and RN6).                                                                                                                                                                                                                                                      |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Monitoring - Evaluation Directorate                                                                                                                                                                                                                                                                         |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Sidiki Diombana DIOP                                                                                                                                                                                                                                                                                        | Phone                    | 221.78. 637. 02 . 32     | E-mail                         | <a href="mailto:sddiop@mcasenegal.org">sddiop@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Gendarmerie Brigade and Police Station of Saint Louis                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Using data on accidents that occurred on RN#2 (Richard Toll-Ndioum) and RN6 (Ziguinchor – Kounkane) provided by the Gendarmerie Brigade and the Police Station of Saint Louis, Ziguinchor, Sedhiou and Kolda summarized by the Road Transport Directorate.                                                  |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by official correspondence officielle from the Brigade de Gendarmerie, the Commissariat de Police, and also from the Direction des Transports Terrestres at MCA-S. Additionally, a mission from the M&E Directorate will collect the raw data necessary to calculate the indicator. |                          |                          |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| Names of verification sources                                                                       | Means of verification                                                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
| Letter of the RTD, the Gendarmerie and Police Station of Saint Louis                                | Letter and statistics of the RTD, the Gendarmerie Brigade and Police Station of Saint Louis, Ziguinchor and Kolda.                                                                                                                                                                                          |                          |                          |                                |                                                                  |
| MCA-S Report                                                                                        | Table of indicators, monitoring data base                                                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |



|                                                                                      |                |                   |                          |                                                               |                                                                                                               |
|--------------------------------------------------------------------------------------|----------------|-------------------|--------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Location of Data Storage                                                             |                |                   |                          | Land Transport Directorate and MCA-Senegal                    |                                                                                                               |
| INDICATOR DATA QUALITY                                                               |                |                   |                          |                                                               |                                                                                                               |
| Date of Data Quality Review                                                          |                |                   |                          | N/A                                                           |                                                                                                               |
| Main findings of data quality review                                                 |                |                   | Average Score (out of 4) | Recommendations                                               | <div><p><b>RRP.9</b></p></div>                                                                                |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |                |                   | 2,8                      | N/A                                                           |                                                                                                               |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |                |                   | 2,7                      | N/A                                                           |                                                                                                               |
| 3. TIMELINESS- Are the data current and frequently collected?                        |                |                   | 2,4                      | N/A                                                           |                                                                                                               |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |                |                   | 1,0                      | N/A                                                           |                                                                                                               |
| 5. INTEGRITY- Is the data free from manipulation?                                    |                |                   | 3,0                      | N/A                                                           |                                                                                                               |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |                |                   | 2,4                      | N/A                                                           |                                                                                                               |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |                |                   | 2,7                      | N/A                                                           |                                                                                                               |
| Overall assessment                                                                   |                |                   | 2,4                      |                                                               |                                                                                                               |
| Action taken in response to data quality review                                      |                |                   | Not Applicable           |                                                               |                                                                                                               |
| Known data limitations and significance                                              |                |                   | Not Applicable           |                                                               |                                                                                                               |
| Actions taken to address data limitations                                            |                |                   | Not Applicable           |                                                               |                                                                                                               |
| INDICATOR BASELINE INFORMATION                                                       |                |                   |                          |                                                               |                                                                                                               |
| Old Baseline                                                                         | Not Applicable | Old Baseline Year | 2012-2013                | Source of old Baseline                                        | Road Transport Directorate's Data Base on accidents                                                           |
| New Baseline                                                                         | 43             | New Baseline Year | 2013-2014                | Source of New Baseline                                        | Letter and statistics of DTT, the Gendarmerie Brigade and the St. Louis Police Station , Ziguinchor and Kolda |
| Justification for Baseline Change (if any)                                           |                | New Indicator     |                          |                                                               |                                                                                                               |
| INDICATOR TARGET CALCULATIONS                                                        |                |                   |                          |                                                               |                                                                                                               |
|                                                                                      |                | Target            |                          |                                                               |                                                                                                               |
| YEAR 1                                                                               |                | Old               | New                      | Justification for changes to targets or calculations (if any) |                                                                                                               |
| Oct 2010 - Sept. 2011                                                                |                | N/A               | N/A                      |                                                               |                                                                                                               |
| Explanation of assumptions and inputs to target calculations                         |                |                   |                          |                                                               |                                                                                                               |
| YEAR 2                                                                               |                | Old               | New                      | Justification for changes to targets or calculations (if any) |                                                                                                               |
| Oct 2011 - Sept. 2012                                                                |                | N/A               | N/A                      |                                                               |                                                                                                               |
| Explanation of assumptions and inputs to target calculations                         |                |                   |                          |                                                               |                                                                                                               |
| YEAR 3                                                                               |                | Old               | New                      | Justification for changes to targets or calculations (if any) |                                                                                                               |
| Oct 2012 - Sept. 2013                                                                |                | N/A               | N/A                      |                                                               |                                                                                                               |
| Explanation of assumptions and inputs to target calculations                         |                |                   |                          |                                                               |                                                                                                               |
| YEAR 4                                                                               |                | Old               | New                      | Justification for changes to targets or calculations (if any) |                                                                                                               |
| Oct 2013 - Sept. 2014                                                                |                | N/A               | N/A                      |                                                               |                                                                                                               |
|                                                                                      |                | New Indicator     |                          |                                                               |                                                                                                               |



|                                                                     |     |     |                                                               |               |
|---------------------------------------------------------------------|-----|-----|---------------------------------------------------------------|---------------|
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |               |
| YEAR 5                                                              | Old | New | Justification for changes to targets or calculations (if any) | New Indicator |
| Oct 2014 - Sept. 2015                                               | N/A | N/A |                                                               |               |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |               |
| Long Term Target                                                    | Old | New | Justification for changes to targets or calculations (if any) |               |
|                                                                     | N/A | N/A |                                                               |               |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |               |
| COMMENTS                                                            |     |     |                                                               |               |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |     |     |                                                               |               |
|                                                                     |     |     |                                                               |               |

## 3.10. Indicator RRP.10. Kilometers of rehabilitated roads on RN#2

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                            |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|----------------------------------------------------------------------------|
| Indicator Name                                                                                      | Kilometers of rehabilitated roads on RN#2                                                                                                                                                                                                                     |                          |                          | Version                        | N° 03 / Sept 2015                                                          |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                                | Current Indicator Number | RRP.10                   | All Previous Indicator Numbers | RRP.9.                                                                     |
| Level                                                                                               | Output                                                                                                                                                                                                                                                        | Classification           | Cumulative               | Unit of Measure*               | Kilometers                                                                 |
| Detailed Definition                                                                                 | Total number of km of rehabilitated roads which have been provisionally accepted.                                                                                                                                                                             |                          |                          |                                |                                                                            |
| Frequency of Reporting                                                                              | ONLY ONCE                                                                                                                                                                                                                                                     |                          | Reporting Period Covered | Compact Duration               |                                                                            |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                            | NO                       |                          |                                |                                                                            |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                               | NO                       |                          |                                |                                                                            |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                            | NO                       |                          |                                |                                                                            |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                          | NO                       |                          |                                |                                                                            |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                            |
| Justification for Including Indicator                                                               | The indicator provides information on the length in km of roads rehabilitated with Compact funds and which have been provisionally accepted. It makes it possible to note whether the result concerning the rehabilitation of RNRN2 has been achieved or not. |                          |                          |                                |                                                                            |
| How does the indicator link to the ERR?                                                             | The ERR is calculated on the basis of the assumption that the objective of 120 km of RNRN2 will be achieved. The indicator will help confirm whether this assumption has been met.                                                                            |                          |                          |                                |                                                                            |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                |                          |                          |                                |                                                                            |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                |                          |                          |                                |                                                                            |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                                                                                                |                          |                          |                                |                                                                            |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                            |
| Entity Responsible for Collecting Data at MCA                                                       | Roads Project Directorate                                                                                                                                                                                                                                     |                          |                          |                                |                                                                            |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Abdoulaye SYLLA                                                                                                                                                                                                                                               | Phone                    | 77.740.66.72             |                                | E-mail<br><a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Office of the Engineer in charge of supervising the works on RN6                                                                                                                                                                                              |                          |                          |                                |                                                                            |
| Detailed description of data collection methodology (including any calculations computed by source) | Use data provided by PMU Roads, the consultant in charge of supervision and the minutes of provisional and final acceptance                                                                                                                                   |                          |                          |                                |                                                                            |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                                |                          |                          |                                |                                                                            |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the Roads Project Directorate with the minutes of acceptance of the concerned roads attached in annex.                                                                                                                             |                          |                          |                                |                                                                            |
| Frequency and timing of data acquisition                                                            | Only once: at the end of the works                                                                                                                                                                                                                            |                          |                          |                                |                                                                            |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                                               |                          | Means of verification    |                                |                                                                            |
| AGEROUTE Annual Report                                                                              |                                                                                                                                                                                                                                                               |                          | Table of indicators      |                                |                                                                            |

|                                                                                      |        |                                            |                                                                                                                                                                                                |                        |                                        |
|--------------------------------------------------------------------------------------|--------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------|
| Report of the Engineer in charge of supervision                                      |        |                                            |                                                                                                                                                                                                | Minutes of acceptance  |                                        |
| Location of Data Storage                                                             |        | AGEROUTE and MCA-Senegal (PRR Directorate) |                                                                                                                                                                                                |                        |                                        |
| <b>INDICATOR DATA QUALITY</b>                                                        |        |                                            |                                                                                                                                                                                                |                        |                                        |
| Date of Data Quality Review                                                          |        |                                            | November 2014                                                                                                                                                                                  |                        |                                        |
| Main findings of data quality review                                                 |        | Average Score (out of 4)                   | Recommendations                                                                                                                                                                                |                        |                                        |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        | 4,0                                        | Use other intermediate for road works. Ex: Percentage of upgrades complete (%), Percentage of civil works completed (%) at (i) sub-base; (ii) base; (iii) surfacing; and (iv) drainage stages. |                        |                                        |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        | 3,6                                        | N/A                                                                                                                                                                                            |                        |                                        |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        | 4,0                                        | N/A                                                                                                                                                                                            |                        |                                        |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        | 4,0                                        | N/A                                                                                                                                                                                            |                        |                                        |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        | 4,0                                        | N/A                                                                                                                                                                                            |                        |                                        |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        | 4,0                                        | N/A                                                                                                                                                                                            |                        |                                        |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        | 4,0                                        | N/A                                                                                                                                                                                            |                        |                                        |
| Overall assessment                                                                   |        | 3,9                                        |                                                                                                                                                                                                |                        |                                        |
| Action taken in response to data quality review                                      |        | Not Applicable                             |                                                                                                                                                                                                |                        |                                        |
| Known data limitations and significance                                              |        | Not Applicable                             |                                                                                                                                                                                                |                        |                                        |
| Actions taken to address data limitations                                            |        | Not Applicable                             |                                                                                                                                                                                                |                        |                                        |
| <b>INDICATOR BASELINE INFORMATION</b>                                                |        |                                            |                                                                                                                                                                                                |                        |                                        |
| Old Baseline                                                                         | 0      | Old Baseline Year                          | 2010-2011                                                                                                                                                                                      | Source of old Baseline | Roads Rehabilitation Project Work Plan |
| New Baseline                                                                         | 0      | New Baseline Year                          | 2010-2011                                                                                                                                                                                      | Source of New Baseline | Roads Rehabilitation Project Work Plan |
| Justification for Baseline Change (if any)                                           |        |                                            |                                                                                                                                                                                                |                        |                                        |
| <b>INDICATOR TARGET CALCULATIONS</b>                                                 |        |                                            |                                                                                                                                                                                                |                        |                                        |
|                                                                                      | Target |                                            |                                                                                                                                                                                                |                        |                                        |
| YEAR 1                                                                               | Old    | New                                        | Justification for changes to targets or calculations (if any)                                                                                                                                  |                        |                                        |
| Oct 2010 - Sept. 2011                                                                | 0      | 0                                          |                                                                                                                                                                                                |                        |                                        |

|                                                                     |     |     |                                                               |  |
|---------------------------------------------------------------------|-----|-----|---------------------------------------------------------------|--|
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 2                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2011 - Sept. 2012                                               | 0   | 0   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 3                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 0   | 0   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 4                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 0   | 0   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 5                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 120 | 120 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| Long Term Target                                                    | Old | New | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| COMMENTS                                                            |     |     |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |     |     |                                                               |  |
|                                                                     |     |     |                                                               |  |

## 3.11. Indicator RRP.11. Kilometers of rehabilitated roads on RN#6

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Kilometers of rehabilitated roads on RN#6                                                                                                                                                                                                                   |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | Not Applicable                                                                                                                                                                                                                                              | Current Indicator Number | RRP.11                   | All Previous Indicator Numbers | RRP.10.                                                          |
| Level                                                                                               | Output                                                                                                                                                                                                                                                      | Classification           | Cumulative               | Unit of Measure*               | Kilometers                                                       |
| Detailed Definition                                                                                 | Total number of km of rehabilitated roads which have been provisionally accepted.                                                                                                                                                                           |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | ONLY ONCE                                                                                                                                                                                                                                                   |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                          |                          | NO                       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                             |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                          |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                        |                          | NO                       |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the length in km of roads rehabilitated with Compact funds and which have been provisionally accepted. It makes it possible to note whether the result concerning the rehabilitation of RN2 has been achieved or not. |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | The ERR is calculated on the basis of the assumption that the objective of 256 km of RN6 will be achieved. The indicator will help confirm whether this assumption has been met.                                                                            |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Roads Project Directorate                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Abdoulaye SYLLA                                                                                                                                                                                                                                             | Phone                    | 77.740.66.72             | E-mail                         | <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Office of the Engineer in charge of supervising the works on RN6                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use data provided by PMU Roads, the consultant in charge of supervision and the minutes of provisional and final acceptance                                                                                                                                 |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the Roads Project Directorate with the minutes of acceptance of the concerned roads attached in annex.                                                                                                                           |                          |                          |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | Only once: at the end of the works                                                                                                                                                                                                                          |                          |                          |                                |                                                                  |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                                             |                          |                          | Means of verification          |                                                                  |
| AGEROUTE Annual Report                                                                              |                                                                                                                                                                                                                                                             |                          |                          | Table of indicators            |                                                                  |
| Report of the Engineer in charge of supervision                                                     |                                                                                                                                                                                                                                                             |                          |                          | Minutes of acceptance          |                                                                  |
| Location of Data Storage                                                                            | AGEROUTE and MCA-Senegal (PRR Directorate)                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| INDICATOR DATA QUALITY                                                                              |                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Date of Data Quality Review                                                                         | November 2014                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |

|                                                                                      |        |                          |                                                                                                                                                                                                |                        |                                        |
|--------------------------------------------------------------------------------------|--------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------|
| Main findings of data quality review                                                 |        | Average Score (out of 4) | Recommendations                                                                                                                                                                                |                        |                                        |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        | 4,0                      | Use other intermediate for road works. Ex: Percentage of upgrades complete (%), Percentage of civil works completed (%) at (i) sub-base; (ii) base; (iii) surfacing; and (iv) drainage stages. |                        |                                        |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        | 3,6                      | N/A                                                                                                                                                                                            |                        |                                        |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        | 4,0                      | N/A                                                                                                                                                                                            |                        |                                        |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        | 4,0                      | N/A                                                                                                                                                                                            |                        |                                        |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        | 4,0                      | N/A                                                                                                                                                                                            |                        |                                        |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        | 4,0                      | N/A                                                                                                                                                                                            |                        |                                        |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        | 4,0                      | N/A                                                                                                                                                                                            |                        |                                        |
| Overall assessment                                                                   |        | 3,9                      |                                                                                                                                                                                                |                        |                                        |
| Action taken in response to data quality review                                      |        | Not Applicable           |                                                                                                                                                                                                |                        |                                        |
| Known data limitations and significance                                              |        | Not Applicable           |                                                                                                                                                                                                |                        |                                        |
| Actions taken to address data limitations                                            |        | Not Applicable           |                                                                                                                                                                                                |                        |                                        |
| INDICATOR BASELINE INFORMATION                                                       |        |                          |                                                                                                                                                                                                |                        |                                        |
| Old Baseline                                                                         | 0      | Old Baseline Year        | 2010-2011                                                                                                                                                                                      | Source of old Baseline | Roads Rehabilitation Project Work Plan |
| New Baseline                                                                         | 0      | New Baseline Year        | 2010-2011                                                                                                                                                                                      | Source of New Baseline | Roads Rehabilitation Project Work Plan |
| Justification for Baseline Change (if any)                                           |        |                          |                                                                                                                                                                                                |                        |                                        |
| INDICATOR TARGET CALCULATIONS                                                        |        |                          |                                                                                                                                                                                                |                        |                                        |
|                                                                                      | Target |                          |                                                                                                                                                                                                |                        |                                        |
| YEAR 1                                                                               | Old    | New                      | Justification for changes to targets or calculations (if any)                                                                                                                                  |                        |                                        |
| Oct 2010 - Sept. 2011                                                                | 0      | 0                        |                                                                                                                                                                                                |                        |                                        |
| Explanation of assumptions and inputs to target calculations                         |        |                          |                                                                                                                                                                                                |                        |                                        |
| YEAR 2                                                                               | Old    | New                      | Justification for changes to targets or calculations (if any)                                                                                                                                  |                        |                                        |
| Oct 2011 - Sept. 2012                                                                | 0      | 0                        |                                                                                                                                                                                                |                        |                                        |
| Explanation of assumptions and inputs to target calculations                         |        |                          |                                                                                                                                                                                                |                        |                                        |
| YEAR 3                                                                               | Old    | New                      |                                                                                                                                                                                                |                        |                                        |

**RRP.11**

| Indicator     | Score |
|---------------|-------|
| Validite      | 4.0   |
| Fiabilite     | 3.0   |
| Opportunité   | 3.0   |
| Precision     | 3.0   |
| Intégrité     | 3.0   |
| Adéquation    | 3.0   |
| Praticabilité | 3.0   |

|                                                                     |     |     |                                                               |  |
|---------------------------------------------------------------------|-----|-----|---------------------------------------------------------------|--|
| Oct 2012 - Sept. 2013                                               | 0   | 0   | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 4                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 0   | 0   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 5                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 252 | 252 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| Long Term Target                                                    | Old | New | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| COMMENTS                                                            |     |     |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |     |     |                                                               |  |
|                                                                     |     |     |                                                               |  |

## 3.12. Indicator RRP.12. Kilometers of roads under design

| <b>INDICATOR BASIC DETAILS</b>                                                                      |                                                                                                                                                                                              |                          |               |                                                      |                                                                  |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------|------------------------------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Kilometers of roads under design                                                                                                                                                             |                          |               | Version                                              | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | (R-3)                                                                                                                                                                                        | Current Indicator Number | RRP.12        | All Previous Indicator Numbers                       | RRP.11.                                                          |
| Level                                                                                               | Process                                                                                                                                                                                      | Classification           | Cumulative    | Unit of Measure*                                     | Kilometers                                                       |
| Detailed Definition                                                                                 | The length of roads in kilometers under design contracts. This includes designs for building new roads and reconstructing, rehabilitating, resurfacing or upgrading existing roads           |                          |               |                                                      |                                                                  |
| Frequency of Reporting                                                                              | ANNUAL                                                                                                                                                                                       | Reporting Period Covered |               | Compact Duration                                     |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                           |                          | NO            |                                                      |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                              |                          | NO            |                                                      |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                           |                          | NO            |                                                      |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                         |                          | YES (RN2/RN6) |                                                      |                                                                  |
| <b>INDICATOR JUSTIFICATION DETAILS</b>                                                              |                                                                                                                                                                                              |                          |               |                                                      |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the number of Km targeted by the study and supervision contracts.                                                                                      |                          |               |                                                      |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                                                               |                          |               |                                                      |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                               |                          |               |                                                      |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                               |                          |               |                                                      |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                               |                          |               |                                                      |                                                                  |
| <b>INDICATOR ACQUISITION PLAN</b>                                                                   |                                                                                                                                                                                              |                          |               |                                                      |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Roads Project Directorate                                                                                                                                                                    |                          |               |                                                      |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Abdoulaye SYLLA                                                                                                                                                                              | Phone                    | 77.740.66.72  | E-mail                                               | <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Project managers RN2 and RN6 / MCA-S                                                                                                                                                         |                          |               |                                                      |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use data of the signed contracts for RN#2 and RN#6                                                                                                                                           |                          |               |                                                      |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                               |                          |               |                                                      |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the PRR to the MED through the annual or quarterly report. The contracts signed for the studies and supervision are also transmitted to the MED, for information. |                          |               |                                                      |                                                                  |
| Frequency and timing of data acquisition                                                            | ANNUAL                                                                                                                                                                                       |                          |               |                                                      |                                                                  |
| Names of verification sources                                                                       |                                                                                                                                                                                              |                          |               | Means of verification                                |                                                                  |
| Roads Project Report                                                                                |                                                                                                                                                                                              |                          |               | Table of indicators                                  |                                                                  |
| Report Procurement Directorate                                                                      |                                                                                                                                                                                              |                          |               | Contracts signed for the PRR studies and supervision |                                                                  |
| Location of Data Storage                                                                            | MCA-Senegal (RRP)                                                                                                                                                                            |                          |               |                                                      |                                                                  |
| <b>INDICATOR DATA QUALITY</b>                                                                       |                                                                                                                                                                                              |                          |               |                                                      |                                                                  |
| Date of Data Quality Review                                                                         | November 2014                                                                                                                                                                                |                          |               |                                                      |                                                                  |



|                                                                                      |   |                                                                             |                 |                                                               |                                        |
|--------------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------|-----------------|---------------------------------------------------------------|----------------------------------------|
| Main findings of data quality review                                                 |   | Average Score<br>(out of 4)                                                 | Recommendations | <div><h3>RRP.12</h3></div>                                    |                                        |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |   | 4,0                                                                         | N/A             |                                                               |                                        |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |   | 3,6                                                                         | N/A             |                                                               |                                        |
| 3. TIMELINESS- Are the data current and frequently collected?                        |   | 4,0                                                                         | N/A             |                                                               |                                        |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |   | 3,2                                                                         | N/A             |                                                               |                                        |
| 5. INTEGRITY- Is the data free from manipulation?                                    |   | 4,0                                                                         | N/A             |                                                               |                                        |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |   | 4,0                                                                         | N/A             |                                                               |                                        |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |   | 4,0                                                                         | N/A             |                                                               |                                        |
| Overall assessment                                                                   |   | 3,8                                                                         |                 |                                                               |                                        |
| Action taken in response to data quality review                                      |   | Not Applicable                                                              |                 |                                                               |                                        |
| Known data limitations and significance                                              |   | Not Applicable                                                              |                 |                                                               |                                        |
| Actions taken to address data limitations                                            |   | Not Applicable                                                              |                 |                                                               |                                        |
| INDICATOR BASELINE INFORMATION                                                       |   |                                                                             |                 |                                                               |                                        |
| Old Baseline                                                                         | 0 | Old Baseline Year                                                           | 2010-2011       | Source of old Baseline                                        | Roads Rehabilitation Project Work Plan |
| New Baseline                                                                         | 0 | New Baseline Year                                                           | 2010-2011       | Source of New Baseline                                        | Roads Rehabilitation Project Work Plan |
| Justification for Baseline Change (if any)                                           |   |                                                                             |                 |                                                               |                                        |
| INDICATOR TARGET CALCULATIONS                                                        |   |                                                                             |                 |                                                               |                                        |
|                                                                                      |   | Target                                                                      |                 |                                                               |                                        |
| YEAR 1                                                                               |   | Old                                                                         | New             | Justification for changes to targets or calculations (if any) |                                        |
| Oct 2010 - Sept. 2011                                                                |   | 406                                                                         | 406             |                                                               |                                        |
| Explanation of assumptions and inputs to target calculations                         |   | This represents: RN2 (120 km) and RN6 (286 km) 30 km of which are optional. |                 |                                                               |                                        |
| YEAR 2                                                                               |   | Old                                                                         | New             | Justification for changes to targets or calculations (if any) |                                        |
| Oct 2011 - Sept. 2012                                                                |   | 406                                                                         | 406             |                                                               |                                        |

|                                                                     |     |     |                                                               |  |
|---------------------------------------------------------------------|-----|-----|---------------------------------------------------------------|--|
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 3                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 406 | 406 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 4                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 406 | 406 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 5                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 406 | 406 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| Long Term Target                                                    | Old | New | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| COMMENTS                                                            |     |     |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |     |     |                                                               |  |
|                                                                     |     |     |                                                               |  |

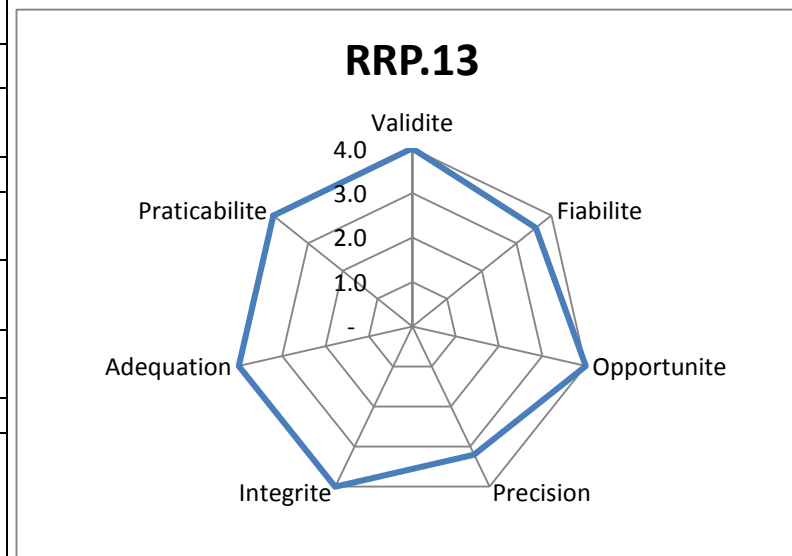
## 3.13. Indicator RRP.13. Value of signed road feasibility and design contracts

| <b>INDICATOR BASIC DETAILS</b>                                                                      |                                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Value of signed road feasibility and design contracts                                                                                                                                                                                                                 |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | (R-1)                                                                                                                                                                                                                                                                 | Current Indicator Number | RRP.13                   | All Previous Indicator Numbers | RRP.12.                                                          |
| Level                                                                                               | Process                                                                                                                                                                                                                                                               | Classification           | Cumulative               | Unit of Measure*               | US\$                                                             |
| Detailed Definition                                                                                 | The value of all signed feasibility, design, and environmental contracts including resettlement action plans, for road investments using 609(g) and compact funds (in Senegal, this includes supervision contracts, which cannot be separated from the other studies) |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                                                                             |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                    | NO                       |                          |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                       | NO                       |                          |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                    | NO                       |                          |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                  | YES (RN2/RN6)            |                          |                                |                                                                  |
| <b>INDICATOR JUSTIFICATION DETAILS</b>                                                              |                                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the total value of studies and supervision contracts signed for the rehabilitation of RN2 and RN6.                                                                                                                              |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | Indicator will be disaggregated by road as well as lot.                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| <b>INDICATOR ACQUISITION PLAN</b>                                                                   |                                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Roads Project Directorate                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Abdoulaye SYLLA                                                                                                                                                                                                                                                       | Phone                    | 77.740.66.72             | E-mail                         | <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Roads Project Directorate                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use data of signed study contracts for RN#2 and RN#6                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the PRR through the annual and quarterly reports. The study and supervision contracts are also sent to the M&E Directorate.                                                                                                                |                          |                          |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                                                       |                          |                          | Means of verification          |                                                                  |
| Quarterly or annual PRR Report                                                                      |                                                                                                                                                                                                                                                                       |                          |                          | Table of indicators            |                                                                  |
| Annual Report Procurement Directorate                                                               |                                                                                                                                                                                                                                                                       |                          |                          | Report on the signed contracts |                                                                  |
| Location of Data Storage                                                                            | Roads Project Directorate and Procurement Directorate                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| <b>INDICATOR DATA QUALITY</b>                                                                       |                                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
| Date of Data Quality Review                                                                         | November 2014                                                                                                                                                                                                                                                         |                          |                          |                                |                                                                  |

|                                                                                      |           |                   |                                                               |                        |                                        |
|--------------------------------------------------------------------------------------|-----------|-------------------|---------------------------------------------------------------|------------------------|----------------------------------------|
| Main findings of data quality review                                                 |           |                   | Average Score<br>(out of 4)                                   | Recommendations        |                                        |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |           |                   | 4,0                                                           | N/A                    |                                        |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |           |                   | 3,6                                                           | N/A                    |                                        |
| 3. TIMELINESS- Are the data current and frequently collected?                        |           |                   | 4,0                                                           | N/A                    |                                        |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |           |                   | 3,2                                                           | N/A                    |                                        |
| 5. INTEGRITY- Is the data free from manipulation?                                    |           |                   | 4,0                                                           | N/A                    |                                        |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |           |                   | 4,0                                                           | N/A                    |                                        |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |           |                   | 4,0                                                           | N/A                    |                                        |
| Overall assessment                                                                   |           |                   | 3,8                                                           |                        |                                        |
| Action taken in response to data quality review                                      |           |                   | Not Applicable                                                |                        |                                        |
| Known data limitations and significance                                              |           |                   | Not Applicable                                                |                        |                                        |
| Actions taken to address data limitations                                            |           |                   | Not Applicable                                                |                        |                                        |
| INDICATOR BASELINE INFORMATION                                                       |           |                   |                                                               |                        |                                        |
| Old Baseline                                                                         | 0         | Old Baseline Year | 2010-2011                                                     | Source of old Baseline | Roads Rehabilitation Project Work Plan |
| New Baseline                                                                         | 0         | New Baseline Year | 2010-2011                                                     | Source of New Baseline | Roads Rehabilitation Project Work Plan |
| Justification for Baseline Change (if any)                                           |           |                   |                                                               |                        |                                        |
| INDICATOR TARGET CALCULATIONS                                                        |           |                   |                                                               |                        |                                        |
|                                                                                      | Target    |                   |                                                               |                        |                                        |
| YEAR 1                                                                               | Old       | New               | Justification for changes to targets or calculations (if any) |                        |                                        |
| Oct 2010 - Sept. 2011                                                                | 2 345 311 | 2 345 311         |                                                               |                        |                                        |
| Explanation of assumptions and inputs to target calculations                         |           |                   |                                                               |                        |                                        |
| YEAR 2                                                                               | Old       | New               | Justification for changes to targets or calculations (if any) |                        |                                        |
| Oct 2011 - Sept. 2012                                                                | 2 345 311 | 2 345 311         |                                                               |                        |                                        |
| Explanation of assumptions and inputs to target calculations                         |           |                   |                                                               |                        |                                        |
| YEAR 3                                                                               | Old       | New               | Justification for changes to targets or calculations (if any) |                        |                                        |
| Oct 2012 - Sept. 2013                                                                | 9 794 690 | 9 794 690         |                                                               |                        |                                        |

**RRP.13**

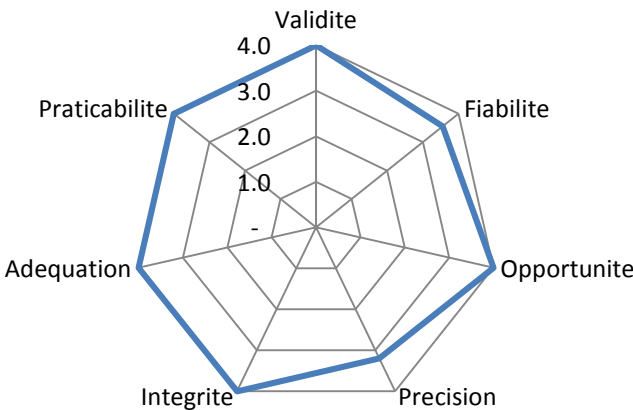
| Indicator      | Score      |
|----------------|------------|
| Validite       | 4.0        |
| Fiabilite      | 3.2        |
| Opportunité    | 4.0        |
| Precision      | 3.6        |
| Integrité      | 4.0        |
| Adequation     | 4.0        |
| Praticabilité  | 4.0        |
| <b>Average</b> | <b>3.8</b> |



|                                                                     |           |           |                                                               |  |
|---------------------------------------------------------------------|-----------|-----------|---------------------------------------------------------------|--|
| Explanation of assumptions and inputs to target calculations        |           |           |                                                               |  |
| YEAR 4                                                              | Old       | New       | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 9 794 690 | 9 794 690 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |           |           |                                                               |  |
| YEAR 5                                                              | Old       | New       | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 9 794 690 | 9 794 690 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |           |           |                                                               |  |
| Long Term Target                                                    | Old       | New       | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A       | N/A       |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |           |           |                                                               |  |
| COMMENTS                                                            |           |           |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |           |           |                                                               |  |
|                                                                     |           |           |                                                               |  |

## 3.14. Indicator RRP.14. Percent disbursed of road feasibility and design contracts

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                         |                                                                                                                                                                                                                                          |                          |                                |                                                                            |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------|----------------------------------------------------------------------------|
| Indicator Name                                                                                      | Percent disbursed of road feasibility and design contracts                                                                                                                                              |                                                                                                                                                                                                                                          |                          | Version                        | N° 03 / Sept 2015                                                          |
| Common Indicator Number                                                                             | (R-2)                                                                                                                                                                                                   | Current Indicator Number                                                                                                                                                                                                                 | RRP.14                   | All Previous Indicator Numbers | RRP.13.                                                                    |
| Level                                                                                               | Process                                                                                                                                                                                                 | Classification                                                                                                                                                                                                                           | Cumulative               | Unit of Measure*               | Percentage                                                                 |
| Detailed Definition                                                                                 | The total amount of all signed feasibility, design, and environmental contracts, including resettlement action plans, for road investments disbursed divided by the total value of all signed contracts |                                                                                                                                                                                                                                          |                          |                                |                                                                            |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                               |                                                                                                                                                                                                                                          | Reporting Period Covered | Compact Duration               |                                                                            |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                      |                                                                                                                                                                                                                                          | NO                       |                                |                                                                            |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                         |                                                                                                                                                                                                                                          | NO                       |                                |                                                                            |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                      |                                                                                                                                                                                                                                          | NO                       |                                |                                                                            |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                    |                                                                                                                                                                                                                                          | YES (RN2/RN6)            |                                |                                                                            |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                         |                                                                                                                                                                                                                                          |                          |                                |                                                                            |
| Justification for Including Indicator                                                               |                                                                                                                                                                                                         | The indicator shows the percentage of disbursements or payments made under the RN2 and RN6 studies and supervision contracts. It is a proxy indicator which gives an idea of the progress made in the studies and supervision contracts. |                          |                                |                                                                            |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                                                                         | Not Applicable                                                                                                                                                                                                                           |                          |                                |                                                                            |
| How does the indicator link to the BA?                                                              |                                                                                                                                                                                                         | Not Applicable                                                                                                                                                                                                                           |                          |                                |                                                                            |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                                                                         | Not Applicable                                                                                                                                                                                                                           |                          |                                |                                                                            |
| Justification for Disaggregations                                                                   |                                                                                                                                                                                                         | Indicator will be disaggregated by road as well as lot. It will also be disaggregated by type of study: ODA+DAO, RAP, Environmental Audit, and Environmental Monitoring.                                                                 |                          |                                |                                                                            |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                         |                                                                                                                                                                                                                                          |                          |                                |                                                                            |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                                                                         | Roads Project Directorate                                                                                                                                                                                                                |                          |                                |                                                                            |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                                                                         | Abdoulaye SYLLA                                                                                                                                                                                                                          | Phone                    | 77.740.66.72                   | E-mail<br><a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                                                                         | Roads Project Directorate                                                                                                                                                                                                                |                          |                                |                                                                            |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                                                                         | Use the contract data and those on the disbursements provided by the Fiscal Agent<br>Numerator = Total cumulative amount of disbursements<br>Denominator = Amount of contract signed for the RN#2 and RN#6 studies                       |                          |                                |                                                                            |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                                                                         | Not Applicable                                                                                                                                                                                                                           |                          |                                |                                                                            |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                                                                         | The data is transmitted by the PRR with the contracts payment certificates in annex. The exchange is made at the current dollar rate if the amount is fully or partly paid in local currency.                                            |                          |                                |                                                                            |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                                                                         | QUARTERLY                                                                                                                                                                                                                                |                          |                                |                                                                            |
| Names of verification sources                                                                       |                                                                                                                                                                                                         |                                                                                                                                                                                                                                          |                          | Means of verification          |                                                                            |
| Quarterly or annual PRR Report                                                                      |                                                                                                                                                                                                         |                                                                                                                                                                                                                                          |                          | Table of indicators            |                                                                            |

|                                                                                      |        |                          |                                                               |                                  |                                                                                                              |
|--------------------------------------------------------------------------------------|--------|--------------------------|---------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------|
| DAF Report                                                                           |        |                          |                                                               | Payments under ongoing contracts |                                                                                                              |
| Location of Data Storage                                                             |        | MCA-Sénégal (RRP)        |                                                               |                                  |                                                                                                              |
| INDICATOR DATA QUALITY                                                               |        |                          |                                                               |                                  |                                                                                                              |
| Date of Data Quality Review                                                          |        |                          | November 2014                                                 |                                  |                                                                                                              |
| Main findings of data quality review                                                 |        | Average Score (out of 4) | Recommendations                                               |                                  | <div><b>RRP.14</b></div>  |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        | 4,0                      | N/A                                                           |                                  |                                                                                                              |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        | 3,6                      | N/A                                                           |                                  |                                                                                                              |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        | 4,0                      | N/A                                                           |                                  |                                                                                                              |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        | 3,2                      | N/A                                                           |                                  |                                                                                                              |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        | 4,0                      | N/A                                                           |                                  |                                                                                                              |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        | 4,0                      | N/A                                                           |                                  |                                                                                                              |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        | 4,0                      | N/A                                                           |                                  |                                                                                                              |
| Overall assessment                                                                   |        | 3,8                      |                                                               |                                  |                                                                                                              |
| Action taken in response to data quality review                                      |        | Not Applicable           |                                                               |                                  |                                                                                                              |
| Known data limitations and significance                                              |        | Not Applicable           |                                                               |                                  |                                                                                                              |
| Actions taken to address data limitations                                            |        | Not Applicable           |                                                               |                                  |                                                                                                              |
| INDICATOR BASELINE INFORMATION                                                       |        |                          |                                                               |                                  |                                                                                                              |
| Old Baseline                                                                         | 0%     | Old Baseline Year        | 2010-2011                                                     | Source of old Baseline           | Roads Rehabilitation Project Work Plan                                                                       |
| New Baseline                                                                         | 0%     | New Baseline Year        | 2010-2011                                                     | Source of New Baseline           | Roads Rehabilitation Project Work Plan                                                                       |
| Justification for Baseline Change (if any)                                           |        |                          |                                                               |                                  |                                                                                                              |
| INDICATOR TARGET CALCULATIONS                                                        |        |                          |                                                               |                                  |                                                                                                              |
|                                                                                      | Target |                          |                                                               |                                  |                                                                                                              |
| YEAR 1                                                                               | Old    | New                      | Justification for changes to targets or calculations (if any) |                                  |                                                                                                              |
| Oct 2010 - Sept. 2011                                                                | 9%     | 9%                       |                                                               |                                  |                                                                                                              |
| Explanation of assumptions and inputs to target calculations                         |        |                          |                                                               |                                  |                                                                                                              |
| YEAR 2                                                                               | Old    | New                      | Justification for changes to targets or calculations (if any) |                                  |                                                                                                              |
| Oct 2011 - Sept. 2012                                                                | 21%    | 21%                      |                                                               |                                  |                                                                                                              |

|                                                                     |      |      |                                                               |  |
|---------------------------------------------------------------------|------|------|---------------------------------------------------------------|--|
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| YEAR 3                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 52%  | 52%  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| YEAR 4                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 81%  | 81%  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| YEAR 5                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 100% | 100% |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| Long Term Target                                                    | Old  | New  | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A  | N/A  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| COMMENTS                                                            |      |      |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |      |      |                                                               |  |
|                                                                     |      |      |                                                               |  |



## 3.15. Indicator RRP.15. Value disbursed of road feasibility and design contracts

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                     |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Value disbursed of road feasibility and design contracts                                                                                                                                                                                                            |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | (R-2.1)                                                                                                                                                                                                                                                             | Current Indicator Number | RRP.15.                  | All Previous Indicator Numbers | New Indicator                                                    |
| Level                                                                                               | Process                                                                                                                                                                                                                                                             | Classification           | Cumulative               | Unit of Measure*               | \$US                                                             |
| Detailed Definition                                                                                 | The total amount of disbursements under signed contracts for road feasibility, design studies and environmental audit and monitoring, including resettlement action plans (RAPs), for road investments funded under the Compact and 609g.                           |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | QUATERLY                                                                                                                                                                                                                                                            |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                  |                          | NO                       |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                     |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                  |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                |                          | YES (RN2/RN6)            |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                     |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator refers to the total amount of disbursements or payments made under the contracts for the RN2 and RN6 studies and supervision. It is a proxy indicator which helps us to get an idea of the funds disbursed under the study and supervision contracts. |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | N/A                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | N/A                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | N/A                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | The indicator will be disaggregated by road and by work lot. It will also be broken down into study types: APD + DAO, RAP, environmental audit and environmental monitoring.                                                                                        |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                     |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Roads Project Directorate                                                                                                                                                                                                                                           |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Abdoulaye SYLLA                                                                                                                                                                                                                                                     | Phone                    | 77.740.66.72             | E-mail                         | <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Roads Project Directorate                                                                                                                                                                                                                                           |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use of the contract data and those related to the amounts of disbursements provided by the Fiscal Agent.                                                                                                                                                            |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Non Applicable                                                                                                                                                                                                                                                      |                          |                          |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data are sent by the RRP, with the attached contract disbursement certificates. The dollar is converted at the daily rate if the payment is made, wholly or partly, in local currency.                                                                          |                          |                          |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | QUATERLY                                                                                                                                                                                                                                                            |                          |                          |                                |                                                                  |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                                                     |                          |                          | Means of verification          |                                                                  |
| RRP Project quarterly or annual report                                                              |                                                                                                                                                                                                                                                                     |                          |                          | Indicators Table               |                                                                  |

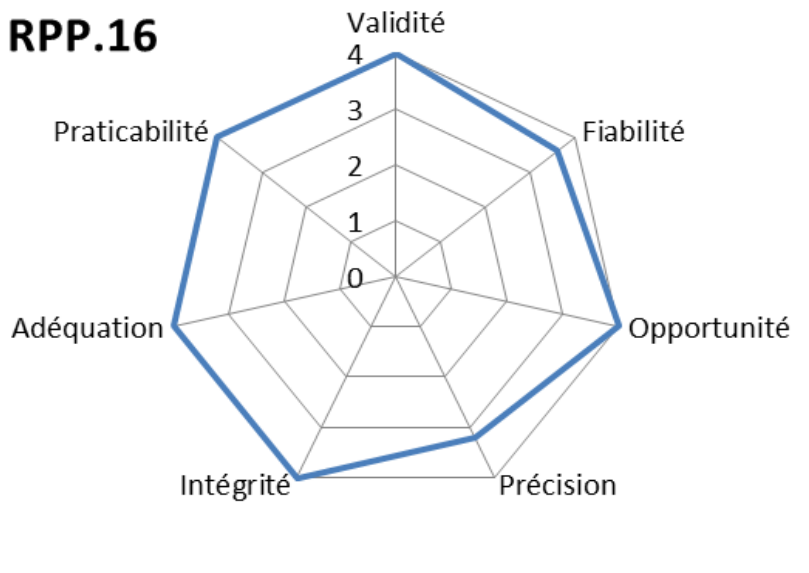
|                                                                                      |        |                   |                                                               |                               |               |
|--------------------------------------------------------------------------------------|--------|-------------------|---------------------------------------------------------------|-------------------------------|---------------|
| Procurement Report                                                                   |        |                   |                                                               | Payments on current contracts |               |
| Location of Data Storage                                                             |        | MCA-Senegal (RRP) |                                                               |                               |               |
| <b>INDICATOR DATA QUALITY</b>                                                        |        |                   |                                                               |                               |               |
| Date of Data Quality Review                                                          |        |                   |                                                               |                               |               |
| Main findings of data quality review                                                 |        | Average score     | Recommendations                                               |                               |               |
| Main findings of data quality review                                                 |        |                   | N/A                                                           |                               |               |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |        |                   | N/A                                                           |                               |               |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |        |                   | N/A                                                           |                               |               |
| 3. TIMELINESS- Are the data current and frequently collected?                        |        |                   | N/A                                                           |                               |               |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |        |                   | N/A                                                           |                               |               |
| 5. INTEGRITY- Is the data free from manipulation?                                    |        |                   | N/A                                                           |                               |               |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |        |                   | N/A                                                           |                               |               |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |        |                   |                                                               |                               |               |
| Action taken in response to data quality review                                      |        | Not Applicable    |                                                               |                               |               |
| Known data limitations and significance                                              |        | Not Applicable    |                                                               |                               |               |
| Actions taken to address data limitations                                            |        | Not Applicable    |                                                               |                               |               |
| <b>INDICATOR BASELINE INFORMATION</b>                                                |        |                   |                                                               |                               |               |
| Old Baseline                                                                         | N/A    | Old Baseline Year | N/A                                                           | Source of old Baseline        |               |
| New Baseline                                                                         | 0      | New Baseline Year | 2014-2015                                                     | Source of New Baseline        | RRP Work plan |
| Justification for Baseline Change (if any)                                           |        |                   |                                                               |                               |               |
| <b>INDICATOR TARGET CALCULATIONS</b>                                                 |        |                   |                                                               |                               |               |
|                                                                                      | Target |                   |                                                               |                               |               |
| YEAR 1                                                                               | Old    | New               | Justification for changes to targets or calculations (if any) |                               |               |
| Oct 2010 - Sept. 2011                                                                | N/A    | 881 522           |                                                               |                               |               |
| Explanation of assumptions and inputs to target calculations                         |        |                   |                                                               |                               |               |
| YEAR 2                                                                               | Old    | New               | Justification for changes to targets or calculations (if any) |                               |               |
| Oct 2011 - Sept. 2012                                                                | N/A    | 2 056 884         |                                                               |                               |               |
| Explanation of assumptions and inputs to target calculations                         |        |                   |                                                               |                               |               |
| YEAR 3                                                                               | Old    | New               | Justification for changes to targets or calculations (if any) |                               |               |
| Oct 2012 - Sept. 2013                                                                | N/A    | 5 093 238         |                                                               |                               |               |

|                                                                     |     |           |                                                               |  |
|---------------------------------------------------------------------|-----|-----------|---------------------------------------------------------------|--|
| Explanation of assumptions and inputs to target calculations        |     |           |                                                               |  |
| YEAR 4                                                              | Old | New       | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | N/A | 7 933 698 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |           |                                                               |  |
| YEAR 5                                                              | Old | New       | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | N/A | 9 794 690 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |           |                                                               |  |
| Long Term Target                                                    | Old | New       | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A | N/A       |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |           |                                                               |  |
| COMMENTS                                                            |     |           |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |     |           |                                                               |  |
|                                                                     |     |           |                                                               |  |

## 3.16. Indicator RRP.16. Value of signed road construction contracts

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                           |                                                                                                                                                    |                                                       |                                |                                                                            |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------|
| Indicator Name                                                                                      | Value of signed road construction contracts                                                                                                                                                                                               |                                                                                                                                                    |                                                       | Version                        | N° 03 / Sept 2015                                                          |
| Common Indicator Number                                                                             | (R-4)                                                                                                                                                                                                                                     | Current Indicator Number                                                                                                                           | RRP.16                                                | All Previous Indicator Numbers | RRP.14. / RRP.15.                                                          |
| Level                                                                                               | Process                                                                                                                                                                                                                                   | Classification                                                                                                                                     | Cumulative                                            | Unit of Measure*               | US\$                                                                       |
| Detailed Definition                                                                                 | The value of all signed construction contracts for new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads using compact funds (in Senegal, this includes the RN2, RN6, and the Kolda and Ndioum bridges) |                                                                                                                                                    |                                                       |                                |                                                                            |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                                                 |                                                                                                                                                    | Reporting Period Covered                              | Duration of the Compact        |                                                                            |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                        |                                                                                                                                                    | NO                                                    |                                |                                                                            |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                           |                                                                                                                                                    | NO                                                    |                                |                                                                            |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                        |                                                                                                                                                    | NO                                                    |                                |                                                                            |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                      |                                                                                                                                                    | YES (RN2/Ndioum Bridge/RN6 Lot 1/RN6 Lot 2/RN6 Lot 3) |                                |                                                                            |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                           |                                                                                                                                                    |                                                       |                                |                                                                            |
| Justification for Including Indicator                                                               |                                                                                                                                                                                                                                           | The indicator provides information on the total value of contracts for the rehabilitation of the RN2, RN6 and the Kolda and Ndioum Bridges.        |                                                       |                                |                                                                            |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                                                                                                           | Not Applicable                                                                                                                                     |                                                       |                                |                                                                            |
| How does the indicator link to the BA?                                                              |                                                                                                                                                                                                                                           | Not Applicable                                                                                                                                     |                                                       |                                |                                                                            |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                                                                                                           | Not Applicable                                                                                                                                     |                                                       |                                |                                                                            |
| Justification for Disaggregations                                                                   |                                                                                                                                                                                                                                           | Indicator will be disaggregated by road as well as by lot.(for the RN6: RN6 Lot1, RN6Lot2, RN6 Lot3, Kolda Bridge; for RN2: RN2 and Ndioum Bridge) |                                                       |                                |                                                                            |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                           |                                                                                                                                                    |                                                       |                                |                                                                            |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                                                                                                           | Roads Project Directorate                                                                                                                          |                                                       |                                |                                                                            |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                                                                                                           | Abdoulaye SYLLA                                                                                                                                    | Phone                                                 | 77.740.66.72                   | E-mail<br><a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                                                                                                           | MCA-S Project Managers for RN2 and RN6                                                                                                             |                                                       |                                |                                                                            |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                                                                                                           | Use data of contracts signed for works on RN#2, RN#6 and Ndioum and Kolda Bridges                                                                  |                                                       |                                |                                                                            |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                                                                                                           | Not Applicable                                                                                                                                     |                                                       |                                |                                                                            |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                                                                                                           | The data is transmitted by the PRR through the annual and quarterly reports. The works contracts are also sent to the MED.                         |                                                       |                                |                                                                            |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                                                                                                           | QUARTERLY                                                                                                                                          |                                                       |                                |                                                                            |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                           |                                                                                                                                                    | Means of verification                                 |                                |                                                                            |
| Quarterly or annual PRR Report                                                                      |                                                                                                                                                                                                                                           |                                                                                                                                                    | Table of indicators                                   |                                |                                                                            |
| Annual Report Administrative and Financial Directorate                                              |                                                                                                                                                                                                                                           |                                                                                                                                                    | Report on payments / Financial implementation report  |                                |                                                                            |
| Location of Data Storage                                                                            |                                                                                                                                                                                                                                           | Roads Project Directorate and Procurement Directorate                                                                                              |                                                       |                                |                                                                            |

**INDICATOR DATA QUALITY**

|                                                                                      |                          |                 |                                                                                                   |
|--------------------------------------------------------------------------------------|--------------------------|-----------------|---------------------------------------------------------------------------------------------------|
| Date of Data Quality Review                                                          |                          | June 2013       | <b>RPP.16</b>  |
| Main findings of data quality review                                                 | Average Score (out of 4) | Recommendations |                                                                                                   |
| 1. VALIDITY – Does the data clearly represent the desired results?                   | 4,0                      | N/A             |                                                                                                   |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 3,6                      | N/A             |                                                                                                   |
| 3. TIMELINESS- Are the data current and frequently collected?                        | 4,0                      | N/A             |                                                                                                   |
| 4. PRECISION – Does the data have an acceptable margin of error?                     | 3,2                      | N/A             |                                                                                                   |
| 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                      | N/A             |                                                                                                   |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 4,0                      | N/A             |                                                                                                   |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     | 4,0                      | N/A             |                                                                                                   |
| Overall assessment                                                                   | 3,8                      |                 |                                                                                                   |
| Action taken in response to data quality review                                      | Not Applicable           |                 |                                                                                                   |
| Known data limitations and significance                                              | Not Applicable           |                 |                                                                                                   |
| Actions taken to address data limitations                                            | Not Applicable           |                 |                                                                                                   |

**INDICATOR BASELINE INFORMATION**

|                                            |   |                   |           |                        |                                        |
|--------------------------------------------|---|-------------------|-----------|------------------------|----------------------------------------|
| Old Baseline                               | 0 | Old Baseline Year | 2010-2011 | Source of old Baseline | Roads Rehabilitation Project Work Plan |
| New Baseline                               | 0 | New Baseline Year | 2010-2011 | Source of New Baseline | Roads Rehabilitation Project Work Plan |
| Justification for Baseline Change (if any) |   |                   |           |                        |                                        |

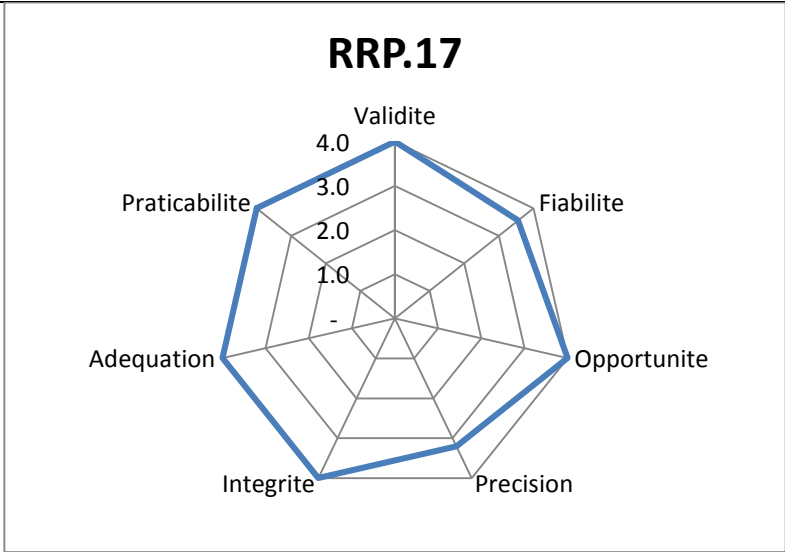
**INDICATOR TARGET CALCULATIONS**

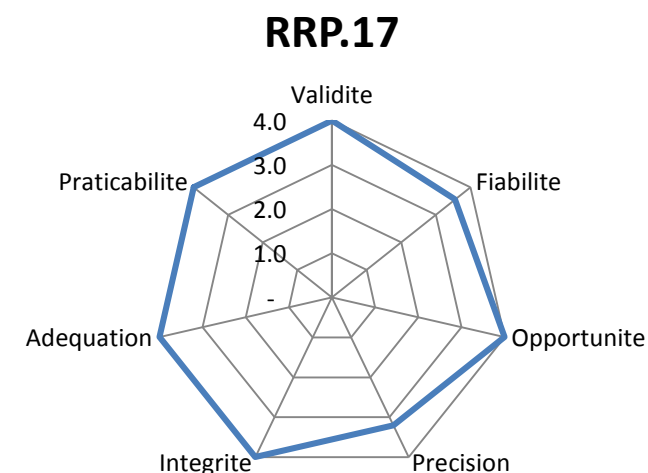
| INDICATOR FOR TARGET CALCULATIONS                            |        |     |                                                               |  |
|--------------------------------------------------------------|--------|-----|---------------------------------------------------------------|--|
|                                                              | Target |     |                                                               |  |
| YEAR 1                                                       | Old    | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2010 - Sept. 2011                                        | 0      | 0   |                                                               |  |
| Explanation of assumptions and inputs to target calculations |        |     |                                                               |  |
| YEAR 2                                                       | Old    | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2011 - Sept. 2012                                        | 0      | 0   |                                                               |  |

|                                                                     |             |             |                                                               |  |
|---------------------------------------------------------------------|-------------|-------------|---------------------------------------------------------------|--|
| Explanation of assumptions and inputs to target calculations        |             |             |                                                               |  |
| YEAR 3                                                              | Old         | New         | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 258 924 397 | 258 924 397 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |             |             |                                                               |  |
| YEAR 4                                                              | Old         | New         | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 258 924 397 | 258 924 397 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |             |             |                                                               |  |
| YEAR 5                                                              | Old         | New         | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 258 924 397 | 258 924 397 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |             |             |                                                               |  |
| Long Term Target                                                    | Old         | New         | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A         | N/A         |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |             |             |                                                               |  |
| COMMENTS                                                            |             |             |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |             |             |                                                               |  |
|                                                                     |             |             |                                                               |  |

## 3.17. Indicator RRP.17. Percent disbursed of road construction contracts

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                |                                                                                                                                                                                                                                             |                                  |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Percent disbursed of road construction contracts                                                                                                                                                               |                                                                                                                                                                                                                                             |                                  | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | (R-5)                                                                                                                                                                                                          | Current Indicator Number                                                                                                                                                                                                                    | RRP.17                           | All Previous Indicator Numbers | RRP.15. / RRP.16.                                                       |
| Level                                                                                               | Process                                                                                                                                                                                                        | Classification                                                                                                                                                                                                                              | Cumulative                       | Unit of Measure*               | Percentage                                                              |
| Detailed Definition                                                                                 | The total amount of all signed construction contracts for new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads disbursed divided by the total value of all signed contracts |                                                                                                                                                                                                                                             |                                  |                                |                                                                         |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                      |                                                                                                                                                                                                                                             | Reporting Period Covered         | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                             | NO                                                                                                                                                                                                                                          |                                  |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                | NO                                                                                                                                                                                                                                          |                                  |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                             | NO                                                                                                                                                                                                                                          |                                  |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                           | YES (RN2/Ndioum Bridge/RN6 Lot 1/RN6 Lot 2/RN6 Lot 3)                                                                                                                                                                                       |                                  |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                |                                                                                                                                                                                                                                             |                                  |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                                                                                                                                                                | The indicator shows the total percentage disbursed for the RN#2 and RN#6 works contracts. It is a proxy indicator on the physical completion of road works.                                                                                 |                                  |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                                                                                | Not Applicable                                                                                                                                                                                                                              |                                  |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                                                                                                                                                                | Not Applicable                                                                                                                                                                                                                              |                                  |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                                                                                | Not Applicable                                                                                                                                                                                                                              |                                  |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                                                                                                                                                                | Indicator will be disaggregated by road as well as by lot. (for the RN6: RN6 Lot1, RN6Lot2, RN6 Lot3, Kolda Bridge; for RN2: RN2 and Ndioum Bridge)                                                                                         |                                  |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                |                                                                                                                                                                                                                                             |                                  |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                                                                                | Roads Project Directorate                                                                                                                                                                                                                   |                                  |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                                                                                | Abdoulaye SYLLA                                                                                                                                                                                                                             | Phone                            | 77.740.66.72                   | E-mail <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                                                                                | Roads Project Directorate                                                                                                                                                                                                                   |                                  |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                                                                                | Use contract data and those on the disbursement provided by the DAF<br>Numerator = Total cumulative amount of disbursements<br>Denominator = Amount of contract signed for the works on RN#2, RN#6, the Ndioum Bridge and the Kolda Bridge. |                                  |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                                                                                | Not Applicable                                                                                                                                                                                                                              |                                  |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                                                                                | The data are transmitted by the Roads Directorate with an annex of the certificates of contract payments. The conversion to dollars is made if the payment or part therein is made in local currency.                                       |                                  |                                |                                                                         |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                                                                                | QUARTERLY                                                                                                                                                                                                                                   |                                  |                                |                                                                         |
| Names of verification sources                                                                       |                                                                                                                                                                                                                |                                                                                                                                                                                                                                             | Means of verification            |                                |                                                                         |
| Quarterly or annual PRR Report                                                                      |                                                                                                                                                                                                                |                                                                                                                                                                                                                                             | Table of indicators              |                                |                                                                         |
| DAF Report                                                                                          |                                                                                                                                                                                                                |                                                                                                                                                                                                                                             | Payments under ongoing contracts |                                |                                                                         |

|                                                                                      |    |                          |                 |                                                               |                                                                                     |
|--------------------------------------------------------------------------------------|----|--------------------------|-----------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Location of Data Storage                                                             |    |                          |                 | MCA-Senegal (PRR)                                             |                                                                                     |
| INDICATOR DATA QUALITY                                                               |    |                          |                 |                                                               |                                                                                     |
| Date of Data Quality Review                                                          |    |                          | November 2014   |                                                               |                                                                                     |
| Main findings of data quality review                                                 |    | Average Score (out of 4) | Recommendations |                                                               |  |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |    | 4,0                      | N/A             |                                                               |                                                                                     |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |    | 3,6                      | N/A             |                                                               |                                                                                     |
| 3. TIMELINESS- Are the data current and frequently collected?                        |    | 4,0                      | N/A             |                                                               |                                                                                     |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |    | 3,2                      | N/A             |                                                               |                                                                                     |
| 5. INTEGRITY- Is the data free from manipulation?                                    |    | 4,0                      | N/A             |                                                               |                                                                                     |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |    | 4,0                      | N/A             |                                                               |                                                                                     |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |    | 4,0                      | N/A             |                                                               |                                                                                     |
| Overall assessment                                                                   |    | 3,8                      |                 |                                                               |                                                                                     |
| Action taken in response to data quality review                                      |    | Not Applicable           |                 |                                                               |                                                                                     |
| Known data limitations and significance                                              |    | Not Applicable           |                 |                                                               |                                                                                     |
| Actions taken to address data limitations                                            |    | Not Applicable           |                 |                                                               |                                                                                     |
| INDICATOR BASELINE INFORMATION                                                       |    |                          |                 |                                                               |                                                                                     |
| Old Baseline                                                                         | 0% | Old Baseline Year        | 2010-2011       | Source of old Baseline                                        | Roads Rehabilitation Project Work Plan                                              |
| New Baseline                                                                         | 0% | New Baseline Year        | 2010-2011       | Source of New Baseline                                        | Roads Rehabilitation Project Work Plan                                              |
| Justification for Baseline Change (if any)                                           |    |                          |                 |                                                               |                                                                                     |
| INDICATOR TARGET CALCULATIONS                                                        |    |                          |                 |                                                               |                                                                                     |
|                                                                                      |    | Target                   |                 |                                                               |                                                                                     |
| YEAR 1                                                                               |    | Old                      | New             | Justification for changes to targets or calculations (if any) |                                                                                     |
| Oct 2010 - Sept. 2011                                                                |    | 0%                       | 0%              |                                                               |                                                                                     |
| Explanation of assumptions and inputs to target calculations                         |    |                          |                 |                                                               |                                                                                     |
| YEAR 2                                                                               |    | Old                      | New             | Justification for changes to targets or calculations (if any) |                                                                                     |
| Oct 2011 - Sept. 2012                                                                |    | 0%                       | 0%              |                                                               |                                                                                     |
| Explanation of assumptions and inputs to target calculations                         |    |                          |                 |                                                               |                                                                                     |





|                                                                     |      |      |                                                               |  |
|---------------------------------------------------------------------|------|------|---------------------------------------------------------------|--|
| YEAR 3                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 22%  | 22%  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| YEAR 4                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 66%  | 66%  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| YEAR 5                                                              | Old  | New  | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 100% | 100% |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| Long Term Target                                                    | Old  | New  | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A  | N/A  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |      |      |                                                               |  |
| COMMENTS                                                            |      |      |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |      |      |                                                               |  |
|                                                                     |      |      |                                                               |  |

## 3.18. Indicator RRP.18. Value disbursed of road construction contracts

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                 |                                                                                                                                                                                                                                          |                               |                                |                                                                         |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------|-------------------------------------------------------------------------|
| Indicator Name                                                                                      | Value disbursed of road construction contracts                                                                                                                  |                                                                                                                                                                                                                                          |                               | Version                        | N° 03 / Sept 2015                                                       |
| Common Indicator Number                                                                             | (R-5.1)                                                                                                                                                         | Current Indicator Number                                                                                                                                                                                                                 | RRP.18.                       | All Previous Indicator Numbers | New Indicator                                                           |
| Level                                                                                               | Process                                                                                                                                                         | Classification                                                                                                                                                                                                                           | Cumulative                    | Unit of Measure*               | \$US                                                                    |
| Detailed Definition                                                                                 | The total amount of disbursements under contracts for construction of new roads, for reconstruction, rehabilitation, surfacing and upgrading of existing roads. |                                                                                                                                                                                                                                          |                               |                                |                                                                         |
| Frequency of Reporting                                                                              | QUATERLY                                                                                                                                                        |                                                                                                                                                                                                                                          | Reporting Period Covered      | Compact Duration               |                                                                         |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                              | NO                                                                                                                                                                                                                                       |                               |                                |                                                                         |
|                                                                                                     | By age (YES/NO)                                                                                                                                                 | NO                                                                                                                                                                                                                                       |                               |                                |                                                                         |
|                                                                                                     | By income (YES/NO)                                                                                                                                              | NO                                                                                                                                                                                                                                       |                               |                                |                                                                         |
|                                                                                                     | By locality (YES/NO)                                                                                                                                            | YES (RN2/Ndioum Bridge/RN6 Lot 1/RN6 Lot 2/RN6 Lot 3)                                                                                                                                                                                    |                               |                                |                                                                         |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                 |                                                                                                                                                                                                                                          |                               |                                |                                                                         |
| Justification for Including Indicator                                                               |                                                                                                                                                                 | The indicator refers to the amount of the disbursements under the contracts for the construction of RN2, RN6, and the Ndioum and Kolda bridges.<br>It is a proxy indicator relating to the physical completion of the road construction. |                               |                                |                                                                         |
| How does the indicator link to the ERR?                                                             |                                                                                                                                                                 | N/A                                                                                                                                                                                                                                      |                               |                                |                                                                         |
| How does the indicator link to the BA?                                                              |                                                                                                                                                                 | N/A                                                                                                                                                                                                                                      |                               |                                |                                                                         |
| How does the indicator link to the impact evaluation?                                               |                                                                                                                                                                 | N/A                                                                                                                                                                                                                                      |                               |                                |                                                                         |
| Justification for Disaggregations                                                                   |                                                                                                                                                                 | The indicator will be disaggregated by locality (RN2 and RN6) and by work lot: .(for the RN6: RN6 Lot1, RN6Lot2, RN6 Lot3, Kolda Bridge; for RN2: RN2 and Ndioum Bridge)                                                                 |                               |                                |                                                                         |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                 |                                                                                                                                                                                                                                          |                               |                                |                                                                         |
| Entity Responsible for Collecting Data at MCA                                                       |                                                                                                                                                                 | RRP Directorate                                                                                                                                                                                                                          |                               |                                |                                                                         |
| Point of Contact Responsible for Collecting the Data at MCA:                                        |                                                                                                                                                                 | Abdoulaye SYLLA                                                                                                                                                                                                                          | Phone                         | 77.740.66.72                   | E-mail <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               |                                                                                                                                                                 | Direction Projet Route                                                                                                                                                                                                                   |                               |                                |                                                                         |
| Detailed description of data collection methodology (including any calculations computed by source) |                                                                                                                                                                 | Use of the contract data and those related to the disbursed amounts provided by the DAF.                                                                                                                                                 |                               |                                |                                                                         |
| If survey data, verbatim question(s) posed to respondent                                            |                                                                                                                                                                 | Not Applicable                                                                                                                                                                                                                           |                               |                                |                                                                         |
| Detailed description of how data is transmitted from source to MCA                                  |                                                                                                                                                                 | The data are sent by the RRP, with the attached contract disbursement certificates. The dollar is converted at the daily rate if the payment is made, wholly or partly, in local currency.                                               |                               |                                |                                                                         |
| Frequency and timing of data acquisition                                                            |                                                                                                                                                                 | QUATERLY                                                                                                                                                                                                                                 |                               |                                |                                                                         |
| Names of verification sources                                                                       |                                                                                                                                                                 |                                                                                                                                                                                                                                          | Means of verification         |                                |                                                                         |
| RRP Project quaterly or annual report                                                               |                                                                                                                                                                 |                                                                                                                                                                                                                                          | Indicators Table              |                                |                                                                         |
| Procurement Report                                                                                  |                                                                                                                                                                 |                                                                                                                                                                                                                                          | Payments on current contracts |                                |                                                                         |
| Location of Data Storage                                                                            |                                                                                                                                                                 | MCA-Senegal (RRP)                                                                                                                                                                                                                        |                               |                                |                                                                         |

| INDICATOR DATA QUALITY                                                               |     |                   |                 |                                                               |                       |
|--------------------------------------------------------------------------------------|-----|-------------------|-----------------|---------------------------------------------------------------|-----------------------|
| Date of Data Quality Review                                                          |     |                   |                 |                                                               |                       |
| Main findings of data quality review                                                 |     | Average score     | Recommendations | New Indicator                                                 |                       |
| Main findings of data quality review                                                 |     |                   | N/A             |                                                               |                       |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |     |                   | N/A             |                                                               |                       |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |     |                   | N/A             |                                                               |                       |
| 3. TIMELINESS- Are the data current and frequently collected?                        |     |                   | N/A             |                                                               |                       |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |     |                   | N/A             |                                                               |                       |
| 5. INTEGRITY- Is the data free from manipulation?                                    |     |                   | N/A             |                                                               |                       |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |     |                   | N/A             |                                                               |                       |
| Overall assessment                                                                   |     |                   |                 |                                                               |                       |
| Action taken in response to data quality review                                      |     | Not Applicable    |                 |                                                               |                       |
| Known data limitations and significance                                              |     | Not Applicable    |                 |                                                               |                       |
| Actions taken to address data limitations                                            |     | Not Applicable    |                 |                                                               |                       |
| INDICATOR BASELINE INFORMATION                                                       |     |                   |                 |                                                               |                       |
| Old Baseline                                                                         | N/A | Old Baseline Year | N/A             | Source of old Baseline                                        |                       |
| New Baseline                                                                         | 0   | New Baseline Year | 2014-2015       | Source of New Baseline                                        | RRP Project Work Plan |
| Justification for Baseline Change (if any)                                           |     |                   |                 |                                                               |                       |
| INDICATOR TARGET CALCULATIONS                                                        |     |                   |                 |                                                               |                       |
|                                                                                      |     | Target            |                 |                                                               |                       |
| YEAR 1                                                                               |     | Old               | New             | Justification for changes to targets or calculations (if any) |                       |
| Oct 2010 - Sept. 2011                                                                |     | N/A               | 0               |                                                               |                       |
| Explanation of assumptions and inputs to target calculations                         |     |                   |                 |                                                               |                       |
| YEAR 2                                                                               |     | Old               | New             | Justification for changes to targets or calculations (if any) |                       |
| Oct 2011 - Sept. 2012                                                                |     | N/A               | 0               |                                                               |                       |
| Explanation of assumptions and inputs to target calculations                         |     |                   |                 |                                                               |                       |
| YEAR 3                                                                               |     | Old               | New             |                                                               |                       |

|                                                                     |     |             |                                                               |  |
|---------------------------------------------------------------------|-----|-------------|---------------------------------------------------------------|--|
| Oct 2012 - Sept. 2013                                               | N/A | 56 963 367  | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations        |     |             |                                                               |  |
| YEAR 4                                                              | Old | New         | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | N/A | 170 890 102 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |             |                                                               |  |
| YEAR 5                                                              | Old | New         | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | N/A | 258 924 397 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |             |                                                               |  |
| Long Term Target                                                    | Old | New         | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A | N/A         |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |             |                                                               |  |
| COMMENTS                                                            |     |             |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |     |             |                                                               |  |
|                                                                     |     |             |                                                               |  |

## 3.19. Indicator RRP.19. Kilometers of roads under works contracts

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                             |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Kilometers of roads under works contracts                                                                                                                                                   |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | (R-6)                                                                                                                                                                                       | Current Indicator Number | RRP.19                   | All Previous Indicator Numbers | RRP.16. / RRP.17.                                                |
| Level                                                                                               | Process                                                                                                                                                                                     | Classification           | Cumulative               | Unit of Measure*               | Kilometers                                                       |
| Detailed Definition                                                                                 | The length of roads in kilometers under works contracts for construction of new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads                         |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | ANNUAL                                                                                                                                                                                      |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                          | NO                       |                          |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                             | NO                       |                          |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                          | NO                       |                          |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                        | YES (RN2/RN6)            |                          |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the number of Km targeted by the study and supervision contracts.                                                                                     |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                                                              |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                              |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                              |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Roads Project Directorate                                                                                                                                                                   |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Abdoulaye SYLLA                                                                                                                                                                             | Phone                    | 77.740.66.72             | E-mail                         | <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Roads Project Directorate                                                                                                                                                                   |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use data of RN#2 and RN#6 works contracts provided by the PM Directorate. It is equal to the number of km for which works contracts have been signed                                        |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the PRR to the MED through the annual or quarterly report. The contracts signed for studies and rehabilitation are also transmitted to the MED, for information. |                          |                          |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | ANNUAL                                                                                                                                                                                      |                          |                          |                                |                                                                  |
| Names of verification sources                                                                       | Means of verification                                                                                                                                                                       |                          |                          |                                |                                                                  |
| Roads Project Report                                                                                | Table of indicators                                                                                                                                                                         |                          |                          |                                |                                                                  |
| Report Procurement Directorate                                                                      | Contracts signed for the PRR works                                                                                                                                                          |                          |                          |                                |                                                                  |
| Location of Data Storage                                                                            | MCA-Sénégal (RRP)                                                                                                                                                                           |                          |                          |                                |                                                                  |
| INDICATOR DATA QUALITY                                                                              |                                                                                                                                                                                             |                          |                          |                                |                                                                  |
| Date of Data Quality Review                                                                         | November 2014                                                                                                                                                                               |                          |                          |                                |                                                                  |

|                                                                                      |   |                             |                 |                                                               |                                        |
|--------------------------------------------------------------------------------------|---|-----------------------------|-----------------|---------------------------------------------------------------|----------------------------------------|
|                                                                                      |   |                             |                 |                                                               |                                        |
| Main findings of data quality review                                                 |   | Average Score<br>(out of 4) | Recommendations |                                                               |                                        |
| 1. VALIDITY – Does the data clearly represent the desired results?                   |   | 4,0                         | N/A             |                                                               |                                        |
| 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |   | 3,6                         | N/A             |                                                               |                                        |
| 3. TIMELINESS- Are the data current and frequently collected?                        |   | 4,0                         | N/A             |                                                               |                                        |
| 4. PRECISION – Does the data have an acceptable margin of error?                     |   | 3,2                         | N/A             |                                                               |                                        |
| 5. INTEGRITY- Is the data free from manipulation?                                    |   | 4,0                         | N/A             |                                                               |                                        |
| 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |   | 4,0                         | N/A             |                                                               |                                        |
| 7. PRACTICABILITY- Is the data current and frequently collected?                     |   | 4,0                         | N/A             |                                                               |                                        |
| Overall assessment                                                                   |   | 3,8                         |                 |                                                               |                                        |
| Action taken in response to data quality review                                      |   | Not Applicable              |                 |                                                               |                                        |
| Known data limitations and significance                                              |   | Not Applicable              |                 |                                                               |                                        |
| Actions taken to address data limitations                                            |   | Not Applicable              |                 |                                                               |                                        |
| INDICATOR BASELINE INFORMATION                                                       |   |                             |                 |                                                               |                                        |
| Old Baseline                                                                         | 0 | Old Baseline Year           | 2010-2011       | Source of old Baseline                                        | Roads Rehabilitation Project Work Plan |
| New Baseline                                                                         | 0 | New Baseline Year           | 2010-2011       | Source of New Baseline                                        | Roads Rehabilitation Project Work Plan |
| Justification for Baseline Change (if any)                                           |   |                             |                 |                                                               |                                        |
| INDICATOR TARGET CALCULATIONS                                                        |   |                             |                 |                                                               |                                        |
|                                                                                      |   | Target                      |                 |                                                               |                                        |
| YEAR 1                                                                               |   | Old                         | New             | Justification for changes to targets or calculations (if any) |                                        |
| Oct 2010 - Sept. 2011                                                                |   | 0                           | 0               |                                                               |                                        |
| Explanation of assumptions and inputs to target calculations                         |   |                             |                 |                                                               |                                        |
| YEAR 2                                                                               |   | Old                         | New             | Justification for changes to targets or calculations (if any) |                                        |
| Oct 2011 - Sept. 2012                                                                |   | 0                           | 0               |                                                               |                                        |
| Explanation of assumptions and inputs to target calculations                         |   |                             |                 |                                                               |                                        |
| YEAR 3                                                                               |   | Old                         | New             |                                                               |                                        |

**RRP.19**

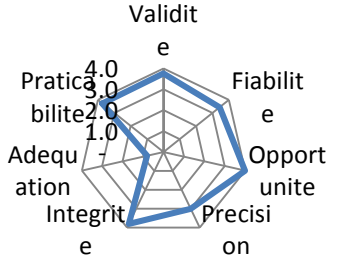
| Category      | Score |
|---------------|-------|
| Validite      | 4.0   |
| Fiabilite     | 3.0   |
| Opportunité   | 3.0   |
| Precision     | 3.0   |
| Intégrité     | 3.0   |
| Adéquation    | 3.0   |
| Praticabilité | 3.0   |

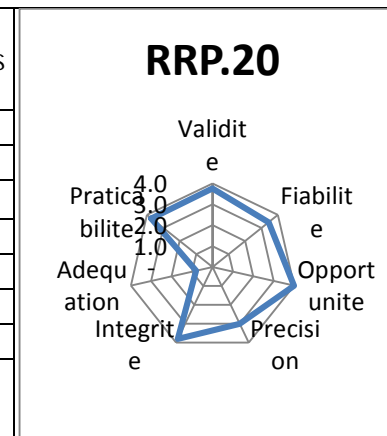
|                                                                     |                                                 |     |                                                               |  |
|---------------------------------------------------------------------|-------------------------------------------------|-----|---------------------------------------------------------------|--|
| Oct 2012 - Sept. 2013                                               | 372                                             | 372 | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations        | This represents: RN2 (120 km) and RN6 (252 km). |     |                                                               |  |
| YEAR 4                                                              | Old                                             | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 376                                             | 372 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                 |     |                                                               |  |
| YEAR 5                                                              | Old                                             | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 372                                             | 372 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        | This represents: RN2 (120 km) and RN6 (252 km). |     |                                                               |  |
| Long Term Target                                                    | Old                                             | New | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A                                             | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |                                                 |     |                                                               |  |
| COMMENTS                                                            |                                                 |     |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |                                                 |     |                                                               |  |
|                                                                     |                                                 |     |                                                               |  |

## 3.20. Indicator RRP.20. Temporary employment generated in road construction

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Temporary employment generated in road construction                                                                                                                                                                                                                                             |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | (R-7)                                                                                                                                                                                                                                                                                           | Current Indicator Number | RRP.20                   | All Previous Indicator Numbers | RRP.18                                                           |
| Level                                                                                               | Process                                                                                                                                                                                                                                                                                         | Classification           | Cumulative               | Unit of Measure*               | Number                                                           |
| Detailed Definition                                                                                 | The number of people temporarily employed or contracted by MCA-contracted construction companies to work on construction of new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads (in Senegal, this includes the RN#2, RN#6 and the Ndioum and Kolda Bridges) |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                                                                                                       |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                              |                          | YES                      |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                 |                          | NO                       |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                              |                          | NO                       |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                            |                          | YES (RN2 / RN6)          |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the number of temporary jobs generated by the rehabilitation works on the RRP roads. It is a new indicator proposed on the list of common indicators. See "Guidance on Common Indicator, May 2012" MCC.                                                   |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | The indicator will be disaggregated by gender and by locality in order to better grasp the contribution of firms contracted by the Program in creating jobs and especially, those directed at women.                                                                                            |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                 |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Roads Project Directorate                                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Abdoulaye SYLLA                                                                                                                                                                                                                                                                                 | Phone                    | 77.740.66.72             | E-mail                         | <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | The contractor in charge of works and rehabilitation of the RN2, the Ndioum Bridge, the RN6 and the Kolda Bridge                                                                                                                                                                                |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Use employment forms of firms responsible for the construction of the different infrastructure lots. Each person (local and foreigner) is counted only once. Informal jobs generated by the construction works, are not taken into consideration.                                               |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                                                                  |                          |                          |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the Roads Project Directorate                                                                                                                                                                                                                                        |                          |                          |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                                                                                                                                                                       |                          |                          |                                |                                                                  |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                                                                                 |                          | Means of verification    |                                |                                                                  |
| Reports of Construction Firms                                                                       |                                                                                                                                                                                                                                                                                                 |                          | Monthly reports          |                                |                                                                  |



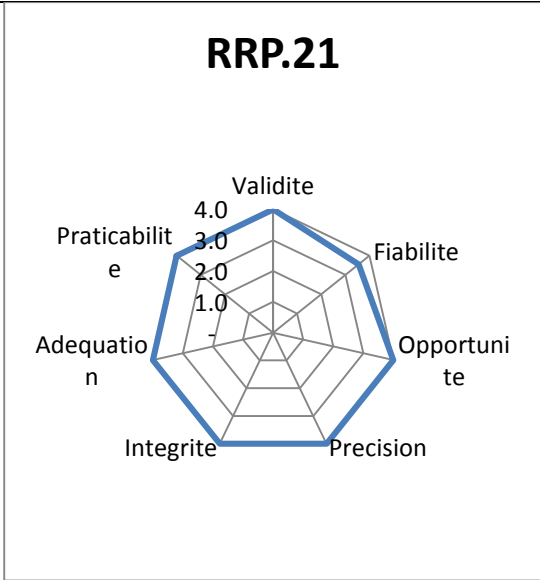
|                                                              |   |                           |                                                                                      |                                                               |                                                                                                                 |     |
|--------------------------------------------------------------|---|---------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----|
| Reports of Consultants in charge of Supervision              |   |                           |                                                                                      | Monthly reports                                               |                                                                                                                 |     |
| PMU-AGEROUTE Reports                                         |   |                           |                                                                                      | Monthly reports: Table of indicators                          |                                                                                                                 |     |
| Location of Data Storage                                     |   | Roads Project Directorate |                                                                                      |                                                               |                                                                                                                 |     |
| INDICATOR DATA QUALITY                                       |   |                           |                                                                                      |                                                               |                                                                                                                 |     |
| Date of Data Quality Review                                  |   |                           |                                                                                      | N/A                                                           |                                                                                                                 |     |
| Main findings of data quality review                         |   |                           | Average Score (out of 4)                                                             |                                                               | Recommendations                                                                                                 |     |
|                                                              |   |                           | 1. VALIDITY – Does the data clearly represent the desired results?                   |                                                               | 3,8                                                                                                             | N/A |
|                                                              |   |                           | 2. RELIABILITY – Are the data collection procedures stable and consistent over time? |                                                               | 3,4                                                                                                             | N/A |
|                                                              |   |                           | 3. TIMELINESS- Are the data current and frequently collected?                        |                                                               | 4,0                                                                                                             | N/A |
|                                                              |   |                           | 4. PRECISION – Does the data have an acceptable margin of error?                     |                                                               | 3,0                                                                                                             | N/A |
|                                                              |   |                           | 5. INTEGRITY- Is the data free from manipulation?                                    |                                                               | 3,8                                                                                                             | N/A |
|                                                              |   |                           | 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     |                                                               | 0,8                                                                                                             | N/A |
|                                                              |   |                           | 7. PRACTICABILITY- Is the data current and frequently collected?                     |                                                               | 3,7                                                                                                             | N/A |
| Overall assessment                                           |   |                           | 3,2                                                                                  |                                                               | <div><div>RRP.20</div></div> |     |
| Action taken in response to data quality review              |   |                           | Not Applicable                                                                       |                                                               |                                                                                                                 |     |
| Known data limitations and significance                      |   |                           | Not Applicable                                                                       |                                                               |                                                                                                                 |     |
| Actions taken to address data limitations                    |   |                           | Not Applicable                                                                       |                                                               |                                                                                                                 |     |
| INDICATOR BASELINE INFORMATION                               |   |                           |                                                                                      |                                                               |                                                                                                                 |     |
| Old Baseline                                                 | 0 | Old Baseline Year         | 2011-2012                                                                            | Source of old Baseline                                        | Roads Rehabilitation Project Work Plan                                                                          |     |
| New Baseline                                                 | 0 | New Baseline Year         | 2011-2012                                                                            | Source of New Baseline                                        | Roads Rehabilitation Project Work Plan                                                                          |     |
| Justification for Baseline Change (if any)                   |   |                           |                                                                                      |                                                               |                                                                                                                 |     |
| INDICATOR TARGET CALCULATIONS                                |   |                           |                                                                                      |                                                               |                                                                                                                 |     |
|                                                              |   | Target                    |                                                                                      |                                                               |                                                                                                                 |     |
| YEAR 1                                                       |   | Old                       | New                                                                                  | Justification for changes to targets or calculations (if any) |                                                                                                                 |     |
| Oct 2010 - Sept. 2011                                        |   | N/A                       | N/A                                                                                  |                                                               |                                                                                                                 |     |
| Explanation of assumptions and inputs to target calculations |   |                           |                                                                                      |                                                               |                                                                                                                 |     |
| YEAR 2                                                       |   | Old                       | New                                                                                  | Justification for changes to targets or calculations (if any) |                                                                                                                 |     |
| Oct 2011 - Sept. 2012                                        |   | 0                         | 0                                                                                    |                                                               |                                                                                                                 |     |
| Explanation of assumptions and inputs to target calculations |   |                           |                                                                                      |                                                               |                                                                                                                 |     |
| YEAR 3                                                       |   | Old                       | New                                                                                  |                                                               |                                                                                                                 |     |



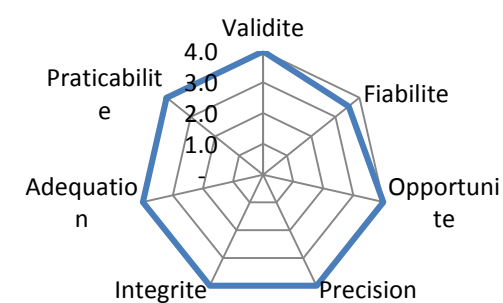
|                                                                     |     |     |                                                               |  |
|---------------------------------------------------------------------|-----|-----|---------------------------------------------------------------|--|
| Oct 2012 - Sept. 2013                                               | N/A | N/A | Justification for changes to targets or calculations (if any) |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 4                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | N/A | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 5                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | N/A | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| Long Term Target                                                    | Old | New | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| COMMENTS                                                            |     |     |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |     |     |                                                               |  |
|                                                                     |     |     |                                                               |  |

## 3.21. Indicator RRP.21. Kilometers of roads completed

| INDICATOR BASIC DETAILS                                                                             |                                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
| Indicator Name                                                                                      | Kilometers of roads completed                                                                                                                                                                                                                                                                                |                          |                          | Version                        | N° 03 / Sept 2015                                                |
| Common Indicator Number                                                                             | (R-8)                                                                                                                                                                                                                                                                                                        | Current Indicator Number | RRP.21                   | All Previous Indicator Numbers | RRP.19                                                           |
| Level                                                                                               | Output                                                                                                                                                                                                                                                                                                       | Classification           | Cumulative               | Unit of Measure*               | Kilometers                                                       |
| Detailed Definition                                                                                 | The length of roads in kilometers on which construction of new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads is complete (certificates handed over and approved)                                                                                                       |                          |                          |                                |                                                                  |
| Frequency of Reporting                                                                              | QUARTERLY                                                                                                                                                                                                                                                                                                    |                          | Reporting Period Covered | Compact Duration               |                                                                  |
| Disaggregations                                                                                     | By gender (YES/NO)                                                                                                                                                                                                                                                                                           | NO                       |                          |                                |                                                                  |
|                                                                                                     | By age (YES/NO)                                                                                                                                                                                                                                                                                              | NO                       |                          |                                |                                                                  |
|                                                                                                     | By income (YES/NO)                                                                                                                                                                                                                                                                                           | NO                       |                          |                                |                                                                  |
|                                                                                                     | By locality (YES/NO)                                                                                                                                                                                                                                                                                         | YES (RN2 / RN6)          |                          |                                |                                                                  |
| INDICATOR JUSTIFICATION DETAILS                                                                     |                                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Justification for Including Indicator                                                               | The indicator provides information on the length in kilometers on which the construction of RN#2 and RN#6 ends (certificates submitted and approved, provisional and final acceptance made). It is an indicator proposed on the list of common indicators. See "Guidance on Common Indicator, May 2012" MCC. |                          |                          |                                |                                                                  |
| How does the indicator link to the ERR?                                                             | Not Applicable                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| How does the indicator link to the BA?                                                              | Not Applicable                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| How does the indicator link to the impact evaluation?                                               | Not Applicable                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| Justification for Disaggregations                                                                   | Not Applicable                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| INDICATOR ACQUISITION PLAN                                                                          |                                                                                                                                                                                                                                                                                                              |                          |                          |                                |                                                                  |
| Entity Responsible for Collecting Data at MCA                                                       | Roads Project Directorate                                                                                                                                                                                                                                                                                    |                          |                          |                                |                                                                  |
| Point of Contact Responsible for Collecting the Data at MCA:                                        | Abdoulaye SYLLA                                                                                                                                                                                                                                                                                              | Phone                    | 77.740.66.72             | E-mail                         | <a href="mailto:asylla@mcasenegal.org">asylla@mcasenegal.org</a> |
| Entity Responsible for the collection of primary Data                                               | Engineers' Firms in charge of supervising RN2 and RN6 rehabilitation works                                                                                                                                                                                                                                   |                          |                          |                                |                                                                  |
| Detailed description of data collection methodology (including any calculations computed by source) | Counting the km of RN#2 and RN#6 roads provisionally or finally accepted                                                                                                                                                                                                                                     |                          |                          |                                |                                                                  |
| If survey data, verbatim question(s) posed to respondent                                            | Not Applicable                                                                                                                                                                                                                                                                                               |                          |                          |                                |                                                                  |
| Detailed description of how data is transmitted from source to MCA                                  | The data is transmitted by the PRR through the annual and quarterly reports. Besides, the MED meets the RRP to collect all the raw data required to calculate the indicator.                                                                                                                                 |                          |                          |                                |                                                                  |
| Frequency and timing of data acquisition                                                            | QUARTERLY                                                                                                                                                                                                                                                                                                    |                          |                          |                                |                                                                  |
| Names of verification sources                                                                       |                                                                                                                                                                                                                                                                                                              |                          |                          | Means of verification          |                                                                  |

|                                                                                                 |   |                                                                                |                                                                                      |                                                                                                               |                                        |
|-------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------|
| PRR quarterly and annual reports                                                                |   |                                                                                |                                                                                      | Table of indicators                                                                                           |                                        |
| PMU-AGEROUTE quarterly and annual reports                                                       |   |                                                                                |                                                                                      | Table of indicators                                                                                           |                                        |
| Monthly and quarterly reports of the engineer in charge of supervising the rehabilitation works |   |                                                                                |                                                                                      | Table of indicators                                                                                           |                                        |
| Location of Data Storage                                                                        |   | Roads Rehabilitation Project Directorate, PMU-AGEROUTE, Supervision Consultant |                                                                                      |                                                                                                               |                                        |
| INDICATOR DATA QUALITY                                                                          |   |                                                                                |                                                                                      |                                                                                                               |                                        |
| Date of Data Quality Review                                                                     |   |                                                                                |                                                                                      | N/A                                                                                                           |                                        |
| Main findings of data quality review                                                            |   |                                                                                | Average Score (out of 4)                                                             | Recommendations                                                                                               |                                        |
|                                                                                                 |   |                                                                                | 1. VALIDITY – Does the data clearly represent the desired results?                   | 4,0                                                                                                           | N/A                                    |
|                                                                                                 |   |                                                                                | 2. RELIABILITY – Are the data collection procedures stable and consistent over time? | 3,6                                                                                                           | N/A                                    |
|                                                                                                 |   |                                                                                | 3. TIMELINESS- Are the data current and frequently collected?                        | 4,0                                                                                                           | N/A                                    |
|                                                                                                 |   |                                                                                | 4. PRECISION – Does the data have an acceptable margin of error?                     | 4,0                                                                                                           | N/A                                    |
|                                                                                                 |   |                                                                                | 5. INTEGRITY- Is the data free from manipulation?                                    | 4,0                                                                                                           | N/A                                    |
|                                                                                                 |   |                                                                                | 6. APPROPRIATENESS – To what extent do the indicators fully portray the results?     | 4,0                                                                                                           | N/A                                    |
|                                                                                                 |   |                                                                                | 7. PRACTICABILITY- Is the data current and frequently collected?                     | 4,0                                                                                                           | N/A                                    |
| Overall assessment                                                                              |   |                                                                                | 3,9                                                                                  | <div><h3>RRP.21</h3></div> |                                        |
| Action taken in response to data quality review                                                 |   |                                                                                | Not Applicable                                                                       |                                                                                                               |                                        |
| Known data limitations and significance                                                         |   |                                                                                | Not Applicable                                                                       |                                                                                                               |                                        |
| Actions taken to address data limitations                                                       |   |                                                                                | Not Applicable                                                                       |                                                                                                               |                                        |
| INDICATOR BASELINE INFORMATION                                                                  |   |                                                                                |                                                                                      |                                                                                                               |                                        |
| Old Baseline                                                                                    | 0 | Old Baseline Year                                                              | 2010-2011                                                                            | Source of old Baseline                                                                                        | Roads Rehabilitation Project Work Plan |
| New Baseline                                                                                    | 0 | New Baseline Year                                                              | 2010-2011                                                                            | Source of New Baseline                                                                                        | Roads Rehabilitation Project Work Plan |
| Justification for Baseline Change (if any)                                                      |   | New Indicator                                                                  |                                                                                      |                                                                                                               |                                        |
| INDICATOR TARGET CALCULATIONS                                                                   |   |                                                                                |                                                                                      |                                                                                                               |                                        |
|                                                                                                 |   | Target                                                                         |                                                                                      |                                                                                                               |                                        |
| YEAR 1                                                                                          |   | Old                                                                            | New                                                                                  | Justification for changes to targets or calculations (if any)                                                 |                                        |
| Oct 2010 - Sept. 2011                                                                           |   | 0                                                                              | 0                                                                                    |                                                                                                               |                                        |

## RRP.21



|                                                                     |     |     |                                                               |  |
|---------------------------------------------------------------------|-----|-----|---------------------------------------------------------------|--|
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 2                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2011 - Sept. 2012                                               | 0   | 0   |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 3                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2012 - Sept. 2013                                               | 12  | 12  |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 4                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2013 - Sept. 2014                                               | 234 | 234 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| YEAR 5                                                              | Old | New | Justification for changes to targets or calculations (if any) |  |
| Oct 2014 - Sept. 2015                                               | 372 | 372 |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
|                                                                     |     |     |                                                               |  |
| Long Term Target                                                    | Old | New | Justification for changes to targets or calculations (if any) |  |
|                                                                     | N/A | N/A |                                                               |  |
| Explanation of assumptions and inputs to target calculations        |     |     |                                                               |  |
| COMMENTS                                                            |     |     |                                                               |  |
| SUPPLEMENTARY DOCUMENTATION FOR DETAILED CALCULATIONS (if required) |     |     |                                                               |  |
|                                                                     |     |     |                                                               |  |

TARGET VALUES OF MCA\_SENEGAL'S PERFORMANCES  
INDICATORS

## 4. Target values of MCA-Senegal's performance indicators

| Indicator                                                                                      | Units      | Indicator Classification Type | Baseline | Baseline Year | Year 1                 | Year 2                 | Year 3                 | Year 4                 | Year 5                 | Long Term (for outcome indicators) |
|------------------------------------------------------------------------------------------------|------------|-------------------------------|----------|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------------------|
|                                                                                                |            |                               |          |               | Oct. 2010 - Sept. 2011 | Oct. 2011 - Sept. 2012 | Oct. 2012 - Sept. 2013 | Oct. 2013 - Sept. 2014 | Oct. 2014 - Sept. 2015 |                                    |
| PROGRAM                                                                                        |            |                               |          |               |                        |                        |                        |                        |                        |                                    |
| Indicator P1. Rate of variation of beneficiaries' net income drawn from the Irrigation Project | Percentage | Level                         | 0        | 2011-12       |                        | 0                      |                        |                        | N/A                    | 35                                 |
| Indicator P.2. Change in vehicle operating costs per trip/kilometer for the RN2                | US\$       | Level                         | 0        | 2010          |                        | 0                      |                        |                        | 0.05                   | N/A                                |
| Indicator P3. Change in vehicle operating costs per trip/kilometer for the RN6                 | US\$       | Level                         | 0        | 2010          |                        | 0                      |                        |                        | 0.16                   | N/A                                |
| IRRIGATION AND WATER RESOURCES MANAGEMENT PROJECT                                              |            |                               |          |               |                        |                        |                        |                        |                        |                                    |
| Indicator IWRM.1. : Rice Paddy Production (Delta/ Ngalenka)                                    | Tons       | Level                         | 102 000  | 2010-11       | 102 000                | 107 000                | 107 000                | 107 000                | 111 000                | 277 000                            |
| Indicator IWRM.2. : Tomato production (Delta and Ngalenka)                                     | Tons       | Level                         | 12 700   | 2010-11       | 12 700                 | 14 200                 | 14 200                 | 14 200                 | 35 500                 | 115 000                            |
| Indicator IWRM.3. : Onion production (Delta and Ngalenka)                                      | Tons       | Level                         | 10 900   | 2010-11       | 10 900                 | 16 000                 | 16 000                 | 16 000                 | 40 000                 | 130 000                            |
| Indicator IWRM.4. : Cropping intensity (Delta)                                                 | Percentage | Level                         | 60%      | 2011-12       | 60%                    | 60%                    | 60%                    | 60%                    | 70%                    | 150%                               |
| Indicator IWRM.5. : Cropping intensity (Ngalenka)                                              | Percentage | Level                         | 20%      | 2011-12       | 20%                    | 20%                    | 0                      | 100%                   | 120%                   | 180%                               |
| Indicator IWRM.6. : Total area with improved irrigation infrastructure (Delta and Ngalenka)    | Ha         | Level                         | 34 848   | 2010-11       | 34 848                 | 36 541                 | 37 554                 | 38 381                 | 38 381                 | 42 721                             |
| Indicator IWRM.7. : Hectares under production across cropping seasons (Delta and Ngalenka)     | Ha         | Level                         | 21 400   | 2010-11       | 20 300                 | 20 300                 | 20 300                 | 20 300                 | 23 600                 | 56 600                             |
| Indicator IWRM.8. : Total flow measured (Q) at the Ronkh and G works (Delta)                   | Rate       | Level                         | 20       | 2010-11       | 20                     | 20                     | 20                     | 20                     | 65                     | N/A                                |

| Indicator                                                                                        | Units   | Indicator Classification Type | Baseline | Baseline Year | Year 1                 | Year 2                 | Year 3                 | Year 4                 | Year 5                 | Long Term (for outcome indicators) |
|--------------------------------------------------------------------------------------------------|---------|-------------------------------|----------|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------------------|
|                                                                                                  |         |                               |          |               | Oct. 2010 - Sept. 2011 | Oct. 2011 - Sept. 2012 | Oct. 2012 - Sept. 2013 | Oct. 2013 - Sept. 2014 | Oct. 2014 - Sept. 2015 |                                    |
| Indicator IWRM.9.: Number of hectares formalized (having a land allocation title and registered) | Ha      | Cumulative                    | 0        | 2010-11       | 0                      | 0                      | 0                      | 748                    | 3 440                  | N/A                                |
| Indicator IWRM.10. : Percentage of land disputes resolved                                        | %       | Cumulative                    | 0        | 2010-11       | 0                      | 0                      | 0                      | 30                     | 50                     | 50                                 |
| Indicator IWRM.11. : Length of rehabilitated hydraulic axes in the Delta                         | Km      | Cumulative                    | 0        | 2010-11       | 0                      | 0                      | 0                      | 40                     | 144,5                  | N/A                                |
| Indicator IWRM.12. : Length of the main drainage canal built in the Delta                        | Km      | Cumulative                    | 0        | 2010-11       | 0,0                    | 0,0                    | 0,0                    | 0,0                    | 40,8                   | N/A                                |
| Indicator IWRM.13. : Total length of canals and drains built in Ngalenka                         | Km      | Cumulative                    | 0        | 2010-11       | 0,0                    | 0                      | 25                     | 25                     | 25                     | N/A                                |
| Indicator IWRM.14. : Hectares under improved irrigation (with MCC support)                       | Ha      | Cumulative                    | 0        | 2011-12       |                        | 0                      | 0                      | 35 480                 | 35 480                 | 42 721                             |
| Indicator IWRM.15. : Stakeholders trained                                                        | Number  | Cumulative                    | 0        | 2010-11       | 0                      | 0                      | 200                    | 400                    | 600                    | N/A                                |
| Indicator IWRM.16. : Number of hectares of mapped land                                           | Ha      | Cumulative                    | 0        | 2010-11       | 41 862                 | 41 862                 | 41 862                 | 41 862                 | 41 862                 | N/A                                |
| Indicator IWRM.17. : Conflicts successfully mediated                                             | Number  | Cumulative                    | 0        | 2011-12       |                        | 0                      | 0                      | N/A                    | N/A                    | N/A                                |
| Indicator IWRM.18. : Parcels corrected or incorporated in land system                            | Parcels | Cumulative                    | 0        | 2011-12       |                        | 0                      | 5 694                  | 5 787                  | 5 787                  | N/A                                |
| Indicator IWRM.19. : Land rights formalized <sup>1</sup>                                         | Number  | Cumulative                    | 0        | 2011-12       |                        | 0                      | 0                      | 600                    | 2500                   | 2500                               |
| Indicator IWRM.20. : Value of signed irrigation feasibility and design contracts                 | US\$    | Cumulative                    | 0        | 2010-11       | 2 560 950              | 3 658 398              | 11 494 547             | 11 494 547             | 11 494 547             | N/A                                |

<sup>1</sup> This indicator refers to households, businesses and legal entities that have formalized land rights.



| Indicator                                                                                         | Units  | Indicator Classification Type | Baseline | Baseline Year | Year 1                 | Year 2                 | Year 3                 | Year 4                 | Year 5                 | Long Term (for outcome indicators) |
|---------------------------------------------------------------------------------------------------|--------|-------------------------------|----------|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------------------|
|                                                                                                   |        |                               |          |               | Oct. 2010 - Sept. 2011 | Oct. 2011 - Sept. 2012 | Oct. 2012 - Sept. 2013 | Oct. 2013 - Sept. 2014 | Oct. 2014 - Sept. 2015 |                                    |
| Indicator IWRM.21. : Percent disbursed of irrigation feasibility and design contracts             | %      | Level                         | 0        | 2010-11       | 12                     | 32                     | 54                     | 77                     | 100                    | N/A                                |
| Indicator IWRM.22. : Value disbursed of irrigation feasibility studies and design contracts       | US\$   | Cumulative                    | 0        | 2010-11       | 1 379 345              | 3 678 255              | 6 207 055              | 8 850 801              | 11 494 547             | N/A                                |
| Indicator IWRM.23. : Value of signed irrigation construction contracts                            | US\$   | Cumulative                    | 0        | 2010-11       | 0                      | 19 153 347             | 130 883 874            | 130 883 874            | 130 883 874            | N/A                                |
| Indicator IWRM.24. : Percent disbursed of irrigation construction contracts                       | %      | Level                         | 0        | 2010-11       | 0                      | 0                      | 37                     | 80                     | 100                    | N/A                                |
| Indicator IWRM.25. : Value disbursed for irrigation construction contracts                        | US\$   | Cumulative                    | 0        | 2010-11       | 0                      | 0                      | 48 427 033             | 104 707 099            | 130 883 874            | N/A                                |
| Indicator IWRM.26. : Number of training sessions on land tenure security tools                    | Number | Cumulative                    | 0        | 2010-11       | 0                      | 0                      | 30                     | 54                     | 72                     | N/A                                |
| Indicator IWRM.27. : Number of man/days of training on land tenure security tools                 | Number | Cumulative                    | 0        | 2011-12       |                        | 0                      | 2400                   | 4800                   | 6400                   | N/A                                |
| Indicator IWRM.28. : Number of participants in training modules on land tenure security tools     | Number | Cumulative                    | 0        | 2011-12       |                        | 0                      | 600                    | 1200                   | 1600                   | N/A                                |
| Indicator IWRM.29. : Temporary employment generated in irrigation                                 | Number | Cumulative                    | 0        | 2011-12       |                        | N/A                    | N/A                    | N/A                    | N/A                    | N/A                                |
| Indicator IWRM.30. : Number of land management committees and commissions set up or improved upon | Number | Cumulative                    | 0        | 2010-11       | 9                      | 9                      | 9                      | 9                      | 9                      | N/A                                |
| <b>ROADS REHABILITATION PROJECT</b>                                                               |        |                               |          |               |                        |                        |                        |                        |                        |                                    |
| Indicator PRR.1. : Average annual daily traffic (AADT) Richard-Toll – Ndium                       | Number | Level                         | 1 029    | 2011-12       |                        | 1 029                  |                        |                        | 1155                   | N/A                                |

| Indicator                                                                           | Units  | Indicator Classification Type | Baseline | Baseline Year | Year 1                 | Year 2                 | Year 3                 | Year 4                 | Year 5                 | Long Term (for outcome indicators) |
|-------------------------------------------------------------------------------------|--------|-------------------------------|----------|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------------------|
|                                                                                     |        |                               |          |               | Oct. 2010 - Sept. 2011 | Oct. 2011 - Sept. 2012 | Oct. 2012 - Sept. 2013 | Oct. 2013 - Sept. 2014 | Oct. 2014 - Sept. 2015 |                                    |
| Indicator PRR.2 : Average annual daily traffic (AADT) Ziguinchor – Tanaff           | Number | Level                         | 571      | 2007          |                        | 181                    |                        |                        | 963                    | N/A                                |
| Indicator PRR.3. : Average annual daily traffic (AADT) Tanaff – Kolda               | Number | Level                         | 301      | 2007          |                        | 23                     |                        |                        | 562                    | N/A                                |
| Indicator PRR.4. : Average annual daily traffic (AADT) Kolda – Kounkané             | Number | Level                         | 798      | 2007          |                        | 716                    |                        |                        | 1426                   | N/A                                |
| Indicator PRR.5. : Rate of change in the duration of travel time on RN2             | %      | Level                         | 0        | 2011-12       |                        | 0                      |                        |                        | -15                    | -15                                |
| Indicator PRR.6. : Rate of change in the duration of travel time on RN6             | %      | Level                         | 0        | 2011-12       |                        | 0                      |                        |                        | -50                    | -50                                |
| Indicator PRR.7. : Roughness (RN2)                                                  | m/km   | Level                         | 3,2      | 2011-12       |                        | 3,2                    |                        |                        | 2,4                    | N/A                                |
| Indicator PRR.8 : Roughness (RN6)                                                   | m/km   | Level                         | 13,0     | 2011-12       |                        | 13,0                   |                        |                        | 2,5                    | N/A                                |
| Indicator RRP.9. : Road Traffic Fatalities                                          | Number | Level                         | 43       | 2013-14       |                        |                        |                        | N/A                    | N/A                    | N/A                                |
| Indicator PRR.10 : Kilometers of rehabilitated roads on RN2                         | Km     | Cumulative                    | 0        | 2010-11       | 0                      | 0                      | 0                      | 0                      | 120                    | N/A                                |
| Indicator PRR.11 : Kilometers of rehabilitated roads on RN6                         | Km     | Cumulative                    | 0        | 2010-11       | 0                      | 0                      | 0                      | 0                      | 252                    | N/A                                |
| Indicator RRP.12. : Kilometers of roads under design                                | Km     | Cumulative                    | 0        | 2010-11       | 406                    | 406                    | 406                    | 406                    | 406                    | N/A                                |
| Indicator RRP.13. : Value of signed road feasibility and design contracts           | US\$   | Cumulative                    | 0        | 2010-11       | 2 345 311              | 2 345 311              | 9 794 690              | 9 794 690              | 9 794 690              | N/A                                |
| Indicator RRP.14. : Percent disbursed of road feasibility and design contracts      | %      | Level                         | 0        | 2010-11       | 9                      | 21                     | 52                     | 81                     | 100                    | N/A                                |
| Indicator RRP.15. : Value disbursed of signed road feasibility and design contracts | US\$   | Cumulative                    | 0        | 2014-15       | 881 522                | 2 056 884              | 5 093 238              | 7 933 698              | 9 794 690              | N/A                                |

| Indicator                                                               | Units  | Indicator Classification Type | Baseline | Baseline Year | Year 1                 | Year 2                 | Year 3                 | Year 4                 | Year 5                 | Long Term (for outcome indicators) |
|-------------------------------------------------------------------------|--------|-------------------------------|----------|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------------------|
|                                                                         |        |                               |          |               | Oct. 2010 - Sept. 2011 | Oct. 2011 - Sept. 2012 | Oct. 2012 - Sept. 2013 | Oct. 2013 - Sept. 2014 | Oct. 2014 - Sept. 2015 |                                    |
| Indicator RRP.16. : Value of signed road construction contracts         | US\$   | Cumulative                    | 0        | 2010-11       | 0                      | 0                      | 258 924 397            | 258 924 397            | 258 924 397            | N/A                                |
| Indicator RRP.17.: Percent disbursed of road construction contracts     | %      | Level                         | 0        | 2010-11       | 0                      | 0                      | 22                     | 66                     | 100                    | N/A                                |
| Indicator RRP.18. : Value disbursed of road construction contracts      | US\$   | Cumulative                    | 0        | 2014-15       | 0                      | 0                      | 56 963 367             | 170 890 102            | 258 924 397            | N/A                                |
| Indicator RRP.19. : Kilometers of roads under works contracts           | Km     | Cumulative                    | 0        | 2010-11       | 0                      | 0                      | 372                    | 372                    | 372                    | N/A                                |
| Indicator RRP.20. : Temporary employment generated in road construction | Number | Cumulative                    | 0        | 2011-12       |                        | 0                      | N/A                    | N/A                    | N/A                    | N/A                                |
| Indicator RRP.21. : Kilometers of roads completed                       | Km     | Cumulative                    | 0        | 2010-11       | 0                      | 0                      | 12                     | 234                    | 372                    | N/A                                |