



**Monitoring and Evaluation Plan  
of the Niger Compact between  
the United States of America, acting through the  
Millennium Challenge Corporation and the  
Republic of Niger**

**March 2018**

**Version 1**

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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 July 29, 2016 between the United States of America, acting through the Millennium Challenge Corporation, a United States Government corporation (MCC), and the Republic of Niger acting through its government;
- will support provisions described in the Compact; and
- is governed by and follows 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.

## LIST OF ACRONYMS

BA	Beneficiary Analysis
CA	Constraints Analysis
CAIMA	Supply Center for Agricultural Inputs and Materials ( <i>Centrale d'Approvisionnement en Intrants et Matériels Agricoles</i> )
CCR	Compact Completion Report
COFOCOM	Communal Land Commissions ( <i>Commissions Foncières Communales</i> )
COMEN	Technical Committee of Fertilizers of Niger ( <i>Comité Technique des Engrais du Niger</i> )
CRA	Climate-Resilient Agriculture
CRC	Climate Resilient Communities
CT	Current Transformer
DQR	Data Quality Review
ERR	Economic Rate of Return
ESP	Environmental and Social Performance
GoN	Government of the Republic of Niger
GSI	Gender and Social Inclusion
ICRIP	Integrated Climate-Resilient Investment Plan
ITT	Indicator Tracking Table
iWUA	Irrigation Water User Associations
M&E	Monitoring and Evaluation
MCA	Millennium Challenge Account
MCA-N	Millennium Challenge Account Niger
MCC	Millennium Challenge Corporation
MCC MIS	MCC Management Information System
NGO	Non-Governmental Organization
NPV	Net Present Value
OMEN	Observatory of the Fertilizer Market in Niger ( <i>Observatoire du Marché des Engrais au Niger</i> )
ONAHA	Office National des Aménagements Hydro Agricoles ( <i>National Office for Irrigation Schemes</i> )
PIU	Project Implementation Unit
POC	Point of Contact
PRAPS	Regional Sahel Pastoralism Support Activity ( <i>Projet Régional d'Appui au Pastoralisme au Sahel/Niger</i> )
PV	Present Value
QDRP	Quarterly Disbursement Request Package
UNOPS	United Nations Office for Project Services

# COMPACT AND OBJECTIVE OVERVIEW

## Introduction

This Monitoring and Evaluation Plan serves as a guide for program implementation and management, so that the Millennium Challenge Account Niger (MCA-N) management staff, Board of Directors, Stakeholders' Committee, Implementing Entities, implementers, beneficiaries, and other stakeholders understand the progress being made toward the achievement of objectives and results, and are aware of variances between targets and actual achievement during implementation.

This Monitoring and Evaluation Plan is a management tool that provides the following functions:

- *Describes the program logic and expected results.* Gives details about what impacts the Compact and each of its components are expected to produce in economic, social inclusion, and gender-related outcomes and how these effects will be achieved.
- *Sets out data and reporting requirements and quality control procedures.* Defines indicators, identifies data sources, and frequency of reporting in order to define how performance and results will be measured. Outlines the flow of data and information from the project sites through to the various stakeholders both for public consumption and to inform decision-making. It also describes the mechanisms that assure the quality, reliability and accuracy of program performance information and data.
- *Establishes a monitoring framework.* Establishes a process to alert implementers, MCA-N management, government officials, stakeholders and MCC to whether or not the program is achieving its major milestones during program implementation and provides the basis for making program adjustments.
- *Describes the evaluation plan.* Explains in detail how MCA-N and MCC will evaluate the Compact interventions to determine whether they are achieving their intended results and expected impacts over time.
- *Includes roles and responsibilities.* Describes in detail what the M&E staff are responsible for and outlines any M&E requirements that MCA-N and Implementing Entities must meet in order to receive disbursements.

# Program Logic

## Compact Background

Niger is a landlocked country located in the western region of Africa, on the southern edge of the Sahara Desert. It has a population of approximately 20 million<sup>1</sup> people covering 489,200 square miles and borders Libya and Algeria to the north, Chad to the east, Mali to the west, Burkina Faso to the southwest, and Benin and Nigeria to the south.

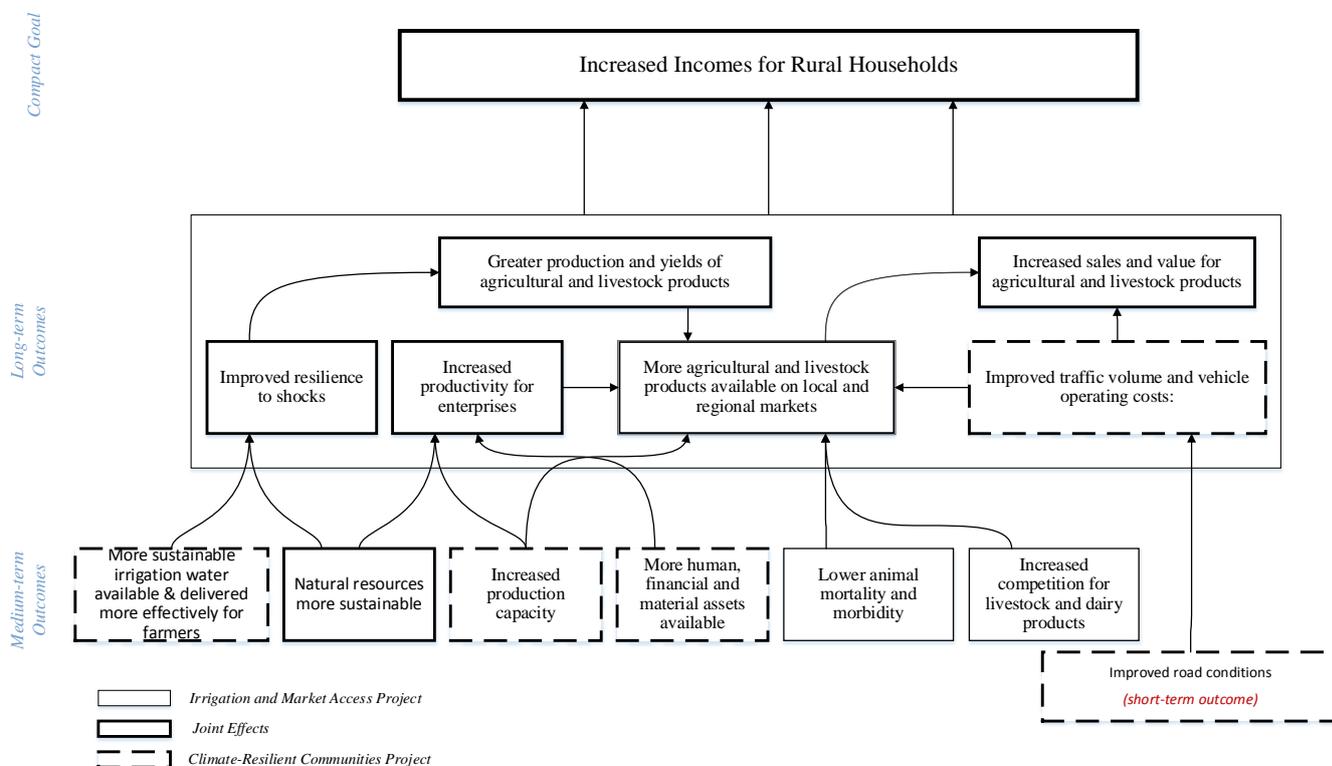
MCC’s Board of Directors selected Niger as eligible to develop a Millennium Challenge Compact in December 2012. The Compact was signed on July 29, 2016 and officially entered into force on January 26, 2018.

Before the Compact was signed, in 2015, Niger completed a \$16.9 million MCC threshold program focusing on strengthening girls’ education, reducing public corruption, streamlining business creation procedures and improving rights and access to land. Results from the Niger threshold program can be found on MCC’s website in the evaluation catalog.

## Compact Logic

The objective of the Program is to increase rural incomes by improving the sustainable productive use of natural resources for agricultural production and improving trade and market access for agricultural products. *Figure 1* displays the overall Compact logic.

**Figure 1: Niger Compact-Wide Logic**



<sup>1</sup> World Bank, Country at Glance, Niger 2015: <http://www.worldbank.org/en/country/niger>

## **Project Description and Logic**

The Compact will directly address the underlying causes of two binding constraints to economic growth and investment in Niger: lack of access to water for productive uses, which inhibits agricultural productivity and household food security; and physical access and institutional barriers to trade, which create high transaction costs and lower sales volume. The Program seeks to raise rural incomes by increasing agricultural and livestock production by boosting production through increases in areas under cultivation and improvements in yields. The Program will achieve this through a combination of policy reforms, infrastructure investments, access to finance and services for smallholder producers, facilitation of partnerships and improvements to agricultural and livestock production and market platforms. The Program consists of two Projects: (1) Irrigation and Market Access Project and (2) Climate-Resilient Communities Project (CRC). Each project and its expected results are described below.

### ***Irrigation and Market Access Project Description and Logic***

Irrigated agriculture plays a fundamental role in Niger's strategy to reduce poverty and promote economic growth. However, while irrigation investments offer opportunities to secure and expand agricultural production in an increasingly drought-prone country, realization of this promise is constrained by several factors, notably: (i) lack of financing for key irrigation and market access infrastructure ; (ii) limited capacity and ill-defined roles for water delivery and infrastructure operations and maintenance; (iii) land tenure insecurity; (iv) perceived negative impacts on current livelihoods and ecosystem management; and (v) barriers to small farmer commercialization, including poor productivity, weak organizational structures to achieve competitive prices, high costs of commercial financing, and elevated costs associated with transport of goods to markets. All of these issues are further exacerbated by high levels of illiteracy and strong reliance on oral transactions.

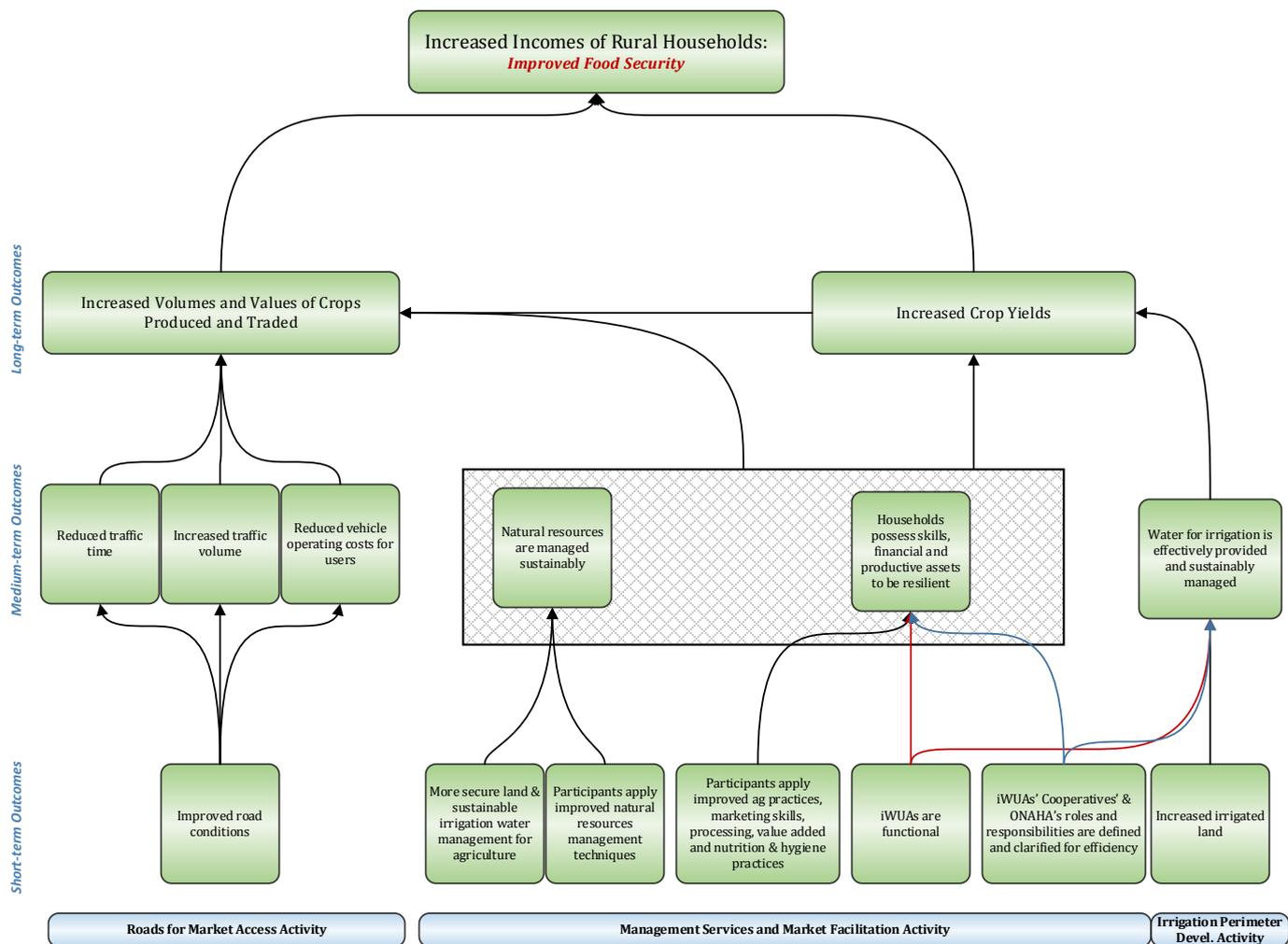
This Project is developed under the theory of change that, investing in large-scale irrigation infrastructure will result in increased water availability for project beneficiaries during the wet and dry seasons. Also, through technical training in water management, savings, improved production techniques, marketing, and other complementary skills, women and men in the irrigated perimeters will be able to utilize the water more productively. In addition, by investing in roads that are linked to the irrigation perimeters, project beneficiaries will be able to more effectively access inputs, services and markets and sell their increased production. These investments in infrastructure, human capacity, and market and performance-oriented management systems will enable Niger's farmers to move toward more commercialized irrigated agriculture as the foundation for sustained growth in rural incomes.

The Irrigation and Market Access Project's Objective is to increase rural incomes through improvements in agricultural productivity and increases in sales resulting from modernized irrigated agriculture and flood management systems with sufficient trade and market access. Given the increasing frequency of drought in Niger, investing in large-scale irrigation infrastructure in the Dosso and Tahoua regions will result in increased water availability for Project recipients during the wet and dry seasons. Through technical training in water and

natural resource management, savings, improved production techniques, marketing, literacy and numeracy, nutrition, sanitation and hygiene education and other complementary skills, women and men in the irrigated perimeters will be able to utilize the water more productively and to minimize health risks associated with use of water points for both agriculture and livestock and domestic and household purposes. In addition, by investing in roads that are linked to the irrigation perimeters, project beneficiaries will be able to more effectively access inputs, services and markets and sell their increased production. These investments in infrastructure, human capacity and market and performance-oriented management systems will enable Niger’s farmers to move toward more commercialized irrigated agriculture as the foundation for sustained growth in rural incomes.

The diagram below illustrates and describes the expected causal relationships for the Irrigation and Market Access Project and synthesizes expected outcomes of that Project.

**Figure 2: Irrigation and Market Access Project Logic**



The assumptions underpinning the logic are the following:

- Irrigation Water User Associations (“iWUAs”) have been established, at an early stage, and have management capacity, autonomy and sufficient authority to operate;
- Sufficient support by either the project or other organizations is provided to the new iWUAs for them to operate and maintain the irrigation infrastructure properly;
- Fertilizer reform will allow more farmers to access quality, affordable fertilizer;
- Fertilizers will be delivered on a timely fashion to meet farmers’ demand;
- More secure land tenure and improved land governance will reduce land conflicts and increase agricultural investment;
- Vulnerable populations will benefit from the Irrigation and Market Access Project;
- The project-improved roads will be properly maintained including through the adoption of performance-based maintenance contracts and community maintenance plans;
- Farmers are able and willing to pay the cost of sustainable irrigation water supply; and this will not displace other income-generating activities they have, or will more than make up for them
- Farmers are organized and will obtain better prices for inputs and commodities produced;
- The Project’s Ramsar protection and management component will be implemented and will ensure the protection of the ecosystem services that underpin the productivity of the intervention areas, and enhance climate resiliency; and
- Irrigation water will be managed according to the new National Water Resources Plan.

The Irrigation and Market Access Project consists of the following Activities:

a. *Irrigation Perimeter Development Activity*

The Irrigation Perimeter Development Activity aims to rehabilitate the Konni irrigation system and develop new irrigated perimeters in the Dosso-Gaya area. Specifically, the Compact will support the following:

- For Konni: it consists of the rehabilitation of the irrigation system of two cascading surface runoff dams, a downstream collection reservoir and supply channel and the approximately 2,452 hectare perimeter in the Maggia Valley, including soil conservation in the catchment to stem the siltation problem, and repairs and rehabilitation of the irrigation system to reduce water losses and improve efficiency.
- For the Dosso-Gaya area, the works will consist of a development of the Ouna-Kouanza (zones 4, 5, 6 and 7) – about 1,754 ha and Sia (lower terrace) perimeters – about 819 ha, the construction of flood protection dikes and access roads, the layout and levelling of parcels (with bunds separating them), water control gates and pumps for intakes and/or drainage structures to enable full water control during the river’s high season, and additionally for Sia, the pumping and water distribution networks for mixed crop irrigated agriculture.

b. *Management Services and Market Facilitation Activity*

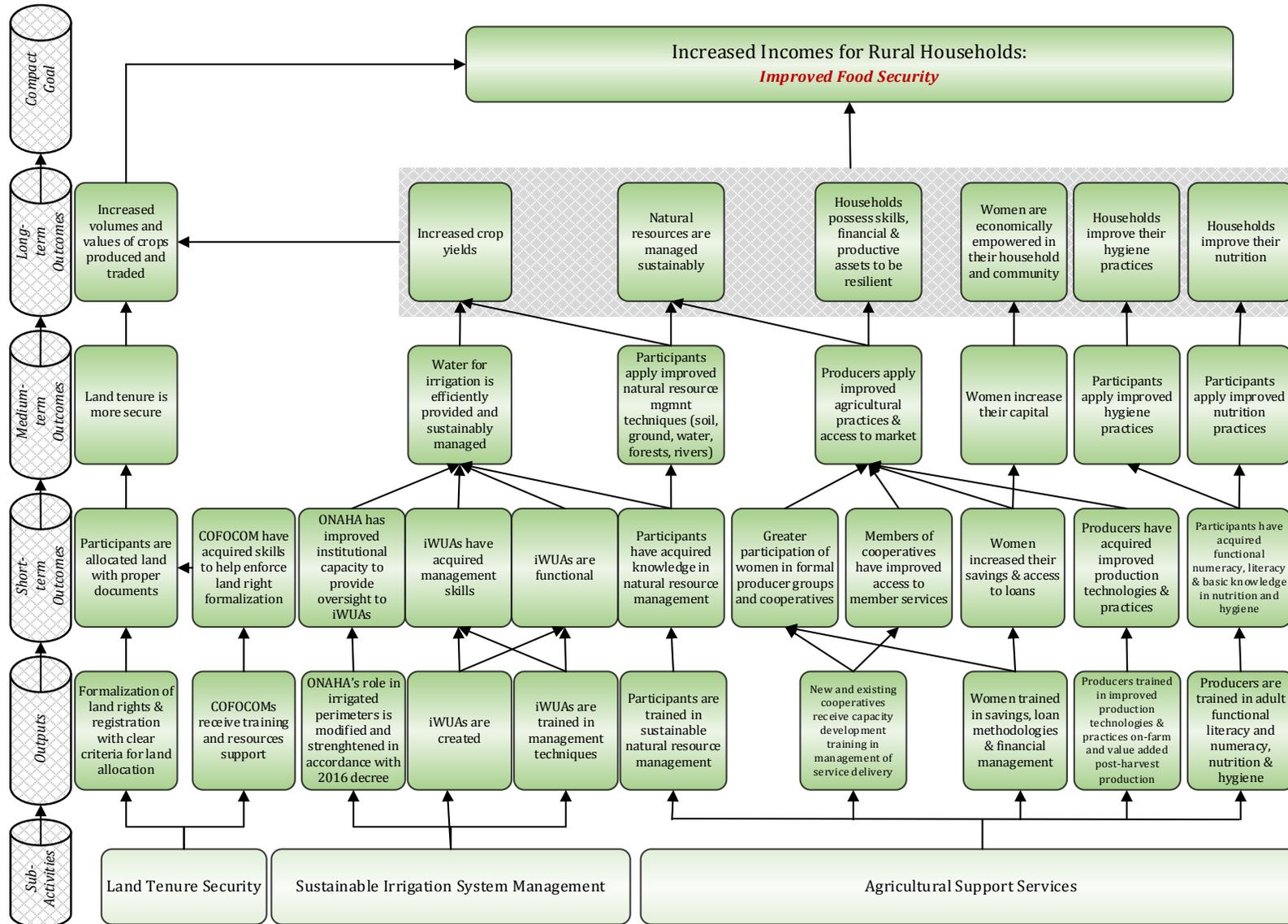
The Compact will establish a suite of institutional and management support activities designed to ensure the achievement of the Project Objective in the irrigated perimeters

targeted by the Irrigation Perimeter Development Activity. The Management Services and Market Facilitation Activity will be implemented using a community-based approach to provide services that address the entire production chain, including the supply of agricultural inputs, the yields obtained by farming, the marketing of produce and the sustainable use of natural resources. Specifically, the Compact will support:

- Activities targeting land tenure security and mitigation of the risk of land conflict in Project intervention zones, by (1) establishing and implementing a framework for land allocation, based on (i) development of local land tenure profiles, (ii) participatory development of core local land allocation standards and of a transparent process for undertaking the land allocation, and (iii) completing the land allocation and formalizing land property rights; and (2) building capacity for local land governance including (i) reinforcement of local institutional capacity for land tenure and land conflict management, and (ii) integrated local land use planning.
- The establishment and empowerment of single-purpose, self-governing, self-financing non-profit iWUAs to undertake irrigation management functions in the Program intervention areas, including preparatory studies, technical support and capacity building for the newly formed iWUAs;
- Strengthening the capacity of beneficiaries, through new or existing savings groups and existing producer groups including women's groups and youth groups, to: (1) develop cropping calendars that help grow commodities to market demand and pricing signals; (2) participate in savings groups to improve business skills and save capital to operationalize their cropping calendars; (3) increase use of appropriate fertilizers and improved seeds; (4) monitor and adapt to changing conditions in the environment to maximize benefits from ecosystem services; (5) participate in producer organizations to improve their negotiation position at the farm gate and in the market place; (6) invest in infrastructure to store, process and add value to their production; and (7) increase sales of commodities and processed products.

The diagram below illustrates and describes the expected causal relationships in more detail for the Management Services and Market Facilitation Activity and synthesizes expected outcomes of that Activity.

**Figure 3: Management Services and Market Facilitation Program Logic**



The assumptions underpinning the logic are the following:

- Sufficient water is available for irrigating crops either from the irrigation infrastructure investments by the Compact or from other sources
- iWUAs have been established at an early stage, and have management capacity, autonomy and sufficient authority to operate;
- Sufficient support by either the project or other organizations is provided to the new iWUAs for them to operate and maintain the irrigation infrastructure properly;
- Producer groups and cooperatives access matching grants for productive activities;
- Project has won support of mayors and chiefs;
- Producer groups, cooperatives, and savings groups put in place strong internal controls;
- Producers are able to improve their business skills and to take better advantage of market opportunities;
- ONAHA is committed to implementing proposed reforms and practices;
- The reason that farmers do not currently apply improved natural resource techniques is lack of knowledge, lack of financial resources, and lack sense that they can overcome climate risks;
- The project can overcome the challenges facing youth and find a way to effectively organize them;
- The reason that farmers do not currently apply improved skills in entrepreneurial and financial, management, nutrition and hygiene choices is lack of knowledge; and
- More secure land tenure and improved land governance will reduce land conflicts and increase agricultural investment.

*c. Roads for Market Access Activity*

The Roads Activity aims to reduce trade barriers and improve physical market access through targeted improvements of the road network serving the Dosso-Gaya perimeters and linking them to the rest of the country. To do so, the Activity will consist of the following sub-activities:

- **RN7 Road**

This Sub-Activity will consist of complete rehabilitation, upgrade and paving of approximately 83 kilometers of the main north-south international trunk road (“RN7”) linking the southern region of Niger to the rest of the country. Specifically, under this Sub-Activity, the Program will support:

- road structure and wearing course strengthening, road width restoration, road safety improvements, replacement or upgrading of associated structures, such as bridges and culverts, and are inclusive of any environmental, social, health and safety measures required for construction; and
- studies, construction supervision, environmental and social mitigation and enhancement activities, livelihoods restoration and resettlement activities

- RN35 Road

This Sub-Activity will support the rehabilitation and gravel upgrade of approximately 187 km of the RN35 road directly serving the Dosso-Gaya perimeters (“RN35”). Specifically, it will support:

- road structure and wearing course strengthening, road width restoration, road safety improvements, replacement or upgrading of associated structures, such as bridges and culverts, and are inclusive of any environmental, social, health and safety measures required for construction; and
- studies, construction supervision, environmental and social mitigation and enhancement activities, livelihoods restoration and resettlement activities

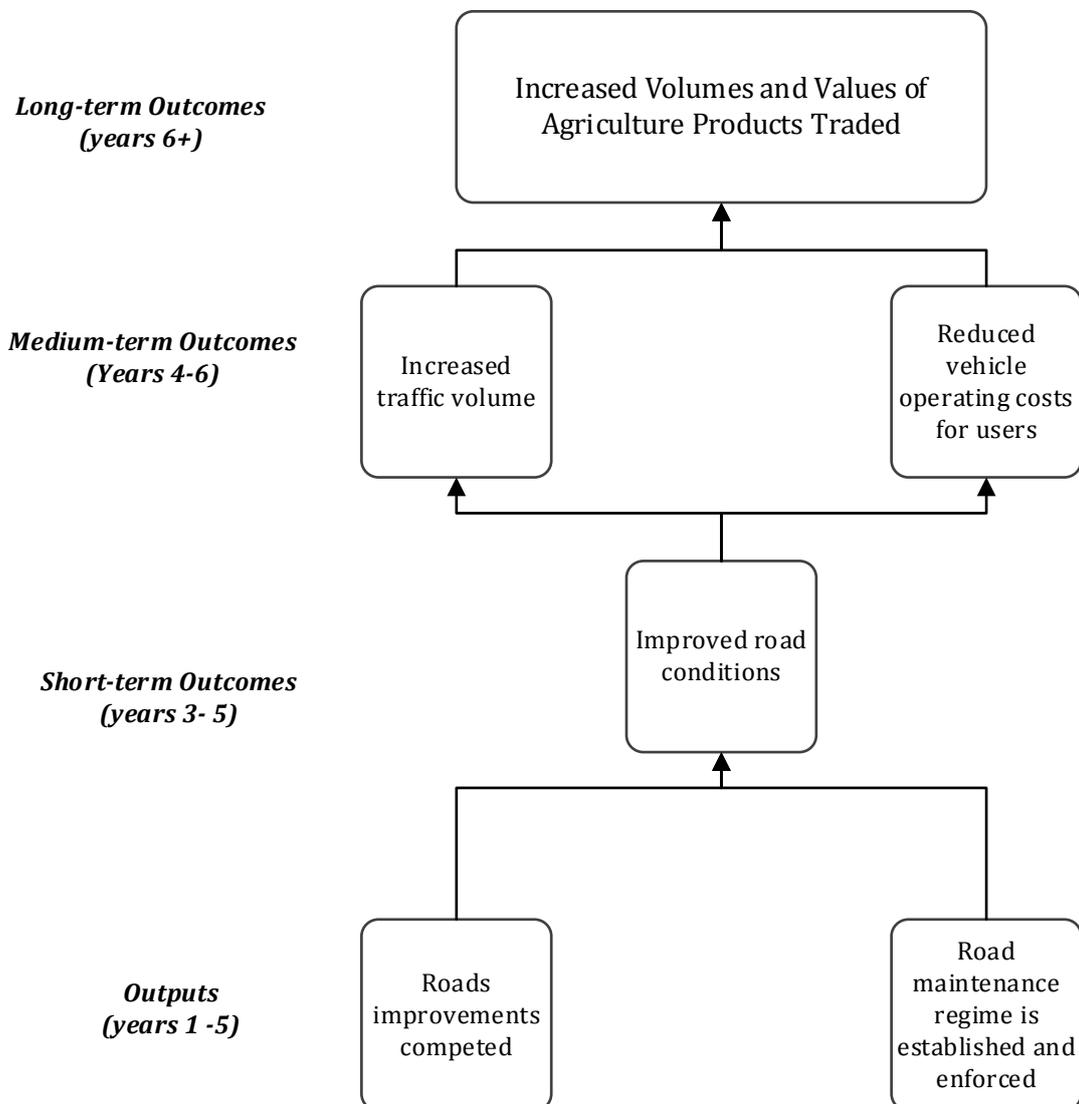
- Sambera Rural Road

This Sub-Activity will support the rehabilitation and gravel upgrade of approximately 37 km of rural road that links the Ouna-Kouanza and Sia irrigation perimeters with the RN7 (“Sambera Rural Road”). More specifically, the Sambera Rural Road Sub-Activity will consist of:

- road structure and wearing course strengthening, road width restoration, road safety improvements, replacement or upgrading of associated structures, such as bridges and culverts, and are inclusive of any environmental, social, health and safety measures required for construction; and
- studies, construction supervision, environmental and social mitigation and enhancement activities, livelihoods restoration and resettlement activities.

The diagram below illustrates and describes the expected causal relationships for the Roads for Market Access Activity and synthesizes expected outcomes of that Activity.

**Figure 4: Roads for Market Access Activity Logic**



*Key Assumptions*

- Improved road conditions and reduced vehicle operating costs will result in increased competition and reduced transport costs for agricultural products produced in the MCA-improved irrigation perimeters.
- Improved road conditions will reduce the amount of damaged produce, leading to higher values for products delivered to market.
- The rehabilitated roads are key to linking the irrigation perimeters to markets
- More vehicles will use the improved roads to serve farmers’ input and marketing needs and access to social and other services.
- The performance-based road management and maintenance contracts are fully implemented.
- Reforms aimed at improved management and sustainable funding of road maintenance in Niger are implemented.

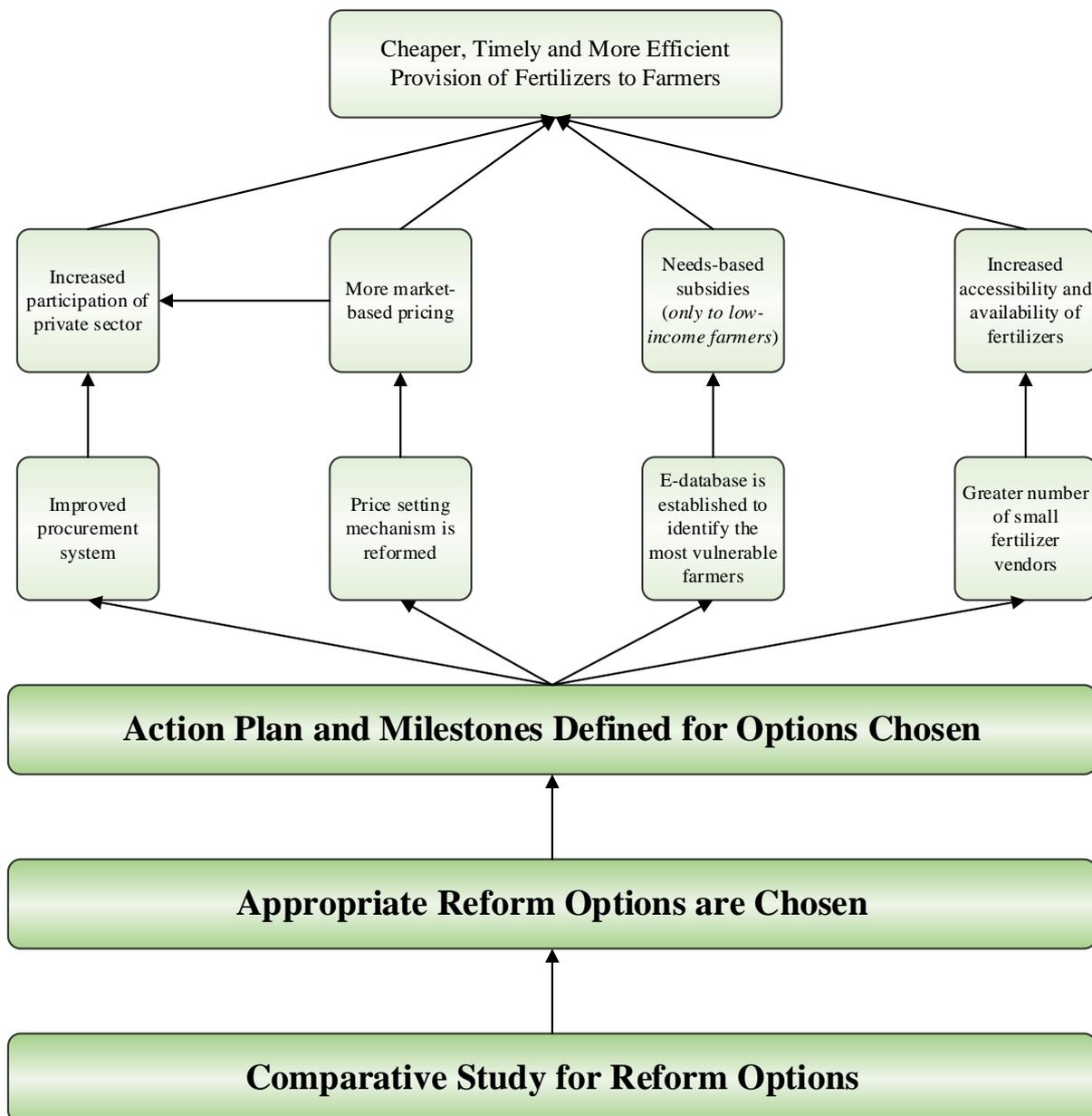
#### d. *Policy Reform Activity*

The Policy Reform Activity aims to promote several major policy reforms directly linked to the success and sustainability of the Program. Specifically, the Activity will support:

- the development and implementation of a new National Water Resources Plan covering a minimum of ten (10) years, including a detailed assessment of water resources using remote sensing technology and detailed hydrogeological studies to improve sustainable management of groundwater resources;
- the development and implementation of natural resource and land use management plans for the protected areas and nearby communities affected by the Irrigation and Market Access Project in the Dosso Region, including (i) ecological assessments and land use studies necessary to identify and promote conservation and natural resource planning objectives; (ii) the development and implementation of management plans for Dosso Partial Faunal Reserve and Ramsar Convention site Zone Humide du Moyen Niger II; and (iii) support for the development of community land use plans within and adjacent to the protected areas;
- the reform of the fertilizer distribution market to allow greater competition and private sector participation and to enable broad availability and affordability of fertilizers, especially to women and small farmers. The sub-activity will assist in the development of an action plan to: (1) open the fertilizer procurement and distribution process to more private firms; (2) adjust fertilizer pricing to be aligned with regional markets; and (3) adopt and implement a fertilizer subsidy exit strategy that leaves in place a focused program to meet crisis needs of the most marginalized;
- the development of the statistical capacities of the National Institute of Statistics and key ministries (Water and Sanitation, Agriculture and Livestock, and Environment) to (1) generate relevant, timely, gender-responsive and accurate productive sector data, including data disaggregated by income level, gender and age, to the maximum extent practicable; (2) analyze and inform the impacts of government policy related to growth strategies, investment, agricultural trade, natural resources and services; (3) measure economic growth and poverty reduction; and (4) the development of the Government's monitoring and evaluation capacity

Specific logic diagrams do not exist for three of the four sub-activities above because they have been included in the Compact to ensure sustainability of the results from the other activities. The diagram below illustrates and describes the expected causal relationships specifically for the Fertilizer Reform Sub-Activity of the Policy Reform Activity and synthesizes expected outcomes of that sub-activity.

**Figure 5: Fertilizer Reform Logic**



The assumptions underpinning the logic are the following:

- The GoN adopts and enforces reformed fertilizer policies;
- Private sector will respond to reformed pricing mechanisms and improved procurement policies with greater participation;

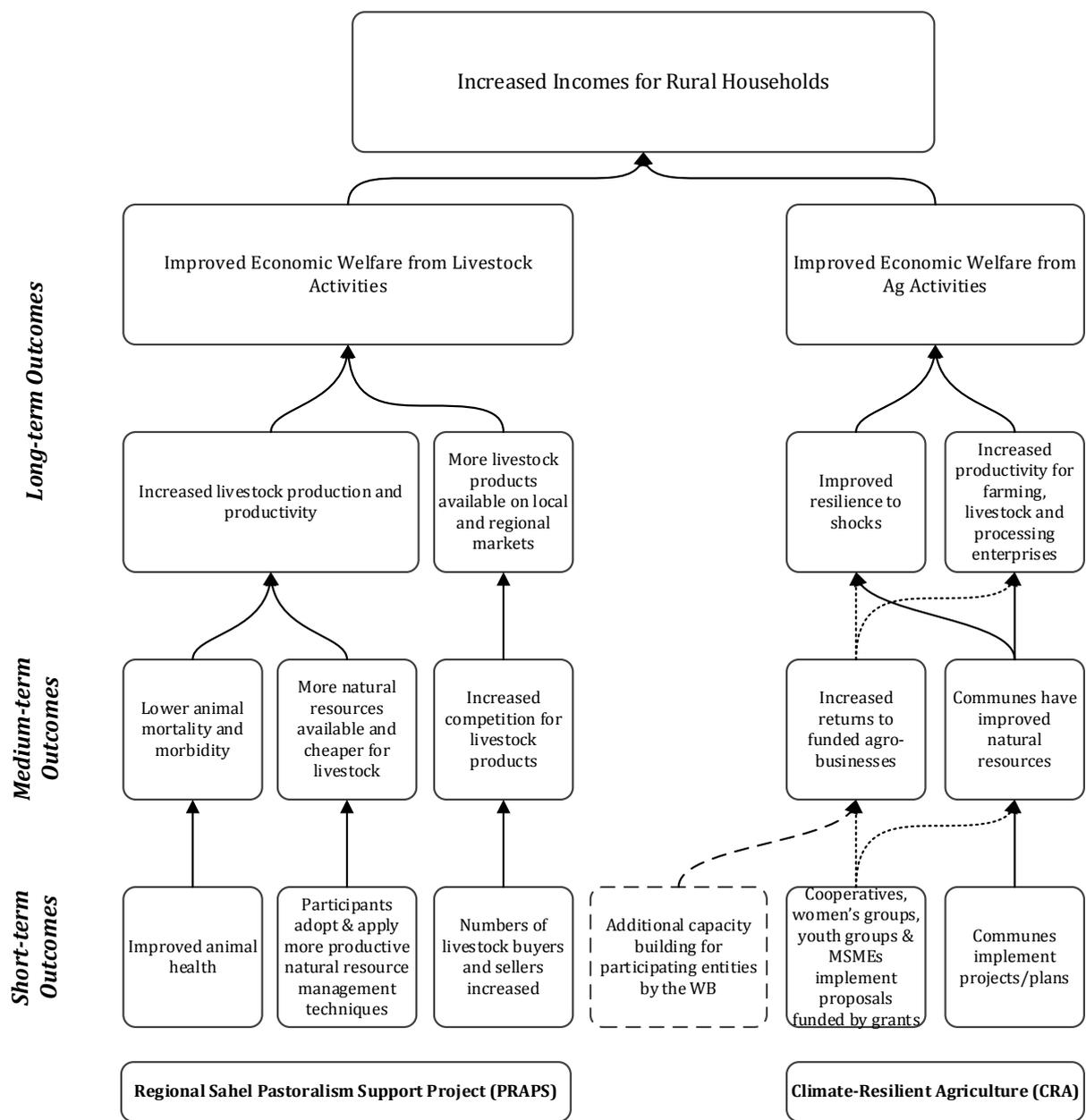
- The pricing reform will sufficiently offset the high cost of transport and logistics to make last mile fertilizer distribution profitable for firms;
- There will be a more diversified and competitive sellers on the market;
- Lack of competition within CAIMA is the root cause of the high prices, low quality and untimely delivery of fertilizers to farmers; and
- There will be high enough demand to meet the increased fertilizer supply.

***Climate-Resilient Communities Project Description and Logic***

The Climate-Resilient Communities Project is designed to increase incomes for small-scale agricultural- and livestock-dependent families in Eligible Communes and Livestock Corridors in rural Niger by improving crop and livestock productivity, sustaining natural resources critical to production and increasing market sales of targeted commodities. Unless otherwise modified by the Parties, the Eligible Communes include Tessa, Mokko, TomboKoirey I, TomboKoirey II and KarguiBangou in Dosso Department; Dan Goulbi and SabonMachi in Dakoro Department; Chadakori and GuidanRoundji in GuidanRoundji Department; Konni and Tsernaoua in BirniN’Konni Department; Malbaza and Doguérawa in Malbaza Department; and Kouré, Liboré and N’Dounga in the Kollo Department.

The diagram below illustrates and describes the expected causal relationships for the Climate-Resilient Communities Project and synthesizes expected outcomes of that Project.

**Figure 6: Climate-Resilient Communities Project Logic**



The Climate-Resilient Communities Project consists of the following Activities:

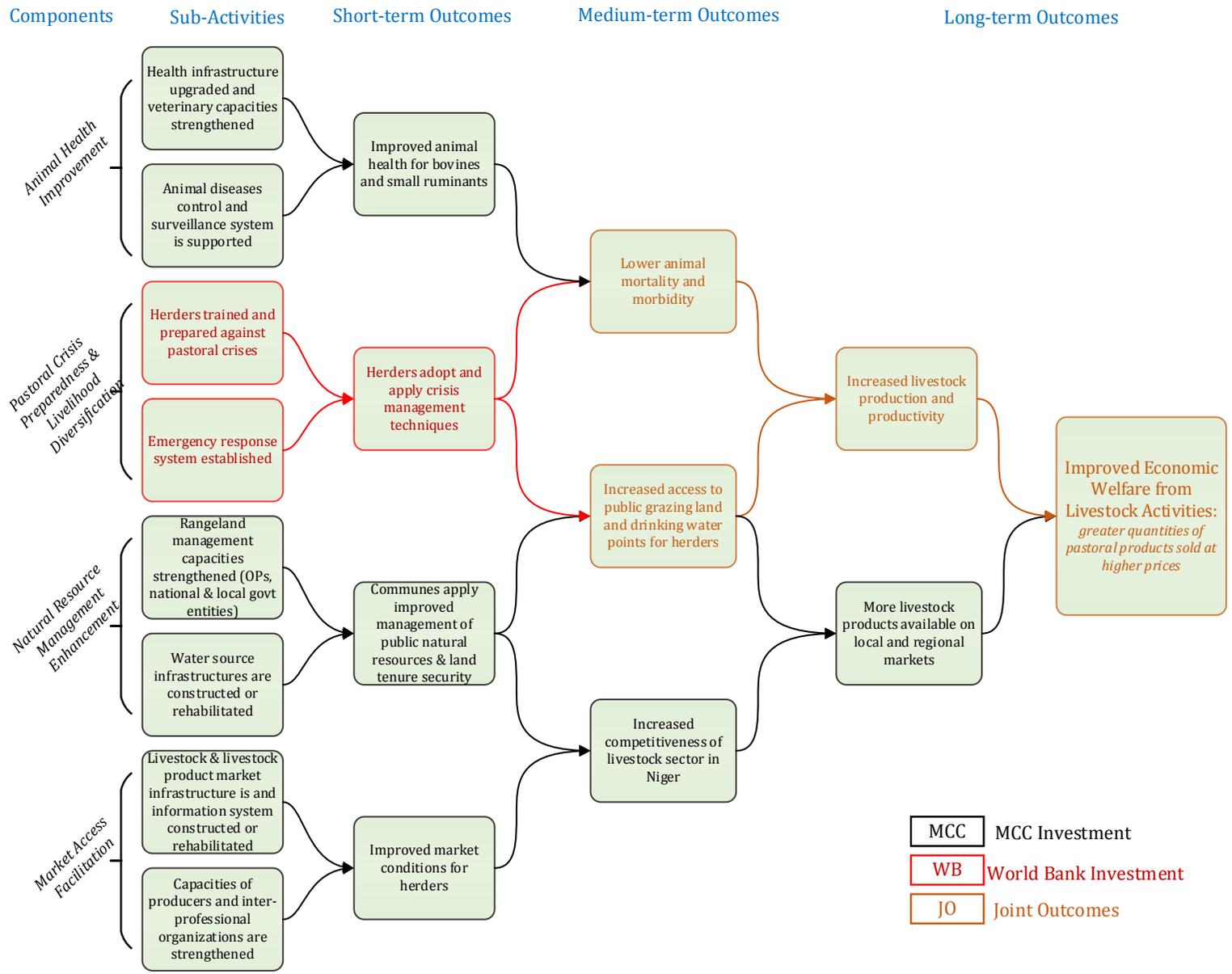
*a. Regional Sahel Pastoralism Support Activity*

This Activity will support pastoralist groups and enhance regional integration by improving livestock health, upgrading water and rangeland resources along major transhumance Livestock Corridors and modernizing local livestock market infrastructure (the Projet Regional d'Appui au Pastoralisme au Sahel/Niger or "PRAPS Activity"). Specifically, the PRAPS Activity will support:

- A livestock health and vaccination campaign to reduce disease prevalence that debilitates livestock productivity by building a more sustainable and efficient national veterinary services to conduct surveillance and control campaigns for major diseases affecting large and small ruminants following World Organization for Animal Health (“OIE”) guidelines, with a focus on remote pastoral areas. In the short-term, the goal of these efforts is to increase the share of animals vaccinated against contagious bovine pleuropneumonia (“CBPP”) and *peste des petits ruminants* (“PPR”) and to construct and rehabilitate veterinary units in the trade corridors, including an increase in inspection services at key border crossings to monitor disease prevalence. In the intermediate term, the goal of these efforts is to decrease the herd prevalence of CBPP and to increase the immunity protection of small ruminants against PPR;
- Consultations to prepare, and the funding to implement, each Livestock Corridor investment plans in form and substance satisfactory to MCC (“Corridor Investment Plans”). Consultations will engage stakeholders in a comprehensive process to identify, by corridor or commune, which Eligible Investments (as defined below) will be prioritized by each Livestock Corridor. Eligible Investments include:
  - Upgrades to key water points and livestock pasture and rest areas along Livestock Corridors to help maintain the condition of animals as pastoralists lead them through such corridors to points of sale (such as markets); and
  - Modernization of existing dilapidated, and the construction of new, physical platforms to market livestock in an improved trade environment. Through a consultative process with livestock stakeholders, an inventory of current market infrastructure and livestock trade flows will be undertaken and priorities established for the location and design of infrastructure improvements needed to ease market participation.

The diagram below illustrates and describes the expected causal relationships for the PRAPS Activity and synthesizes expected outcomes of that Activity.

**Figure 7: PRAPS Logic**



### *Key Assumptions*

- The vaccinations will reach enough animals within the national herd to significantly reduce prevalence of two targeted diseases linked to animal mortality and morbidity;
- Training of herders and the emergency response system are completed by the Government and the World Bank in a timely manner;
- Herders will apply improved natural resource management knowledge to reduce overgrazing and reclaim grazing areas;
- Animals will maintain health and weight if they have access to water points and rest areas;
- Herders will invest in animal fattening and obtain better prices for their animals at modernized and organized markets;
- More women will participate in organized markets;
- The land tenure interventions will reduce the risk of conflict over access to improved land and natural resources;
- Modern and organized market platforms will attract more livestock sellers and buyers creating increased volume of sales and competitive prices for pastoralists; and
- The PRAPS Activity is supported by the World Organization of Animal Health to build proper capacities of the Ministry of Agriculture and Livestock's Department of Veterinary Services to effectively reduce and monitor prevalence and avoid outbreaks of livestock diseases.
- The infrastructures will be maintained, and herders and livestock owners have the resources to invest in their cattle
- The government will sustain and maintain the vaccinations rates beyond the intervention period

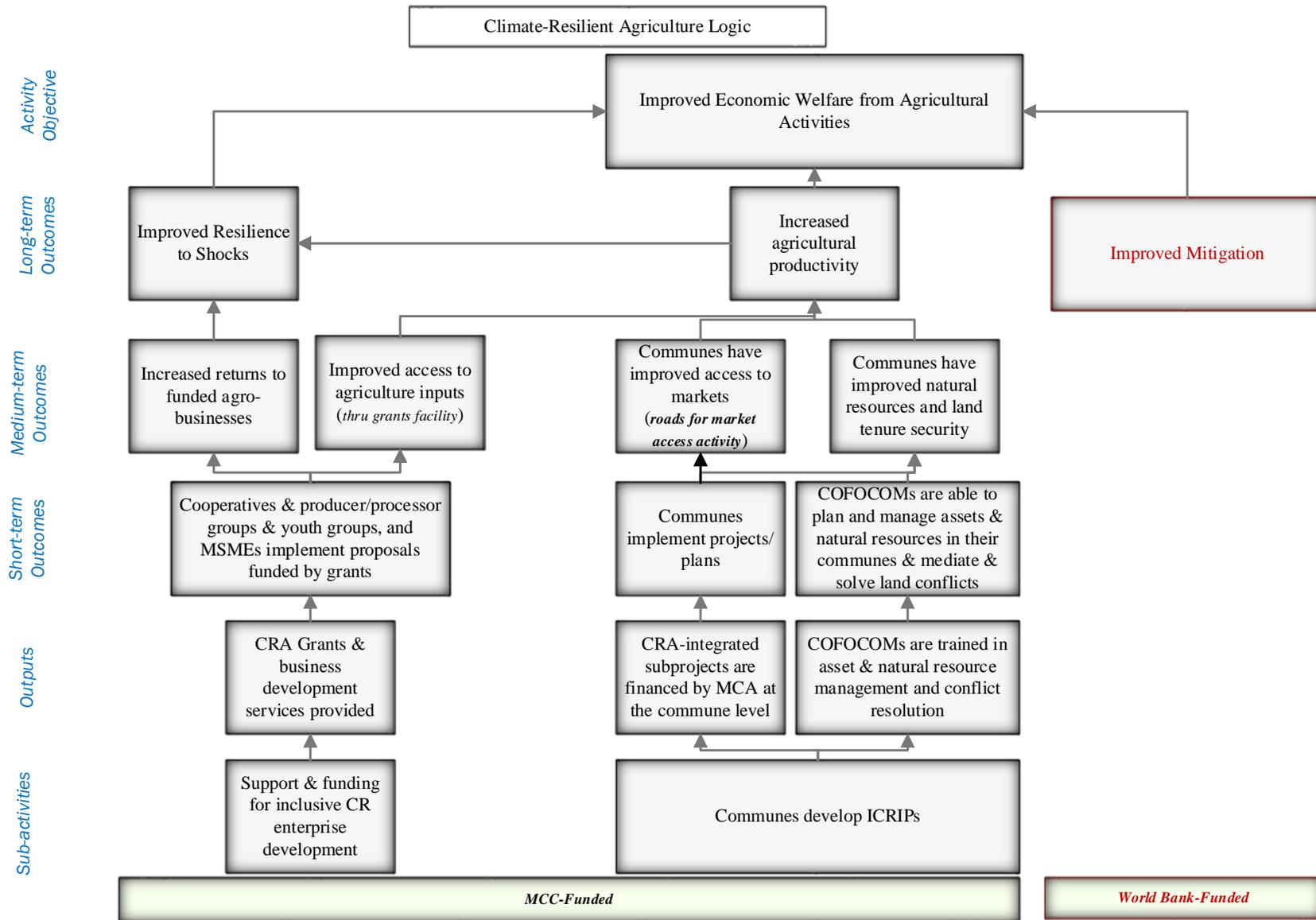
*b. Climate-Resilient Agriculture Activity*

The Climate-Resilient Agriculture Activity (or “CRA Activity”) will support sustainable increases in productivity and farm incomes in Eligible Communes by strengthening the resiliency of farmers and agro-pastoralists to the impacts of climate. The Activity will consist of:

- Consultations to prepare, and the funding to implement, each Eligible Commune’s integrated climate-resilient investment plan (“ICRIP”). The ICRIP will integrate investments by communes, farmers’ groups and entrepreneurs in a range of areas (e.g., irrigation, erosion control measures and marketing infrastructure) to achieve one or more of the following objectives: (1) improving soil fertility and water management for rain fed crops; (2) improving water control and increases in small and medium scale irrigation schemes; (3) support for livestock integration; (4) value chain consolidation and improved market access; and (5) improved agroforestry and natural resource management; and
- A grants facility (“Facility”) to support productive assets and investment needs, integrated with provision of business development services to target beneficiaries in Eligible Communes and the Dosso-Gaya perimeter participating in the Irrigated Perimeter Development Activity. The Facility will target producer/processor groups, women’s and youth groups, and micro-, small- and medium-sized enterprises, and will focus on five categories for funding: (1) irrigation and irrigated production (including post-harvest and storage); (2) rain-fed production (including post-harvest and storage); (3) livestock integration; (4) agro-processing and sale; and (5) input supply. The business development services provided to applicants and grantees will support (i) initial outreach and demand targeting; (ii) business plan and grant proposal development; and (iii) business advisory support for grantees during grant implementation.

The diagram below illustrates and describes the expected causal relationships for the CRA Activity and synthesizes expected outcomes of that Activity.

**Figure 8: CRA Logic**



### *Key Assumptions*

- Communities whose residents receive funding from the Facility will invest in public goods to create an enabling environment to support producers and enterprises to invest in improved practices & techniques;
- Application of climate-resilient techniques will help farmers better manage climate shocks;
- ICRIP will represent the priorities of communities regarding investments in access to water for small-scale irrigation, rangeland improvement, erosion control measures, afforestation, construction of marketing platforms and dry storage facilities, and access to market information;
- The CRA Activity and the World Bank-funded activities are implemented in a timely and effective manner;
- The land tenure interventions will reduce the risk of conflict over access to improved land and natural resources;
- All small works funded by MCA-Niger include training and technical assistance to communes and end-users to clearly define costs and responsibilities to properly operate and maintain public investments in climate-resilient infrastructure; and
- Projects funded by CRA Grants will be sustainable even after grants end.

### **Projected Economic Benefits**

The Large-Scale Irrigated Agriculture Project is estimated to increase farmer incomes through increased production along extensive and intensive margins. The Konni irrigation system rehabilitation and accompanying measures are expected to increase both area cultivated, particularly during the dry season, and output per hectare. Farmers are expected to augment their incomes primarily by increasing the volume of their production through both enlarging their area cultivated and through improved yields. The new irrigation perimeters in the Dosso-Gaya area are also expected to contribute to economic growth and poverty reduction by raising farmers' income. As with Konni, farmers are expected to increase their income by boosting their production through both an increase in area cultivated and improvement in yields. The project will make more land available for production through both an increase in area cultivated, but also through projected land and production savings from the reduction in flood losses. The economic rate of returns (ERR) for the three irrigation perimeters are given in Table 4 below, and the combined ERR for irrigation perimeters at Compact signing was 10 percent.

The key assumptions underlying the cost-benefit analyses and the associated risks to project success are common to all three irrigation perimeters. The first area of substantial uncertainty has to do with the cost of and timeline for physical construction. Changes in cost will obviously have a direct impact on ERRs, but timeline issues are important as well; the cost-benefit analyses currently assume that yield improvements will occur via farmer training activities. To the extent that there is less time to train farmers who can cultivate on their own plots using the improved irrigation technology, the ERR will decrease. Similarly, farmer training take-up will also directly affect the cost-benefit analyses.

Roads infrastructure serving the Dosso-Gaya perimeters is a complementary investment to the irrigation. Rehabilitating and upgrading the road network around the Dosso-Gaya area is

expected to improve physical market access. With targeted improvements on the road network, the Dosso-Gaya perimeters can be linked to the rest of the country. However, because of the size of the investment, the ERR for roads are calculated separately. To this end, the HDM-4 model was used to calculate the ERRs for different segment of roads to be rehabilitated. The main assumption in the HDM-4 model is that by using roads that are in good condition, the users of the roads will save on the vehicle operating costs (due to reduced maintenance and repair) and on traveling time. The inputs used to estimate the model are presented in Tables 1-3. The combined ERR for road investments at Compact signing was 20 percent.

**Table 1: Assumption made in HDM4 for RN7**

<b>Core Assumption</b>	<b>Without Project</b>	<b>With Project</b>
International Roughness Index (IRI)	8	2
Project Cost (FCFA Per Kilometer)	NA	650,120,000
Pavement Type	Bituminous (Paved)	Bituminous (Paved)
Road Width (Meters)	6	10
Maintenance Scheme	Poor (Crack Sealing, Potholes only)	Poor (Crack Sealing, Potholes only)
Normal Traffic (AADT)	1625	1625
Generated Traffic (AADT)	NA	None assumed
Truck factor	63%	63%
Value of time (FCFA per hour)	459	459

**Table 2: Assumption made in HDM4 for RN35**

<b>Core Assumption</b>	<b>Without Project</b>	<b>With Project</b>
International Roughness Index (IRI)	10	2
Project Cost (FCFA Per Kilometer)	NA	154,712,000
Pavement Type	Gravel	Gravel (Ready to Pave)
Road Width (Meters)	6	10
Maintenance Scheme	Very poor (Spot regravelling every 3 years)	Decent (Annual regravelling)
Normal Traffic (AADT)	580	580
Generated Traffic (AADT)	NA	61% of normal traffic in year 6, up to 300% of normal traffic in year 10
Truck factor	2%	2%
Value of time (FCFA per hour)	459	459

**Table 3: Assumption made in HDM4 for rural roads**

Core Assumption	Without Project	With Project
International Roughness Index (IRI)	10	5
Project Cost (FCFA Per Kilometer)	NA	62,400,300
Pavement Type	Gravel	Gravel
Road Width (Meters)	6	10
Maintenance Scheme	Very poor (Spot regravelling every 3 years)	Very poor (Spot regravelling every 3 years)
Normal Traffic (AADT)	135	135
Generated Traffic (AADT)	NA	50% of normal traffic
Truck factor	8%	8%
Value of time (FCFA per hour)	459	459

The Regional Sahel Pastoralism Support Activity is expected to increase pastoralists' incomes by improving animal health and improving infrastructure to ensure animal growth. To improve animal health, the project will undertake vaccination activities against the contagious bovine pleuropneumonia (CBPP) and small ruminant plague (*peste des petits ruminants*, PPR). Vaccination is expected to reduce disease incidence for both CBPP and PPR. Pastoralist income is expected to increase through avoided losses caused by the mortality and morbidity related to these diseases. MCC expects to increase bovine vaccination from its current coverage rate of 52% to 80% coverage rate and that for small ruminants from 40% coverage rate to 80%. To ensure sustainability of the vaccination benefit post-compact, MCC is contemplating establishing a ring-fenced vaccination fund that will rely on fees collected in modernized livestock markets. An estimation of ERR for vaccination with and without the sustainability fund is considered as well. Currently, the ERR was estimated to be 19.27% during compact signing. This figure was reworked to reflect current state of knowledge of the project and consideration for sustainability of some of the project post-compact. Specifically, in addition to the fund, we have adjusted the types of livestock targeted to benefit from the vaccination. The revised ERR for vaccination, which includes a vaccination fund, currently stands at 57%. Other activities, such as rehabilitation and upgrading of the transhumance livestock corridors, will increase income by improving animal growth and by allowing pastoralists to save on animal feed purchase through access to improved water points, pasture, and market infrastructure. Another activity within PRAPS consists of a modernizing livestock markets. "Modernized Markets" include enclosure walls and gates that controls who comes in and out. In these modernized markets tax collection is easier to carry out and it will done in the following way. Each herder that brings animals to sell, pays a "fee" for presenting the animal to the market collected at the moment the herder passes through the entrance of the market. The herder receives a uniquely numbered stamp/ticket for each animal brought and upon exiting the number of heads he leaves with has to match the number of stamps/tickets. So if someone came with 10 heads and sold 5, upon exiting the market the herder will have to show 5 tickets. At the end, the market is

supposed to reduce theft and maximize fiscal revenue that can later be used to ensure the sustainability of public services such as vaccination.

The initial ERR for improved markets was estimated to be 20.54% during compact signing. The main benefit streams came from increase in livestock traded in the anticipated modernized markets due to improvement of infrastructure. However, this is being reworked to further consider the potential efficiency gained associated with changes in market management structure.

The Climate Resilient Agriculture Activity (CRA) is expected to foster economic growth and reduce poverty by increasing both agro-pastoralist, and farmers' income. CRA includes integrated agricultural practices, improves the utilization rate of selected and drought-tolerant seeds, rehabilitates and develops new, small-scale irrigation schemes, promotes the reclamation of agro-pastoral degraded land, protects agricultural soils and watersheds from erosion, provides funding and business development services to small-holder agro-enterprises, and secures irrigation potential. These activities are expected to increase farmers' income in a number of ways. CRA is expected to increase farmers' and communities' incomes by increasing production, both through increases in area cultivated and yield. An indicative ERR corresponding to the grants to communes that CRA will provide was estimated to equal 16%.<sup>2</sup> The indicative combined ERR for PRAPS livestock corridor rehabilitation and animal vaccination, plus CRA commune matching grants at Compact signing was estimated to be 14 percent.

**Table 4: Economic Rates of Returns (ERRs)**

Project	Activity	Component	Original Economic Rate of Return (ERR), March 2016	Current Economic Rate of Return (ERR)
Irrigation and Market Access Project	Whole Project		17%	17%
	Roads for Market Access Activity	RN7	22%	22%
		RN35	13%	13%
		Rural Road	8%	8%
	Irrigation Perimeter Development and Management Services and Market Facilitation Activities	Konni Perimeter	11%	11%
		Ouna-Kouanza Perimeter	11%	11%
		Lower Sia Perimeter	6%	6%

<sup>2</sup> CRA grants to enterprises, cooperatives, and groups will also eventually be subject to cost-benefit analyses.

	Policy Reform Activity	N/A	Costs included in Irrigation Perimeter ERRs	Costs included in Irrigation Perimeter ERRs
Climate Resilient Communities Project	Whole Project		14%	N/A <sup>3</sup>
	Regional Sahel Pastoralism Support Activity	Vaccination	19%	57%
		Corridors	13%	13%
		Market modernization	21%	20%
	Climate Resilient Agriculture Activity	Matching grants	N/A	N/A
		Community-based projects	16%	16%

According to the *MCC Guidelines for Economic and Beneficiary Analysis*, beneficiaries of projects are considered individuals that are expected to experience better standards of living due to Compact activities aimed to increase their real incomes. The ERR analysis for proposed projects gives details on benefit streams through which beneficiaries should experience increased income. Some participants in the Compact activities may not realize increased incomes, which is why MCC differentiates between participants and beneficiaries.

The expected participants of this Compact are shown in the following table:

**Table 5: Projected Program Participants**

Project	Activity	Program Participant Definition	Est. Number of Participants
Irrigation and Market Access Project	Roads for Market Access Activity	For broad-based investments, participants and beneficiaries are the same.	See number of beneficiaries below.
	Irrigation Perimeter Development Activity	For broad-based investments, participants and beneficiaries are the same.	See number of beneficiaries below.

<sup>3</sup> The current Project-level ERR is not available because MCC Econ can not locate the original spreadsheets for the CRA Activity community-based projects.

	Management Services and Market Facilitation Activity <sup>4</sup>	1. Farmer training participants 2. Women's productive activities training participants 3. Literacy training participants	1. 10,834 farmers 2. 3,000 women 3. 12,800 people
	Policy Reform Activity	TBD after the activity is further designed	TBD after the activity is further designed
Climate Resilient Communities Project	Regional Sahel Pastoralism Support Activity	For broad-based investments, participants and beneficiaries are the same.	See number of beneficiaries below.
	Climate Resilient Agriculture Activity	For broad-based investments, participants and beneficiaries are the same.	See number of beneficiaries below.

The expected beneficiaries of this Compact are shown in the following table:

**Table 6: Projected Program Beneficiaries**

Project	Program Beneficiary Definition	Est. Number of Beneficiaries	Present Value (PV) of Benefits	Net Present Value (NPV)
Irrigation and Market Access Project	TOTAL	447,501	\$377,696,942	\$149,206,629
	Irrigation Perimeter Development Activity: all individuals with plots of land and all members of their households	406,865	\$102,256,675	\$9,332,763
	Roads for Market Access Activity: all members of households living within five kilometers on both sides along the roads	447,501	\$275,440,267	\$139,873,866
	Management Services and	N/A <sup>6</sup>	N/A	N/A

<sup>4</sup> Note that many of these trainees will be trained through more than one training program, so the numbers cannot be added together.

<sup>5</sup> Note that there is overlap between the beneficiaries of the irrigation perimeters and the roads, so the number of road beneficiaries includes the irrigation beneficiaries and therefore the two numbers should not be added together.

<sup>6</sup> These beneficiaries have already been accounted for in the Irrigation Perimeter Activity beneficiaries.

	Market Facilitation Activity: all households, whose yields or sales are expected to increase as a result of at least one member participating in the trainings and facilitations			
	Policy Reform Activity: the beneficiaries will be defined when the Activity is fully designed	TBD	N/A	N/A
Climate Resilient Communities Project	TOTAL <sup>7</sup>	3,440,172	TBD	TBD
	PRAPS Activity: the number of beneficiaries is a function of the proportion of animals in the endemic areas and the projected vaccination coverage in those areas. The animal count for the health component suggests that about 426,804 households will benefit. In term of individual beneficiaries this would represent about 3,414,436 people. A portion of these people will also benefit from livestock corridor improvements and market infrastructure under the PRAPS Activity.	3,414,436	\$108,549,0259	\$89,482,989
	CRA Activity: the number of beneficiaries is based on the potential for small scale irrigation in the 16 communes underpinned by a World Bank assessment to identify irrigation potential. An estimated 3,217 households are expected to benefit from the CRA Activity's small-scale irrigation, representing 25,736 individual beneficiaries <sup>8</sup> . These	25,736	TBD	TBD

<sup>7</sup> This only includes public CRA, Vaccination, and livestock corridors only. Estimates for CRA matching grants and market modernization will be updated later.

<sup>8</sup> Beneficiaries from grant facility will be determined upon completion of the application process

	beneficiaries, at least in part, may also be the same as those benefiting from the animal health activity.			
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**Irrigation and Market Access Beneficiary Analysis**

For irrigation, all individuals with plots of land and all members of their households are considered beneficiaries. For roads, all members of households living within five kilometers on both sides along the road are considered beneficiaries.

**Climate Resilient Communities Beneficiary Analysis**

For PRAPS, the animal count for the health component suggests that there will be about 426,804 household beneficiaries. In term of individual beneficiaries this would represent about 3,414,436 people. The number of beneficiaries was calculated based on the proportion of animal in the endemic areas and the vaccination coverage in those areas. For transhumance pasture improvement the total number of beneficiaries depends crucially on the amount of time herders’ animals spend feeding on activity-providing forage before they are considered to have benefited. In particular, if we define beneficiaries to mean herders whose animals feed for 2 months, then given assumptions on the carrying capacity of the pastureland and herd sizes, there are 238 herders (and 1,904 herder household members) who will benefit. Alternatively, if we assume that herds of livestock will each feed for a single day and then be considered beneficiaries, then there are 14,286 herders (and 114,288 herder household members) who will benefit. These beneficiaries, at least in part, will be the same as those benefiting from the animal health activity.

For CRA small scale irrigation, the number of beneficiaries is calculated based on the numbers calculated by the World Bank for the initial 30 communes where they identified irrigation potential. The number of beneficiaries for CRA small scale irrigation in the MCC commune was prorated from the World Bank beneficiary numbers. As show in the table above 3,217 households are expected to benefit from the CRA small scale irrigation, representing 25,736 individual beneficiaries. These beneficiaries, at least in part, will also be the same as those benefiting from the animal health activity.

**MONITORING COMPONENT**

**Summary of Monitoring Strategy**

The Compact will be monitored systematically and progress reported regularly through the Indicator Tracking Table (ITT). There are four levels of indicators that follow from the program logic framework: (i) goal, (ii) outcome, (iii) output and (iv) process. The various indicator levels map to the program logic and thus allow project developers and managers to understand to what extent planned activities are likely to achieve their intended objectives.

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<sup>9</sup> Livestock corridors and vaccination only

Monitoring data will be analyzed regularly to allow managers of MCA-N and MCC to make programmatic adjustments as necessary with a view towards improving the overall implementation and results of the Compact. Often most outcome and goal indicators are not monitored during the life of the Compact, but rather are reported through evaluations after the Compact is complete. Those levels of results typically take longer to be achieved.

Monitoring data will be analyzed regularly to allow managers of MCA-N and MCC to make programmatic adjustments as necessary with a view towards improving the overall implementation and results of the Program.

- Goal indicators measure the economic growth and poverty reduction that occur during or, most likely, after implementation of the program. For MCC Compacts, goal indicators will typically be a direct measure of local income and are typically measured through post compact evaluations.
- Outcome indicators measure intermediate effects of an Activity or set of Activities and are directly related through the program logic to the output indicators.
- Output indicators measure the direct result of the Project Activities. They describe and quantify goods or services produced directly by the implementation of an Activity.
- Process indicators record an event or measure progress toward the completion of Project Activities. They are a forerunner to the achievement of Project outputs and a means to ensure the work plan is proceeding on a timely basis.<sup>10</sup>

MCC has introduced common indicators for external reporting across all MCC Compacts. The common indicators relevant to the MCA-N Compact are included in this M&E Plan.

Annex III of the Compact outlines the initial indicators for the Compact. The M&E Plan builds on this information with additional relevant indicators developed by MCC, MCA-N project managers, and implementers in the early stage of project implementation. Additional indicators will be added as Compact investments are further defined.

The Indicator Definition Table provides relevant details for each indicator by Project and can be found in Annex I. It provides descriptions for the indicator structure by specifying each indicator's: (i) result it is intended measure; (ii) name; (iii) definition; (iv) unit of measurement; (v) level of disaggregation; (vi) data source; (vii) frequency of reporting; and (viii) party or parties responsible.

To ensure that the Program is on track to meet its overall goals and objectives, the monitoring indicators will be measured against established baselines and targets, derived from the ex-ante economic rate of return analysis, other types of analysis, and project planning documents. The targets reflect the underlying assumptions made in program design about what each Activity would likely achieve. Baselines and target levels for each indicator are defined in Annex II.

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<sup>10</sup> The indicator levels are formally defined in MCC's *Policy for Monitoring and Evaluation of Compacts and Threshold Programs*.

Indicators may need to be modified in future versions of the M&E Plan. Modifications and revisions to the indicators may only be made according to the MCC M&E Policy. Any significant modifications to the indicators or other content will be summarized in Annex III of the M&E Plan per the M&E Policy.

A number of each Project's indicators, baselines and targets are currently pending determination. The majority of these baselines and targets will be established once the feasibility and design studies are completed. Others are pending updated data from once implementation contracts are awarded and contractors have presented their work plans.

The M&E Unit shall consult and assist Implementing Entities in setting up their data collection plans and reporting templates.

### **Data Disaggregation**

Where feasible and appropriate, monitoring and evaluation indicators will be disaggregated by sex, age, income, and/or vulnerable groups. The agreed-upon disaggregations for each indicator are noted in Annex I.

### **Data Sources**

The indicators identified in the M&E Plan will require the collection of a range of data from various sources within Niger such as the Implementing Entities and implementers. To the greatest extent possible, MCA-N will attempt to harmonize data collection with other existing data sources or planned surveys and ensure that the data collected through the project are useful and cost-effective. Specific data sources are outlined in Annex I of this M&E Plan.

### **Data Quality Reviews (DQRs)**

Data quality is the primary responsibility of the MCA-N staff, led by the M&E Unit. The M&E Unit, other MCA-N staff, as appropriate, and Implementing Entities should regularly check data quality. The M&E Unit should verify that all reported data have appropriate source documentation and that calculations have been done correctly. The MCA-N M&E Unit will conduct field visits on a regular basis or whenever requested by MCC, to review the quality of the data gathered through this M&E Plan. MCA-N may also hire individual data quality monitors to monitor data collection and quality, as needed.

In addition to regular data quality checks by MCA-N staff, independent Data Quality Reviews (DQRs) will be conducted in accordance with the requirements of the MCC M&E Policy.

The objectives of DQRs are to assess the extent to which data meet the standards defined in the MCC M&E Policy in the areas of validity, reliability, timeliness, precision and integrity. DQRs will be used to verify the consistency and quality of data over time across implementing agencies and other reporting institutions. DQRs will also serve to identify where the highest levels of data quality is not possible, given the realities of data collection.

The particular objectives for the DQRs will include identification of the following parameters: i) what proportion of the data has quality problems (completeness, conformity,

consistency, accuracy, duplication, integrity); ii) which of the records in the dataset are of unacceptably low quality; iii) what are the most predominant data quality problems within each indicator; iv) what are the main reasons behind low quality; and v) what steps can be taken to improve data quality. An initial DQR will be contracted by MCA-N in compliance with MCC Program Procurement Guidelines during Year 1 of the Compact; subsequent DQRs will be conducted as needed.

### **M&E Capacity Program**

MCA-N will be responsible for ensuring regular training of key project stakeholders in monitoring and evaluation in order to build the capacity of these stakeholders to remain compliant with the M&E requirements of the Compact. The capacity building program will be need-based, as determined through a) regular staff assessments and b) as identified in the findings of the independent DQRs.

### **Standard Reporting Requirements**

#### **Reporting to MCC: Quarterly Disbursement Request Package (QDRP)**

Performance reports serve as a vehicle by which the MCA Management informs MCC of implementation progress and on-going field revisions to Project work plans. Currently, MCC requires that MCA-N submit a Quarterly Disbursement Request Package (QDRP) each quarter. The QDRP must contain an updated ITT and a narrative report. A complete ITT presents the preceding quarters' indicator actuals and current quarter indicator progress against targets set forth in this M&E Plan. The QDRP narrative report provides a brief description of the previous quarter's Compact implementation progress and explains how requested funds will be used in the coming quarter. The QDRP narrative is the responsibility of all staff of MCA-N. The ITT is the source for MCC's internal and external reporting on indicator progress.

Additional guidance on reporting will be provided by MCC in its *Guidance on Quarterly MCA Disbursement Request and Reporting Package*.

#### **Reporting to MCA and Local Stakeholders**

Even though the QDRP is required to be sent to MCC, MCAs should also use these reports and the data included in them to assess progress and performance internally. The M&E teams attempt to align MCC and MCA reporting so that data are used to inform decision-making at both levels.

## **MCA-N Board Coordination Meetings**

The M&E Directorate shall be responsible for reporting M&E results to the MCA-N Board on a quarterly basis. The reports will consist of ITT data and other materials that help depict progress towards Compact targets. These updates may include recommendations that are crucial to change or guide the implementation of projects for consideration by the MCA-N Board.

## **EVALUATION COMPONENT**

### **Summary of Evaluation Strategy**

While good program monitoring is necessary for program management, it is not sufficient for assessing ultimate results. Therefore, MCC and MCA-N will use different types of evaluations as complementary tools to better understand the effectiveness of its programs. As defined in the MCC M&E Policy, evaluation is the objective, systematic assessment of a program's design, implementation and results. MCC and MCA-N are committed to making the evaluations as rigorous as warranted in order to understand the causal impacts of the program on the expected outcomes and to assess cost effectiveness. This Evaluation Component contains three types of evaluation activities: (i) independent evaluations (impact and/or performance evaluations); (ii) self-evaluation, and (iii) special studies, each of which is further described below. The results of all evaluations will be made publicly available in accordance with the MCC M&E Policy.

### **Independent Evaluations**

According to the MCC M&E Policy, every Project in a Compact must undergo a comprehensive, independent evaluation (impact and/or performance). The next section on Specific Evaluation Plans will describe the purpose of each evaluation, methodology, timeline, and the process for collection and analysis of data for each evaluation. All independent evaluations must be designed and implemented by independent, third-party evaluators, which are hired by MCC. If MCA-N wishes to engage an evaluator, the engagement will be subject to the prior written approval of MCC. Contract terms must ensure non-biased results and the publication of results.

For each independent evaluation, MCA-N and relevant stakeholders are expected to review and provide feedback to independent evaluators on the evaluation design reports, evaluation materials (including questionnaires), baseline report (if applicable), and any interim/final reports in order to ensure proposed evaluation activities are feasible, and final evaluation products are technically and factually accurate. MCC's evaluation review process will follow the guidelines outlines in the MCC M&E Policy.

### **Self-Evaluation**

If determined by MCC and MCA to be desirable and useful, MCA may contract an interim evaluation (or multiple interim evaluations if deemed useful) to assess performance against the M&E Plan in the middle of the Compact. Upon completion of each Compact program, MCA-N will produce the Compact Completion Report (CCR) to document and reflect on implementation and lessons learned. MCA-N staff will draft the CCR in the last year of Compact implementation. It should be noted that each department will be responsible for

drafting its own section to the report for its own activities, subject to cross-departmental review. Upon agreement with MCC, MCA-N may contract an independent evaluator to prepare a final process evaluation to collect information and conduct analysis to be used in the CCR.

### **Special Studies**

Either MCC or the Government may request special studies or ad hoc evaluations of Projects, Activities, or the Program as a whole prior to the expiration of the Compact Term.

*WEAI:* The “Women’s Empowerment in Agriculture Index” (WEAI), launched by IFPRI, Oxford Poverty and Human Development Initiative (OPHI), and USAID's Feed the Future in February 2012, is the first comprehensive and standardized measure to directly capture women’s empowerment and inclusion levels in the agricultural sector. The WEAI is an innovative tool composed of two sub-indexes: one measures how empowered women are within five domains, and the other measures gender parity in empowerment within the household. MCC worked with IFPRI in 2015 and 2016 to conduct two WEAIs in Niger. The first covered 500 households in Tahoua (Maggia Valley). The second was done in 641 households (and 1,107 adult individuals in these households) in the departments of Konni (in Tahoua region), Gaya, and Koulou (both in the Dosso region). MCC is planning on conducting a follow-up WEAI towards the end of the Compact or after the end of the Compact to measure changes in women’s empowerment in the MCC intervention areas.

*Remote Imagery Study:* MCC and MCA are planning to work on developing and documenting methods to monitor changes in the area, crop composition and yields in irrigation and any non-irrigation areas required by the project, based on cost-effective collection and analysis of remote imagery combined with representative samples based on traditional farm plot level measures. In addition, the documented methods would be applied, coordinating remote imagery analyses with any required traditional farm plot level crop measures that would be conducted as part of MCC’s independent evaluator data collection. This may also involve continued remote imagery gathering and analysis to provide routine crop-season feedback on essential program crop indicators, including crop composition, area and yields.

### **Specific Evaluation Plans**

The following table summarizes the specific evaluation plans.

**Table 7: Summary of Specific Evaluation Plans**

Evaluation Name	Evaluation Type	Evaluator	Primary/ Secondary Methodology	Final Report Date
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Evaluation Name	Evaluation Type	Evaluator	Primary/ Secondary Methodology	Final Report Date
<b>Irrigation and Market Access Project</b>	Performance	Mathematica Policy Research	TBD <sup>11</sup>	TBD
<b>Roads for Market Access Activity</b>	Performance	TBD – To be contracted by late 2018	Pre-post (HDM-IV road modeling and Political Economy Analysis)	TBD
<b>Climate-Resilient Agriculture Activity</b>	Performance	TBD – To be contracted by late 2018	TBD	TBD
<b>Regional Sahel Pastoralism Support Activity</b>	Performance	TBD – To be contracted by late 2018	TBD	TBD

### **Irrigation and Market Access Evaluation**

The main goal of the Irrigation and Market Access Evaluation is to determine the extent, if any, to which the various activities improved the productivity and profitability of participants in the irrigation areas.

#### ***Evaluation Questions***

The Irrigation and Market Access Evaluation is expected to address the evaluation questions listed below. The evaluation questions are based on the existing program logics, but they should be refined as the program logics are updated and activities become more defined. It is expected that all of these questions will be answered separately for the two irrigation areas because they are starting off with very different levels of irrigation since Konni is an existing irrigation perimeter and Sia-Kouanza is a new irrigation perimeter.

#### ***Irrigation Perimeter Development***

1. Were the expected outputs produced by the Activity? What changes to the design of the Activity occurred during implementation?
2. Is the new/improved infrastructure functioning properly in terms of water flow and/or area irrigated?
3. Is water for irrigation in farmers' plots available as expected from the irrigation system, including frequency and amount as per planned irrigation schedules? If no, why not?
4. Did irrigated land increase as expected (as a whole and per family)? If no, why not?
5. Did the actual cost of providing irrigation water change? In what way and why?

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<sup>11</sup> Mathematica will propose a methodology in the Evaluation Design Report for MCC approval.

6. Did the water fees charged to farmers cover the actual cost of providing irrigation water? If not, to what extent and why?

Management Services and Market Facilitation

1. Were the expected outputs produced by the Activity? What changes to the design of the Activity occurred during implementation?
  - a. What was the profile of the participants (total number of participants disaggregated by sex and age)? Were iWUAs set up? How many? What percentage of iWUA leadership committee members were women at the end of the Compact?
  - b. Was land regularization and allocation at Konni and land allocation at Sia-Kouanza completed efficiently and with sufficient transparency and participation to ensure “legitimacy” in the eyes of local stakeholders? Was the appropriate property rights documentation (contrats d’occupation or long-term leases for farmers, publicly held property titles of overall perimeters) processed and delivered in a timely manner? Was a land tenure registry created to record the property rights that were granted? Were land use plans at the commune level successfully completed?
2. Did participants acquire new knowledge from the trainings? Was this different for women/men or youth (15-35)/non-youth participants? If new knowledge was not acquired, why not?
  - a. Trainings include: adult functional literacy and numeracy, nutrition & hygiene for producer groups; savings, loan methodologies & financial management, & value-added post-harvest production for women and youth; improved production technologies and practices on-farm and value added for producers; management of service delivery for cooperatives; marketing and commercialization of agriculture for cooperatives; sustainable natural resource management for participants; management skills for iWUAs & oversight for iWUAs by the Office National des Aménagements Hydro Agricoles (ONAHA).
    - i. What percentage of participants of adult functional literacy and numeracy improved their skills (basic reading and writing) after the training? What percentage of them indicate improved knowledge of nutrition and hygiene, and budgeting and record keeping (since these concepts were introduced as part of the literacy and numeracy training)?
    - ii. What percentage of participants have increased their knowledge of sustainable land and water resources management?
    - iii. What percentage of participants can name and explain at least 2-3 new or improved agricultural practices that they did not know before the training?
    - iv. What percentage of members of comites de gestion within the cooperatives indicate improved knowledge of cooperative management?
3. Did participants apply their knowledge? Was this different for women/men or youth (15-35)/non-youth participants? If knowledge was not applied, why not?
  - a. Application includes: improved nutrition, and hygiene practices; approved skills in production; increased savings and access to loans, improved financial management and planning, improved agricultural practices & access to market; improved natural resource management techniques (soil, ground,

water, forests, rivers); water for irrigation efficiently provided; improved marketing and management skills

- i. Are iWUAs functioning as expected? Is the irrigation infrastructure being maintained properly?
  - ii. What percentage of participants of village and savings loans remain active in their groups and maintain savings accounts (with some money in it)? What percentage of participants from village savings and loans indicate they have improved access to credit?
  - iii. How many cooperatives are applying knowledge acquired through capacity development in the following areas: financial management, market linkages and business relations, recruitment and membership retention, production and quality of inputs, management and accounting systems, administrative procedures and strategic planning?
4. Is the land registry used as a tool by local authorities to continually record changes in land holdings? Are the local land commissions in the project zone better equipped to ensure sustainable management of land rights in/around the perimeter? Was the level and risk of land conflict reduced/minimized? Did land tenure security increase?
  5. Do households possess skills, financial and productive assets to be resilient? If no, why not?
  6. Are natural resources more sustainable and resilient? If no, why not?

#### Roads for Market Access

1. To what extent did the activity lead to a change in transportation costs for agricultural products?
2. To what extent did the Activity contribute to increased volumes and values of agricultural products traded from the irrigation areas? If it didn't, why not?

#### Policy Reform

1. Were the expected outputs produced by the Activity? What changes to the design of the Activity occurred during implementation?
2. Did the Fertilizer Reform Sub-Activity lead to increased private sector participation in the fertilizer sector? If not why not?
3. Did the National Statistical Capacity Sub-Activity lead to increased, sustainable capacity of the GoN to develop and manage improved approaches to data collection, analysis and reporting?

#### Project-Level

1. Did the Project components interact as envisioned during project design to reach a common objective? If yes, what facilitated the interaction and if not, why not?
  - a. Was there close coordination and planning among the different contractors designing and implementing the Activity (land allocation, infrastructure, iWUA, and agricultural services)? Did the United Nations Office for Project Services (UNOPS) in the role of Project Manager facilitate the roll out and coordination of activities?
2. To what extent did the Project interact with the Climate-Resilient Communities Project, in particular the Grant Facility? What facilitated the interaction and what didn't?

3. To what extent did the Project contribute to increased production and yields of cash crops? Did crop choices or cropping patterns change? Did numbers of cropping cycles change?
4. To what extent did the Project contribute to increased volumes and values of agricultural products sold and traded?
5. To what extent did the Project contribute to increased incomes for rural households in the intervention areas?
6. To what extent did the Project contribute to improved food and nutritional security in the intervention areas and improved practices around nutrition and hygiene?
7. How thoroughly were the Project Activities designed to achieve the Project Objective? Assess their sufficiency and efficiency at achieving the objective, as well as how did the Activity designs and their sufficiency and efficiency evolve over the life of the Compact?
8. If the Project produced results, are they expected to be sustained?
9. If the Project did not meet its expected results, why not?
10. What lessons can be drawn to inform future projects?
11. What is the post compact ERR of the Project (except for the Roads for Market Access Activity)?

### ***Evaluation Methodology Description***

The concepts in the evaluation questions could be measured in different ways, so the Evaluator is expected to work closely with MCC, MCA-Niger, implementers, and other stakeholders to define how measurement will take place for all of the evaluation questions. The evaluation will likely be a comparison of key outcomes in the irrigation areas before and after the intervention; however the evaluator will explore if different irrigation areas exist that are similar enough to be used as comparisons for a difference-in-difference evaluation.

The current evaluation plan envisions three rounds of data collection (mix of quantitative and qualitative). A baseline in 2018 or 2019, an interim round in 2022 or 2023, and a final round in 2025 or 2026 for an exposure period of three to four years. This timeline is based on the existing implementation timeline and projected benefits from the economic analysis. However, the Evaluator is expected to adjust the evaluation timeline and data collection rounds based on their experience evaluating similar projects, as well as from updated implementation plans and economic analysis as more information about when expected results will occur becomes available. In addition, it is expected that the interim data collection round will focus more on implementation and short-term outcomes rather than assessing the ultimate objective of the project.

### ***Data Sources***

The evaluation is expected to use data from design studies, implementation reports, a farmer survey, focus groups and key informant interviews. The exact design of the farmer survey, focus groups and interviews will be determined in the evaluation design report.

### **Primary Data Collection**

<b>Survey</b>	<b>Quantitative or</b>	<b>Define</b>	<b>Sample</b>	<b>Number of</b>	<b>Exposure</b>	<b>Expected Dates of</b>
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Name	Qualitative	Sample	Size	Rounds	Period	Primary Data Collection
Farmer Survey	Quantitative	Households with land within the irrigation areas	TBD	2 or 3	3 to 4 years	Baseline: TBD Endline: TBD
Focus Groups and Interviews	Qualitative	TBD	TBD	TBD	TBD	Baseline: TBD Endline: TBD

### **Roads for Market Access Evaluation**

The main goal of the Roads for Market Access Evaluation is to (i) determine the post-compact ERR using HDM-4 analysis, (ii) assess the road maintenance regime, (iii) analyze the composition of road users, and (iv) assess the transportation market structure.

#### ***Evaluation Questions***

The Roads for Market Access Evaluation is expected to address the evaluation questions listed below. These evaluation questions cover the four standard research areas for MCC road evaluations, but can be refined as the evaluation design is developed.

Research Question 1: What is the economic return calculated in terms of vehicle operating cost (VOC) savings and travel time (TT) savings of the road investments? What factors drove changes to the ERR over time? How could the activity have been designed to result in a higher ERR?

Research Question 2: To what extent have the roads been maintained through the performance-based road management and maintenance contracts? To what extent have the road maintenance reforms been implemented and how has that affected the sustainability of the road investments? Based on this assessment, what set of maintenance assumptions should be used in the HDM-4 model to yield the best estimate of the costs and benefits of the road investment? What political, and economic incentives are shaping road maintenance decisions in the country? And what other key factors are influencing actual maintenance practices?

Research Question 3: Have road usage patterns changed, in terms of who is traveling on the road, why, what they are transporting, what they are paying for transport, and how long it takes to move along key routes?

Research Question 4: How is the transportation market structured and what is the likelihood that vehicle operating cost savings will be passed on to consumers of transportation services?

### ***Evaluation Methodology Description***

The Evaluator will determine the methodology to be used, but it is expected to be a combination of HDM-4 analysis, which quantifies vehicle operating cost savings and time savings, plus political economy analysis of the road maintenance regime and transport market structure.

### ***Data Sources***

The evaluation is expected to use data from design studies, implementation reports, traffic surveys, origin and destination surveys, and key informant interviews. The exact design of the surveys and interviews will be determined in the evaluation design report.

### **Primary Data Collection**

<b>Survey Name</b>	<b>Quantitative or Qualitative</b>	<b>Define Sample</b>	<b>Sample Size</b>	<b>Number of Rounds</b>	<b>Exposure Period</b>	<b>Expected Dates of Primary Data Collection</b>
TBD	TBD	TBD	TBD	TBD	TBD	Baseline: TBD Endline: TBD

### **Climate-Resilient Agriculture Evaluation**

The evaluation will be designed to capture the likely effects of the activity on the expected outcomes of improving the economic welfare from agricultural activities through increases in agricultural productivity and improved resilience to shocks, and ultimately on the goal of increasing rural household incomes.

### ***Evaluation Questions***

This M&E Plan contains the following evaluation questions; however, the final list of questions will be documented in the final evaluation designs.

Implementation Question:

1. Was the Activity implemented as designed? If not, what changes occurred to the original design during implementation and why?
2. How do the components not covered by MCC (funded by the World Bank) contribute to achieving the overall objective of increasing incomes for rural households?

### ***Outcomes***

1. To what extent is small-scale irrigation the right approach to providing water for farming?
2. How effective is the commune-led planning and development approach in achieving the objectives of the CRA Activity?
3. Does the CRA program encourage lasting adoption of climate resilient agriculture practices and technologies?

4. Is productivity, resilience, and income improved for CRA beneficiaries?
5. Have the CRA grants improved growth and profitability for groups and enterprises engaging in commercial agricultural activities in the underserved communities?
6. Have the CRA grants succeeded in providing farmers and other beneficiaries access to critical long-term assets needed to increase productivity that they were unable to access before?
7. Have the CRA grants led to farmers and other target beneficiaries accessing other sustainable sources of financing?

### ***Evaluation Methodology Description***

An independent evaluator will be hired to assess evaluation methodology options.

### ***Data Sources***

The evaluation is expected to use data from design studies, implementation reports, a farmer survey, focus groups and key informant interviews. The exact design of the primary data collection will be determined in the evaluation design report.

#### **Primary Data Collection**

<b>Survey Name</b>	<b>Quantitative or Qualitative</b>	<b>Define Sample</b>	<b>Sample Size</b>	<b>Number of Rounds</b>	<b>Exposure Period</b>	<b>Expected Dates of Primary Data Collection</b>
Survey	Quantitative	TBD	TBD	TBD	TBD	Baseline: TBD Endline: TBD
Focus Groups and Interviews	Qualitative	TBD	TBD	TBD	TBD	Baseline: TBD Endline: TBD

### **Regional Sahel Pastoralism Support Evaluation**

The evaluation will be designed to capture the likely effects of the activity on the expected outcomes of improving economic welfare from livestock activities through increased quantities of pastoral products sold at higher prices, and ultimately on the goal of increasing incomes of rural households.

### ***Evaluation Questions***

#### **Implementation**

1. Was the Activity implemented as designed? If not, what changes occurred to the original design during implementation and why?
2. How do the components not covered by MCC (funded by the World Bank) contribute to achieving the overall objective of increasing incomes for pastoral and agro-pastoral households?

## Outcomes

1. Were the expected short, medium, and long-term results in the program logic realized? For example:
  - a. Did animal health improve? How? Was there a reduction in disease prevalence? Was there a reduction in mortality or morbidity of animals linked to the CBPP and PPR? Was there on average a tangible increase in weight of bovines and small ruminants for animals that have improved access to water points and improved access to pasture lands?
  - b. (i) Are there more pasture lands available for animals to graze? (ii) Have communities experienced a decrease in land related conflicts in particular between farmers and livestock producers?
  - c. To what extent are communes managing and maintaining water access infrastructure (wells/boreholes). Have communes adopted sustainable management of water access points (i.e. monitoring of wells and water quality) and improved management of pasture lands/pasture areas?
  - d. (i) Was there an increase in buyers and sellers of livestock? (ii) Was there a net increase in sales of livestock or related products? (iii) Was there any shift of sales from nearby markets that did not get modernized? Did the markets resulted in any increased incomes for the herders? For the buyers? For the intermediaries? How did the distribution get affected?
  - e. Were new sellers allowed in the markets? Were the power dynamics and transparency of transactions changed (between herders, traders, sellers)?
  - f. Did the markets offer herders more of the expected services such as veterinary services, animal feed, watering points, and scales, better pricing and market information? Did herders use these services (i.e. did they buy animal feed or animal medicine while in the market)?
  - g. What improvements did herders experience in the pasturelands as a result of the program? Did competition increase for livestock and dairy products? If so what effect did this competition have in the income of herders and rural households?
  - h. Were there any efficiency gains in trade/transactions, price increases/changes? How were these benefits distributed (between buyers, sellers, and traders)?
  - i. To what extent did livestock production and productivity increase?
  - j. Were more livestock products available on local and regional markets?
  - k. Were greater quantities of pastoral products sold at higher prices?
  - l. Did milk collection centers result in better prices for milk? Did they result in higher volumes of milk being traded in communities that received infrastructure? Was quality of milk better maintained and monitored? To what extent did the milk collection centers contribute to improved standards of dairy products? To what extent did the milk collection centers reach targeted populations – in particular women – that produce milk or dairy products in small scale in the zones?

- m. Did tax revenue collection from livestock sales increase in communes with upgraded markets? Have receipts and controlled access and exit points decreased reports of animals being lost/stolen?
2. What facilitated achievement of the results if they were achieved? If results were not achieved, why not?
  - a. Did the assumptions in the program logic hold?
  - b. How and to what extent did factors outside the compact (such as droughts, locust attacks, additional third-party interventions and investments, alignment with other five regional PRAPS members, etc.), influence the ability of the project to meet its expected outcomes?
  - c. How did the 2 components not covered by MCC (funded by the World Bank) contribute to achieving the results?
3. If possible through the analysis, what is the differentiated impact between different components (for instance: the impact of vaccination vs. the impact of transhumance corridors vs. the impact of market construction)? Which components had the greatest impact on the outcomes? And why?
4. If possible through the analysis, what is the differentiated impact between different components (for instance, the impact of vaccination vs. the impact of transhumance corridors vs. the impact of market construction)? Which components had the greatest impact on the outcomes? And why?
5. Based on the findings from the evaluation, what is the estimated Economic Rate of Return (ERR) for MCC's investments in the PRAPS Activity in Niger?
6. PRAPS zones and CRA zones overlap in some regions. How and to what extent do those overlaps effect each sub-activity's outcomes?
7. How does improved animal health increase the revenues of livestock owners?
8. Do improved transhumance corridors reduce conflicts over grazing and farming?
9. Have animal sales increased (in quantities and prices) in the intervention zones?

### **Sustainability and Lessons**

1. How sustainable are the results achieved through PRAPS?
  - a. To what extent are MCC's maintenance expectations for the new infrastructure works being met?
  - b. What are the measures introduced or taken by the communes to ensure sustainability of the investments? How is that being paid for?
2. What lessons can be drawn from the PRAPS Activity to inform future projects and activities?

### ***Evaluation Methodology Description***

An independent evaluator will be hired to assess evaluation methodology options.

### ***Data Sources***

The evaluation is expected to use data from design studies, implementation reports, a livestock survey, focus groups and key informant interviews. The exact design of the primary data collection will be determined in the evaluation design report.

## Primary Data Collection

Survey Name	Quantitative or Qualitative	Define Sample	Sample Size	Number of Rounds	Exposure Period (months)	Expected Dates of Primary Data Collection
Survey	Quantitative	TBD	TBD	TBD	TBD	Baseline: TBD Endline: TBD
Focus Groups and Interviews	Qualitative	TBD	TBD	TBD	TBD	Baseline: TBD Endline: TBD

## IMPLEMENTATION AND MANAGEMENT OF M&E

### Responsibilities

#### MCA-N M&E Unit

The MCA-N M&E Unit will be part of the MCA Management Team, and will be composed of an M&E Director who will have the key responsibility of leading and managing all M&E and economic activities and M&E and Economic Analysis Officers who will support the M&E Director in performing the M&E activities. Additionally, the M&E Unit will hire short-term support on an as-needed basis. The M&E Unit will carry out, or hire contractors to complete the following and other related activities:

- Direct implementation of all activities laid out in the M&E Plan and ensure all requirements of the M&E Plan are met by MCA-N and reporting entities;
- Ensure that the M&E Plan is modified and updated as improved information becomes available;
- Oversee development and execution of an M&E system (including data-collection, data analysis and reporting systems) integrated with the MCC Management Information System (MCC MIS);
- Elaborate and document M&E Policies, Procedures and Processes in an M&E Manual or other format, to be used by all MCA-N staff and project implementers;
- Communicate the M&E Plan and explain the M&E system to all key stakeholders involved in the Compact, particularly project implementers, to ensure a common understanding by all. This could take the form of orientation and capacity building sessions or ongoing coordination efforts, and could focus on issues such as:
  - Explaining indicator definitions, data collection methods, and timing/frequency of data collection and reporting,
  - Data quality controls and verification procedures,
  - Evaluation questions and methodology, etc.;

- Develop and use a documentation system to ensure that key M&E actions, processes and deliverables are systematically recorded. This may be accomplished either as part of the M&E information system or independently. The documentation may encompass the following elements:
  - Indicators and material evidence for reported values,
  - M&E Plan versions,
  - Reporting manuals and templates,
  - Key M&E deliverables including TORs, contracts/agreements, data collection instruments, reports/analyses, etc.;
- Develop (with the MCA-N Communications/Outreach Unit and Environmental and Social Performance (ESP), and Gender and Social Inclusion (GSI)/Social and Gender Assessment (SGA) officers, and implement a systematic results dissemination approach that draws on verified ITT data to ensure participation of all stakeholders, and to facilitate feedback of lessons learned into the Compact implementation process;
- Organize and oversee regular independent data quality reviews on a periodic basis to assess the quality of data reported to MCA-N;
- Participate in project monitoring through site visits, review of project reports and analysis of performance monitoring and other data;
- Update the M&E work plan periodically;
- Manage the M&E budget efficiently;
- Contribute to the design of the evaluation strategy;
- Collaborate with the Procurement Director to prepare and conduct procurement of M&E contracts;
- Ensure that data collection mechanisms are designed to collect data disaggregated by gender, income category, age, and other dimensions, as applicable and practical, and that the findings are presented at the appropriately disaggregated level;
- As the champion of results based management, the M&E Unit will take steps to foster a results oriented culture throughout MCA-N and its implementing partners – this includes making sure that M&E information is used by the MCA management and project teams to improve Compact performance (feedback loop).
- Ensure data collection, storage, and dissemination activities maximize protection of confidentiality of survey respondents’ personally identifiable information. This may require:
  - Facilitating local Institutional Review Board clearance for data collection,
  - Using lock and key cabinets for paper files,
  - Using secure file transfer systems,
  - Encrypting data files,
  - Employing password protection on data systems and data encryption,
  - Requiring signed acknowledgements of roles and responsibilities,
  - Requiring relevant stakeholders to sign non-disclosure agreements, and
  - Incorporating data protection standards into the organization’s records management procedures, or if necessary, developing a records management procedure that includes such standards.

The M&E Director will be a part of MCA-N’s internal Management Unit, composed from MCA leadership, Project Directors and other Directors. The M&E Director will report directly to the MCA-N CEO and maintain close cooperation with Project Directors.

Collaboration with the procurement team will be very important to prepare and conduct timely procurement of M&E related contracts as well as ensuring that other implementation contracts contain necessary data reporting provisions.

Seminars, workshops, elaboration and distribution and dissemination of M&E materials shall be conducted in close cooperation with the MCA-N Communications/Outreach Unit.

In order to prepare for Post Compact monitoring by the Government, the MCA-N M&E Unit should identify a Post Compact point of contact (POC) for MCC early on in the program and work with that POC to build understanding of the MCC program and monitoring process. This POC should be part of the Government entity that will commit to continuing M&E of Compact investments after the Compact End Date. The M&E Unit should also identify the team that will be responsible for reviewing evaluation reports that are delivered Post Compact (e.g., project leads), to ensure that the relevant project stakeholders review and provide feedback prior to the publication of final reports.

#### ***Monitoring and Evaluation (M&E) Director***

The M&E Director shall be responsible for the overall M&E strategy and review of Compact implementation. The Director will also act as an advisor to the CEO and MCA-N Senior Management. The Director shall periodically measure, report and communicate (in collaboration with the Communications/Outreach Unit) the performance and results of the Compact, which will inform implementation decisions and help the Compact achieve its objectives. The Director will also analyze the overall program execution, covering both financial and physical implementation and monitoring key assumptions and risks made in the ERR calculations for the program.

#### ***Monitoring and Evaluation Officers***

The Monitoring and Evaluation Officers and CRC imbeds shall assist in the full range of M&E activities, including day to day monitoring and analysis, and providing timely and relevant information to key project stakeholders. The imbeds are MCA's staff imbedded within the World Bank's implementation units, and in charge of providing MCA inputs to the implementation teams and reporting on the progress to MCA.

#### ***Economist***

Along with MCA's Monitoring and Evaluation Officers and CRC imbeds, the MCA Economist shall assist the M&E Director in his/her day-to-day responsibilities, and report to him/her. The role of the MCA Economist during implementation is twofold. First, they will be actively engaged in the estimation of the ERRs for CRA projects using templates designed by MCC Economists. The MCA Economist will work closely with the CRA Manager and sector experts to agree and validate the key variables needed to estimate the ERR which will be approved and validated by MCC Economists. Second, the MCA Economist will monitor the key indicators used to estimate the ERR for compact projects. It is anticipated that some projects or activities will encounter redesigns may trigger an ERR re-calculation and the role of the MCA Economist is to monitor these triggering events

#### **Coordination**

##### ***MCA-N Data Management System for Monitoring and Evaluation***

All MCAs must use the MCC MIS for reporting the QDRP (including the ITT) to MCC. In addition, an MCA may decide to develop its own MIS for M&E to collect data from

implementers that can track program progress and monitor each activity to facilitate timely and accurate reporting. However, any MIS development must be coordinated closely with both the MCC MIS and MCA MIS initiatives, other service providers, and government ministries.

***Review and Revision of the M&E Plan***

The M&E Plan is designed to evolve over time, adjusting to changes in program activities and improvements in performance monitoring and measurement. The M&E Plan may be modified or amended without amending the Compact. However, any such modification or amendment of the M&E Plan by MCA-N must be approved by MCC in writing and must be otherwise consistent with the requirements of the Compact and any relevant supplemental agreements. With notice to MCA-N, MCC may make non-substantive changes to the M&E Plan as necessary. Some examples of non-substantive changes could include revising units to correspond to MCC’s approved list of units of measurement or standardizing indicator names.

***Timing and Frequency of Reviews and Modifications***

In the fourth quarter of every Compact year, or as necessary, the M&E Director of MCA-N and representatives of MCC M&E staff will review how well the M&E Plan has met its objectives (i.e., an “Annual Review”). The Annual Review is intended to ensure that the M&E Plan measures program performance accurately and provides crucial information on the need for changes in project design. More specifically, the review:

- Ensures that the M&E Plan shows whether the logical sequence of intervention outputs and outcomes is occurring;
- Checks whether indicator definitions are precise and timely;
- Checks whether M&E indicators accurately reflect program performance;
- Updates indicator targets, as allowed by the MCC M&E Policy; and
- Adds indicators, as needed, to track hitherto unmeasured results.

The M&E Plan will be revised by MCA-N, in agreement with MCC M&E, when the need for change has been identified in an Annual Review. The revision and approval process will follow the guidelines outlines in the MCC M&E Policy.

The Annual Reviews will adhere to the following schedule; however, the M&E Plan may be reviewed and modified at other times, e.g., as Compact investments are further defined:

**Table 8: Schedule for Annual Reviews**

Compact Year	Timing of Annual Review
1	October - December 2018
2	October - December 2019
3	October – December 2020
4	October – December 2021

### ***Documenting Modifications***

Justification for deleting an indicator, modifying an indicator baseline or target, modifying Beneficiary information or major adjustments to the evaluation plan will be adequately documented in English in Annex III to the revised M&E Plan. MCA-N shall use the standard modification template provided by MCC for documenting these modifications.

### ***Approval and Peer Review of M&E Plan Modifications***

All M&E Plan modifications made by the MCA-N will be submitted to MCC for formal approval. The M&E Plan may undergo peer review within MCC before the beginning of the formal approval process. The initial M&E Plan must be approved by MCA-N Board of Directors prior to its formal submission to MCC. MCA-N must then send the M&E Plan to MCC for formal approval. Any revision of the M&E Plan by MCA-N must be approved by MCC in writing and must be otherwise consistent with the requirements of the compact program agreement, and any relevant supplemental agreements.

## **M&E BUDGET**

The budget for the implementation of the proposed M&E activities for the five-year term of the Compact is US\$12 million. The line items of this budget will be reviewed and updated as the program develops, on an annual or quarterly basis, when the respective quarterly detailed financial plan is submitted to MCC with the quarterly disbursement request.

The M&E budget does not include the M&E staff in the MCA-N Management Unit whose salaries and field trips are included in the administrative budget of the Compact. The budget should not exceed the total amount over the five years, but the distribution of funding between line items and years may be adjusted according to the results of the M&E Plan's annual or quarterly reviews, if needed.

While the resources for carrying-out surveys during the Compact are included as Compact funds, the evaluation design and analysis is to be funded directly by MCC. MCC will commit to fund the external evaluators. A high-level evaluation budget will be added to this plan once the evaluations are more defined.

## **OTHER**

### **M&E Work Plan**

The MCA-N M&E Directorate shall develop an M&E work plan based on the proposed activities in the M&E budget. This work plan shall be for the whole duration of the Compact five year period. The main activities shall include the procurement of consultant services, procurement of monitoring equipment if necessary, stakeholder workshops, data collection and analysis, and procurement and implementation of surveys. The M&E work plan will be developed and available within the second quarter of Compact implementation.

## ANNEX I: INDICATOR DOCUMENTATION TABLE

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
<b>Project 1: Irrigation and Market Access Project</b>										
<b>Activity 1: Irrigation Perimeter Development Activity</b>										
AI-8	Output	N/A	Hectares under improved irrigation	The number of hectares served by existing or new irrigation infrastructure that are either rehabilitated or constructed with MCC funding.	Hectares	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Hand-over Certificates	MCA-Niger	Annual	This indicator should measure the number of hectares that could be irrigated by the irrigation system. In other words, this indicator measures the capacity of the irrigation system, but not the actual number of hectares being irrigated. It will be reported on once an irrigation system is completed.
AI-5	Process	N/A	Temporary employment generated in irrigation	The number of people temporarily employed or contracted by MCA-contracted construction companies to work on construction of irrigation systems.	Number	Sex (Male, Female) Niger Age (15-35 years old, Over 35 years old)	Construction contractor reports	MCA-Niger	Annual	
AI-4	Process	N/A	Percent disbursed of irrigation construction contracts	The total amount of all signed construction contracts for agricultural irrigation investments disbursed divided by the total value of all signed contracts.	Percentage	None	Fiscal Agent reports	MCA-Niger	Quarterly	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
AI-4.1	Process	N/A	Value disbursed of irrigation construction contracts	The amount disbursed of all signed construction contracts for agricultural irrigation investments using compact funds.	US Dollars	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Fiscal Agent reports	MCA-Niger	Quarterly	
AI-3	Process	N/A	Value of signed irrigation construction contracts	The value of all signed construction contracts for agricultural irrigation investments using compact funds.	US Dollars	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Fiscal Agent reports	MCA-Niger	Quarterly	
AI-2	Process	N/A	Percent disbursed of irrigation feasibility and design contracts	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.	Percentage	None	Fiscal Agent reports	MCA-Niger	Quarterly	
AI-2.1	Process	N/A	Value disbursed of irrigation feasibility and design contracts	The amount disbursed of all signed feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments using 609(g) and compact funds.	US Dollars	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Fiscal Agent reports	MCA-Niger	Quarterly	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
AI-1	Process	N/A	Value of signed irrigation feasibility and design contracts	The value of all signed feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments using 609(g) and compact funds.	US Dollars	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Fiscal Agent reports	MCA-Niger	Quarterly	
<b>Project 1: Irrigation and Market Access Project</b> <b>Activity 2: Management Services and Market Facilitation Activity</b> <b>Sub-Activity: Land Tenure Security</b>										
L-6	Output	Participants are allocated land with proper documents	Land rights formalized	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.	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)  Household Head (Community-owned/Male-headed household/Female-headed household/Co-headed household)	Occupation contract (Konni) and Long-term Leases (Sia Kouanza Tondika)	ONAHA	Quarterly	Note that this result is an outcome in the program logic, but the common indicator is an output.
	Outcome	COFOCOMs have acquired skills to enforce land rights formalization	TBD after further definition	TBD	TBD	TBD	Communes' annual reports to MCA	Land/RAP Consultants	Annual	TBDs will be filled in during the first M&E Plan revision

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Output	Formalization of land rights & registration with clear criteria for land allocation	Perimeters registered	Irrigation perimeters formally registered in the name of the central government	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Land Title	Department of Land Conservation under the Directorate of State and Cadastral Affairs	Quarterly	
	Output	Formalization of land rights & registration with clear criteria for land allocation	Communes formally adopting land allocation principles and criteria	Number of municipal orders issued by communes adopting land allocation and principles criteria	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Municipal Order	ONAHA	Once	
L-5	Output	Formalization of land rights & registration with clear criteria for land allocation	Parcels corrected or incorporated in land system	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, cadastre or an integrated system).	Parcels	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Occupation contract (Konni) and Long-term Leases (Sia Kouanza Tondika)	ONAHA	Quarterly	The sub-activity will only be working in rural areas, thus the common indicator urban/rural disaggregation will not be included in the M&E plan.
L-4	Output	Formalization of land rights & registration with clear criteria for land allocation	Conflicts successfully mediated	The number of disputed land and property rights cases that have been resolved by local authorities, contractors, mediators or courts with compact support.	Number	None	Conflict monitoring system	Locally appointed ad hoc grievance resolution committees with support from MCA-Niger/ONAHA	Quarterly	In a future M&E Plan revision, consider making this an input and adding an indicator of "Percent of conflicts successfully mediated."
L-3	Output	Formalization of land rights & registration with clear criteria for land allocation	Stakeholders trained	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	Number	Sex (Male, Female)	Project training records compiled by contractors and subject to verification	MCA-Niger/Permanent National Secretariat of the Rural Code	Quarterly	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
				resolution, land allocation, land use planning, land legislation, land management or new technologies.						
	Output	COFOCOMs receive training and resources support	COFOCOMs that receive training and resources support	Number of COFOCOMs that receive training on rural code and land administration procedures to develop and implement land allocation principles and improve land administration in targeted communes	Number	None	Consultant training reports	MCA-Niger consultant	Quarterly	A more detailed definition of what it means for a COFOCOM to be "trained" will be added once it's determined.  MCA-Niger to contract out training for COFOCOMs
<b>Project 1: Irrigation and Market Access Project</b> <b>Activity 2: Management Services and Market Facilitation Activity</b> <b>Sub-Activity: Sustainable Management of Irrigation Systems</b>										
	Outcome	Water for irrigation is efficiently provided and sustainably managed	Perception of quality of water service by water users	Percent of water users that approve of the quality of service	Percentage	IWUAs Sex (Male, Female)	Water User Surveys	ONAHA	Annual	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Outcome	Water for irrigation is efficiently provided and sustainably managed	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
	Outcome	iWUAs are functional	iWUAs that self-finance with fees covering assigned operations, maintenance, and rehabilitation	Number of iWUAs that contribute 100% of assigned operations, maintenance, and rehabilitation (O&M&R) costs	Number	None	Contractor Annual Report	Sustainable Management of Irrigation Systems contractor	Annual	The target for this indicator in the Compact was 5, but the final number of iWUAs won't be determined until additional studies have been conducted. If the total number of iWUAs created changes, then the target for this indicator will be reviewed.
	Outcome	iWUAs have acquired management skills	Rate of collection of water fees	Percent of (each individual) irrigation water user association members that are paying their fees in full and on time	Percentage	iWUAs	iWUAs with ONAHA oversight	iWUAs with ONAHA oversight	Annually	Will be collected by whomever is in charge of fund management
	Outcome	iWUAs have acquired management skills	Rate of investment from water fees in operation management	Proportion of collected fees that are used for operation management	Percentage	iWUAs	ONAHA and contractor's reports	ONAHA	Annual	Can't be collected until after iWUAs are installed, this should begin in the 7th quarter

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Outcome	ONAHA has improved institutional capacity to provide oversight to iWUAs	iWUA management perceives that ONAHA has technical capacity to support them in the management of the system	Percent of iWUA management which perceives that ONAHA has technical capacity to support them in the management of the system	Percentage	iWUAs	TBD	TBD	TBD	Discuss with sustainable management contractor on data sources and responsible party
	Outcome	iWUAs have acquired management skills	iWUAs prepare financial reports and annual budgets	Number of iWUAs that prepare financial reports and annual budgets	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	MCA consultant report	iWUAs with ONAHA oversight	Annual	
	Process	ONAHA's role in irrigated perimeters is modified in accordance with 2016 decree	The role of the perimeter director is modified for ONAHA to become supervisor of the irrigation water user associations' performance management	Date the perimeter director role is modified for ONAHA to become official supervisor of the water user associations' performance and resource management	Date	None	Signed entity agreement	MCA-Niger (Manager Services Lead)	Once	
	Output	iWUAs are created	iWUAs created	Number of iWUAs created	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	MCA consultant report	Sustainable Management of Irrigation Systems contractor	Quarterly	Created is defined as carrying out all the processes that will lead to the establishment of the different components (general assembly, executive committee, control committee) by the members

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Output	iWUA management is trained	iWUA management trained	Number of iWUA management members who have received management technique skills training	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Sustainable Management of Irrigation Systems report	Sustainable Management of Irrigation Systems contractor	Quarterly	A detailed definition for "trained" will be included once it is agreed upon with the consultant.
<b>Project 1: Irrigation and Market Access Project</b> <b>Activity 2: Management Services and Market Facilitation Activity</b> <b>Sub-Activity: Agricultural Support Services</b>										
AI-11	Outcome	Producers apply improved agricultural practices & access to market	Farmers who have applied improved practices as a result of training	The number of primary sector producers (farmers, ranchers, fishermen, and other primary sector producers) that are applying new production or managerial techniques introduced or supported by MCC training or technical assistance, such as input use, production techniques, irrigation practices, post-harvest treatment, farm management techniques, or marketing strategies.	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)  Sex (Male, Female)  Niger Age (15-35 years old, Over 35 years old)	Agricultural Support Services contractor report	Agricultural Support Services contractor	Annual	The indicator name is required to be the common indicator name, but the corresponding indicator in the SAA RFQ is "Applied improved production practices." The definition is required to be the common indicator definition, but a more detailed definition of what it means to apply improved practices in Niger needs to be included here. Definition will be added upon agreement with SAA contractor.
AI-12	Outcome	Producers apply improved agricultural practices & access to market	Hectares under improved practices as a result of training	The number of hectares on which farmers are applying new production or managerial techniques introduced or supported by MCC, such as input use, production techniques, irrigation practices, post-harvest treatment, farm management techniques, or marketing strategies.	Hectares	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)  Sex (Male, Female)	Agricultural Support Services contractor report	Agricultural Support Services contractor	Annual	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
AI-13	Outcome	Participants apply improved skills in production	Enterprises that have applied improved techniques	The number of rural enterprises; producer, processing, and marketing organizations; water users associations; trade and business associations; and community-based organizations that are applying managerial or processing techniques introduced or supported by MCC.	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)  Sex (Male, Female)	Agricultural Support Services contractor report	Agricultural Support Services contractor	Annual	The disaggregation should measure female vs. male ownership.
	Outcome	Members of cooperatives have improved access to member services	Cooperatives providing key services to membership	Percentage of cooperatives or producer organizations that provide at least 3 key services to its members (inputs, access to credit, sales/marketing, or post-harvest services).	Percentage	None	Agricultural Support Services contractor report	Agricultural Support Services contractor	Annual	
	Outcome	Participants have acquired functional numeracy, literacy & basic knowledge in nutrition and hygiene	Trained participants who pass the literacy test	Participants who pass the literacy test and can move on to the next level	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)  Sex (Male, Female)  Niger Age (15-35 years old, Over 35 years old)	Agricultural Support Services contractor report	Agricultural Support Services contractor	Quarterly	This indicator is in the Niger Compact document. The indicator has been refined to focus on literacy. The original name of the indicator was "Men, women and youth participants with improved knowledge from management services." Note that the result from the Compact document that the indicator intends to measure has also been refined.

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Outcome	Savings group members increased their savings & access to loans	Youth groups implement business plans	Percentage of youth groups with common economic interests that implement their business plans	Percentage	None	Agricultural Support Services contractor report	Agricultural Support Services contractor	Quarterly	Implementing business plans means that they have obtained financing, purchased equipment, materials or inputs and have begun production or services of their businesses.
	Outcome	Women increased their savings & access to loans	Savings and loans groups that have graduated from the program	Number of savings and loans groups that have graduated from the program. This means that they have participated in a 12 month cycle and have an average yield of 29%.	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Agricultural Support Services contractor report	Agricultural Support Services contractor	Quarterly	
AI-6	Output	Producers trained in improved production technologies & practices on-farm and value added and Participants trained in sustainable natural resource management	Farmers trained	The number of primary sector producers (farmers, ranchers, fishermen, and other primary sector producers) receiving technical assistance or participating in a training session (on improved production techniques and technologies, including post-harvest interventions, developing business, financial, or marketing planning, accessing credit or finance, or accessing input and output markets).	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)  Sex (Male, Female)  Niger Age (15-35 years old, Over 35 years old)	Agricultural Support Services contractor report	Agricultural Support Services contractor	Quarterly	Primary production: Producers will be trained in improved agriculture practices, including crop rotation, soil conservation, integrated pest management, improved agricultural calendar planning, use of improved agricultural inputs (fertilizer/seeds), use of water saving technologies Value-added and post harvest: improved harvest and post harvest marketing, value-added transformation, introduction of mechanization and new technologies.

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Output	Producers trained in improved production technologies & practices on-farm and value added post harvest production	Women trained in improved productive activities	Women trained in improved and innovative primary production and processing	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Agricultural Support Services contractor report	Agricultural Support Services contractor	Quarterly	
	Output	Women trained in savings, loan methodologies & financial management	Women trained in village savings and loan program	Number of women trained in the village savings and loan program	Number	None	Agricultural Support Services contractor report	Agricultural Support Services contractor	Quarterly	
	Output	Producer groups are trained in adult functional literacy and numeracy, nutrition & hygiene	Participants trained in literacy	Number of participants who completed the literacy program	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)  Sex (Male, Female)	Agricultural Support Services contractor report	Agricultural Support Services contractor	Quarterly	
	Output	New and existing cooperatives receive capacity development training in management of service delivery	Groups who have applied that have secured funding from CRA grant facility or financial institution	Percentage of groups who applied that have secured funding from CRA grant facility or a financial institution for their business plans	Percentage	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)  Sex (Male, Female)  Niger Age (15-35 years old, Over 35 years old)	Agricultural Support Services contractor report	Agricultural Support Services contractor	Quarterly	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
						Organization Type (Cooperative, Non-Cooperative)				
	Process	N/A	Demonstration plots installed	Number of demonstration plots installed in irrigation perimeter (for 2 seasons)	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Agricultural Support Services contractor report	Agricultural Support Services contractor	Quarterly	
	Process	N/A	Innovation plots installed	Number of innovation plots installed in irrigation perimeter (for 2 seasons)	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Agricultural Support Services contractor report	Agricultural Support Services contractor	Quarterly	
	Process	N/A	Demonstration sites installed for women	Sites of demonstration for transformation installed outside of the irrigation perimeter for women	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Agricultural Support Services contractor report	Agricultural Support Services contractor	Quarterly	This will take place outside the irrigation perimeter, but technically still within the two regions.

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
<b>Project 1: Irrigation and Market Access Project</b>										
<b>Activity 3: Roads for Market Access</b>										

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
R-9	Outcome	Improved road conditions	Roughness	The measure of the roughness of the road surface, in meters of height per kilometer of distance traveled	Meters per kilometer	Niger Road Sections (RN-35, RN-7, Rural Road)	TBD	TBD	TBD	This is the International Roughness Index (IRI). The Ministry of Infrastructures does not currently possess a database on the International Roughness Index. Thus the Primary Data Source is temporarily TBD
R-8	Output	Road improvements completed	Kilometers of roads completed	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).	Kilometers	Niger Road Sections (RN-35, RN-7, Rural Road)	Hand-over Certificates	MCA-Niger	Quarterly	
R-7	Process	N/A	Temporary employment generated in road construction	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.	Number	Sex (Male, Female)	Construction Contractor Quarterly Reports	Construction Contractors	Quarterly	
R-6	Process	N/A	Kilometers of roads under works contracts	The length of roads in kilometers under works contracts for construction of new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads	Kilometers	Niger Road Sections (RN-35, RN-7, Rural Road)	Signed contracts	MCA-Niger	Quarterly	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
R-5	Process	N/A	Percent disbursed of road construction contracts	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.	Percentage	None	Calculation	MCA-Niger	Quarterly	
R-5.1	Process	N/A	Value disbursed of road construction contracts	The amount disbursed of all signed construction contracts for new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads using compact funds.	US Dollars	Niger Road Sections (RN-35, RN-7, Rural Road)	Financial Report	MCA-Niger	Quarterly	
R-4	Process	N/A	Value of signed road construction contracts	The value of all signed construction contracts for new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads using compact funds.	US Dollars	Niger Road Sections (RN-35, RN-7, Rural Road)	Signed contracts	MCA-Niger	Quarterly	
R-3	Process	N/A	Kilometers of roads under design	The length of roads in kilometers under design contracts. This includes designs for building new roads and reconstructing, rehabilitating, resurfacing or upgrading existing roads.	Kilometers	Niger Road Sections (RN-35, RN-7, Rural Road)	Signed contracts	MCA-Niger	Quarterly	
R-2	Process	N/A	Percent disbursed of road feasibility and design contracts	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	Percentage	None	Financial Report	MCA-Niger	Quarterly	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
R-2.1	Process	N/A	Value disbursed of road feasibility and design contracts	The amount disbursed of all signed feasibility, design, and environmental contracts, including resettlement action plans, for road investments using 609(g) and compact funds.	US Dollars	Niger Road Sections (RN-35, RN-7, Rural Road)	Financial Report	MCA-Niger	Quarterly	
R-1	Process	N/A	Value of signed road feasibility and design contracts	The value of all signed feasibility, design, and environmental contracts, including resettlement action plans, for road investments using 609(g) and compact funds.	US Dollars	Niger Road Sections (RN-35, RN-7, Rural Road)	Signed contracts	MCA-Niger	Quarterly	
	Process	Road maintenance regime is established and enforced	Road maintenance reform adopted	The date the government adopts the road maintenance reform including: (i) the establishment of a Second Generation Road Maintenance Fund; (ii) a functional Road Maintenance Agency; and (iii) an Independent Auditor for road maintenance funds	Date	None	TBD	MCA-Niger	Once	Under definition, by “government adopts” we meant “the maintenance regime that is validated and approved by all stakeholders”  Under Primary Source, on June 15, 2017 key stakeholders (including UC-PMC, MCC and Ministry of Infrastructures) approved the proposed road maintenance approach by GENIS/D-BOM – according to meeting minutes from June 15, 2017
	Process	N/A	The Plan for sustainable Road maintenance is approved by MCC	Date on which MCC approves the proposed Plan	Date	None	Approval documents	MCA-Niger (Roads Manager)	Once	

CI Code	Indicator Level	Results	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
<b>Project 1: Irrigation and Market Access Project</b>										
<b>Activity 4: Policy Reform Activity</b>										
	Outcome	Improved procurement system	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBDs will be filled upon completion of the consultant's work on Comparative Study is completed
	Outcome	Greater number of small fertilizer vendors	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBDs will be filled upon completion of the consultant's work on Comparative Study is completed
	Output	Price setting mechanism is reformed	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
	Output	E-database is established to identify the most vulnerable	TBD	TBD	Date	TBD	TBD	TBD	TBD	
	Process	Action Plan and Milestones Defined for Options Chosen	TBD	TBD	Date	TBD	TBD	TBD	TBD	
	Process	Appropriate Reform Options are Chosen	Fertilizer sector reform approved	Fertilizer sector reform approved by the government	Date	None	TBD	TBD	Once	
	Process	Comparative Study for Reform Options	TBD	TBD	Date	TBD	TBD	TBD	Once	

	Process	N/A	COTEN installed	COTEN installed	Date	None	TBD	TBD	Once	
	Process	N/A	OMEN installed	OMEN installed	Date	None	TBD	TBD	Once	
	Process	N/A	Needs Assessments for Statistical Capacity	Date of completion of needs assessments for statistical capacity	Date	None	Contractor reports	MCA Contractor	Once	
	Process	N/A	Decree/Ordinance Adoption of CAIMA	Date of Government's Decree or Ordinance officially adopting CAIMA reform approach	Date	None	Government Decree/Ordinance	MCA Niger	Once	
CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information

**Project 2: Climate Resilient Communities Project**  
**Activity 1: Climate Resilient Agriculture Activity**

	Outcome	Communes have improved access to markets	Communes with market access infrastructure	Number of market-access infrastructure built or rehabilitated (roads, storage facilities, markets, other)	Number	None	TBD	MCA - Niger CRA	Quarterly	If ICRPs do not apply, indicators could be retired or modified
AI-12	Outcome	Communes have improved natural resources	Hectares under improved practices as a result of training	The number of hectares on which farmers are applying new production or managerial techniques introduced or supported by MCC, such as input use, production techniques, irrigation practices, post-harvest treatment, farm management techniques, or marketing strategies.	Number	None	Surveys	MCA - Niger CRA	Annually	

	Outcome	Communes implement projects/plans	Grain storage facilities built or rehabilitated	Number of commune level grain storage facilities built or rehabilitated through an ICRIP	Number	None	Annual CRA report of the ICRIP Consultant	MCA - Niger CRA	Annually	If ICRPs do not apply, indicators could be retired or modified
	Outcome	Communes implement projects/plans	Communes with increased access to water for irrigation	Number of irrigation systems built <sup>12</sup>	Number	None	Annual CRA report of the ICRIP Consultant	MCA - Niger CRA	Annually	If ICRPs do not apply, indicators could be retired or modified
	Output	CRA-integrated subprojects are financed by MCA at the commune level	Communal subprojects (ICRIPs) funded	Total number of communal subprojects (ICRIPs) approved and financed by MCA	Number	None	Annual CRA report of the ICRIP Consultant	MCA - Niger CRA	Annually	
	Output	CRA-integrated subprojects are financed by MCA at the commune level	Amount granted for communal subprojects (ICRIPs)	Total amount granted for approved communal subprojects	CFA	None	TBD	MCA - Niger CRA	Quarterly	
	Output	Communes develop ICRIPs	Applications received for subprojects (ICRIPs)	Total amount of communal subproject applications submitted for grant approval	Number	None	Annual CRA report of the ICRIP Consultant	MCA - Niger CRA	Annually	

<sup>12</sup> This indicator is only valid (and will only be maintained) if one of multiple ICRIPs contain irrigation in their communal plans

	Outcome	Target participants implement proposals funded by grants	Completed projects funded by CRA Grant Facility	% projects funded by Grant Facility that are complete	Number	Type of Agro-Business (MSME Cooperatives, Cooperatives and Processor Groups, Youth Groups, Women's Groups)	Facility Manager reports	MCA - Niger CRA	Quarterly	
	Output	CRA grants & business development services provided	Amount leveraged	Amount leveraged through grant facilities	CFA	Type of Agro-Business (MSME Cooperatives, Cooperatives and Processor Groups, Youth Groups, Women's Groups)	MCA - Niger CRA	MCA - Niger CRA	Quarterly	
	Output	CRA grants & business development services provided	Grant Facility projects funded	Number of projects funded by the Grant Facility	Number	Type of Agro-Business (MSME Cooperatives, Cooperatives and Processor Groups, Youth Groups, Women's Groups)	MCA - Niger CRA	MCA - Niger CRA	Quarterly	
	Output		Amount granted for CRA Grant Facility projects	Total amount of grants approved by the Grant Facility	CFA	Type of Agro-Business (MSME Cooperatives, Cooperatives and Processor Groups, Youth Groups, Women's Groups)	MCA - Niger CRA	MCA - Niger CRA	Quarterly	

	Process	N/A	Applications received by Grant Facility	Number of grant applications received by Grant Facility	Number	Type of Agro-Business (MSME Cooperatives, Cooperatives and Processor Groups, Youth Groups, Women's Groups)	MCA - Niger CRA	MCA - Niger CRA	Quarterly	
	Outcome	COFOCOMs and officials are able to plan and manage assets the natural resources in their communes and to mediate and solve land conflicts	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBDs to be filled upon detailed definition of capacity sought (in revised M&E Plan)
	Output	COFOCOMs are trained in asset and natural resource management and conflict resolution	Participants trained	Number of individual officials trained in sustainable management of resources and infrastructure	Number	None	MCA - Niger CRA	MCA - Niger CRA	Quarterly	

	Process	N/A	Agreements with Communes	Date of signed agreements	Date	Regions (Dosso, Maradi, Tahoua, Tillabery)	Signed accord documents	MCA-Niger (CRA Manager)	Once	
	Process	N/A	Outreach campaigns	Date of completion of outreach campaigns	Date	None	Campaign reports	MCA-Niger (CRA Manager)	Once	
	Process	N/A	Grant Manager hired	Date of Grant Manager's contract signing	Date	None	Contract documents	MCA-Niger (CRA Manager)	Once	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
<b>Project 2: Climate Resilient Communities</b>										
<b>Activity 2: Regional Sahel Pastoralism Support Activity</b>										
	Outcome	Improved animal health for bovines and small ruminants	Herd Prevalence of CBPP	Herd prevalence of contagious bovine pleuropneumonia (CBPP)	Percentage	Animal (Cow, Sheep, Goat)	Ministry of Livestock Annual Report	Ministry of Livestock	Annually	From Jonathan: Data is reported in the final, annual report of the vaccination campaign
	Outcome		Herd Prevalence of PPR	Post vaccine seroprevalence of PPR	Percentage					
	Outcome	Animal diseases control and surveillance system is supported	Vaccination coverage rates	Percent of animals vaccinated against CBPP and PPR	Percentage	Disease (CBPP, PPR)	Ministry of Livestock	Ministry of Livestock	Annual	
	Outcome	More livestock products available in local and regional markets	Animals sold	Number of animals sold in new and rehabilitated markets	Number	None	Ministry of Livestock	Ministry of Livestock	Annual	
	Outcome		Dairy products sold	Quantity of milk sold on local and regional markets (constructed or rehabilitated)	Kilogram	None	Ministry of Livestock	Ministry of Livestock	Annual	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Outcome	Increased livestock production and productivity	Production growth rate	Rate of increase for number of animals	Percentage	Animal (Cow, Sheep, Goat)	Ministry of Livestock	Ministry of Livestock	Annually	
	Outcome	Increased access to public grazing land and drinking water points for herders	Areas of grazing land created and improved	Hectares of grazing land created and improved	Hectares	None	Ministry of Livestock	Ministry of Livestock	Annually	
	Outcome		Distance between functional water points	Average distance between functional water points and accessible to pastoralists and agro-pastoralists in targeted areas	Kilometers	None	Ministry of Livestock	Ministry of Livestock	Annually	
	Outcome	Increased number of livestock displayed and sold	Animals sold	Total number of animals sold on the constructed or rehabilitated markets	Number	Animal (Cow, Sheep, Goat)	Ministry of Livestock	Ministry of Livestock	Annually	
	Outcome	Increased number of livestock displayed and sold	Animals displayed for sale	Average weekly number of animals displayed for sale on the constructed or rehabilitated markets	Number	Animal (Cow, Sheep, Goat)	Ministry of Livestock	Ministry of Livestock	TBD	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Outcome	Increased competition for livestock and dairy products	Average price of dairy products	Average monthly price of dairy products sold on new or rehabilitated market	CFA/Kilogram	None	Ministry of Livestock	Ministry of Livestock	Quarterly	From Jonathan: Through improvements of market management and enhancement and construction of milk collection centers
	Outcome	Increased competition for livestock and dairy products	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
	Output	Health infrastructure upgraded and veterinary capacities strengthened	Veterinaries that complete training or re-training	Number of veterinaries that complete training or re-training	Number	Sex (Male/Female)	SBPP Consultant report	SBPP Consultant	Quarterly	
	Output	Health infrastructure upgraded and veterinary capacities strengthened	Auxiliaries that complete training or re-training	Number of auxiliaries that complete training or re-training	Number	None	SBPP Consultant report	SBPP Consultant	Quarterly	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Output	Health infrastructure upgraded and veterinary capacities strengthened	Veterinary technicians that complete training or re-training	Number of veterinary technicians that complete training or re-training	Number	None	SBPP Consultant report	SBPP Consultant	Quarterly	
	Output	Health infrastructure upgraded and veterinary capacities strengthened	New veterinary clinics upgraded or built	Number of new veterinary clinics upgraded or built	Number	None	SBPP Consultant report	SBPP Consultant	Quarterly	
	Output	Health infrastructure upgraded and veterinary capacities strengthened	Public posts of veterinary control built	Number of public posts of veterinary control built	Number	None	SBPP Consultant report	SBPP Consultant	Quarterly	
	Output	Rangeland management capacities strengthened (OPs, national & local govt. entities)	Participants trained in rangeland management	Number of participants trained	Number	National/Local	SBPP Consultant report	SBPP Consultant	Quarterly	A detailed definition of “trained” will need to be added to this plan once it’s agreed upon.

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Output	Water source infrastructures are reinforced	Water sources constructed or rehabilitated	Number of water sources constructed or rehabilitated	Number	None	SBPP Consultant report	SBPP Consultant	Quarterly	
	Output	Livestock & livestock product infrastructure is improved and information system reinforced	Markets built or rehabilitated	Number of markets built or rehabilitated	Number	Type of infrastructure	SBPP Consultant report	SBPP Consultant	Quarterly	
	Output	Capacities of producers and inter-professional organizations are strengthened	Organizations trained in management of pastoral land both locally and nationally	Number of organizations that have been trained in management of pastoral land both locally and nationally	Number	None	SBPP Consultant report	SBPP Consultant	Quarterly	
	Process	Health infrastructure upgraded and veterinary capacities strengthened	Veterinaries selected	Number of veterinaries selected	Number	Sex (Male, Female)	SBPP Consultant report	SBPP Consultant	Quarterly	

CI Code	Indicator Level	Result	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Process	Health infrastructure upgraded and veterinary capacities strengthened	Auxiliaries selected	Number of auxiliaries selected	Number	None	SBPP Consultant report	SBPP Consultant	Quarterly	
	Process	Health infrastructure upgraded and veterinary capacities strengthened	Veterinary technicians selected	Number of veterinary technicians selected	Number	None	SBPP Consultant report	SBPP Consultant	Quarterly	

## ANNEX II: TABLE OF INDICATOR BASELINES AND TARGETS

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
<b>Project 1: Irrigation and Market Access Project</b>													
<b>Activity 1: Irrigation Perimeter Development Activity</b>													
Hectares under improved irrigation	Hectares	Cumulative	Konni	0	0	0	0	2,452	2,452	2,452	N/A	NORDA DD3,	Konni is expected to be completed towards

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
			Sia Kouanza Tondika	0	0	0	0	0	2,573	2,573		Konni, page 44 NORDA DD3 Sia-Kouanza, page 10 (1,754 ha) NORDA DD3 Sia, page 10 (819 ha)	the end of Year 3, so the command area should have improved access to irrigation by Year 4.
			Total	0	0	0	0	2,452	5,025	5,025			
Temporary employment generated in irrigation	Number	Cumulative	Sex Niger Age	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	MCC does not set targets for temporary employment.	N/A
Percent disbursed of irrigation construction contracts	Percentage	Level	None	0	0	TBD	TBD	100	100	100	N/A	Calculated	Konni is expected to be completed towards the end of Year 3, so we can expect that 100% will have been disbursed by Year 4.
Value disbursed of irrigation construction contracts	US Dollars	Cumulative	Konni	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	TBDs will be filled in during the first M&E Plan revision at the end of Year 1.
			Sia Kouanza Tondika	0	0	TBD	TBD	TBD	TBD	TBD			
			Total	0	0	TBD	TBD	TBD	TBD	TBD			
Value of signed irrigation construction	US Dollars	Cumulative	Konni	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	TBDs will be filled in during the first M&E

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
contracts			Sia Kouanza Tondika	0	0	TBD	TBD	TBD	TBD	TBD			Plan revision at the end of Year 1.
			Total	0	0	TBD	TBD	TBD	TBD	TBD			
Percent disbursed of irrigation feasibility and design contracts	Percentage	Level	Konni	0	100	100	100	100	100	100	N/A	Calculated	N/A
			Sia Kouanza Tondika	0	57	100	100	100	100	100			
			Total	0	69	100	100	100	100	100			
Value disbursed of irrigation feasibility and design contracts	US Dollars	Cumulative	Konni	0	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	N/A	Email from MCC Irrigation Lead 1/26/2018	N/A
			Sia Kouanza Tondika	0	1,600,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000			
			Total	0	2,700,000	3,900,000	3,900,000	3,900,000	3,900,000	3,900,000			
Value of signed irrigation feasibility and design contracts	US Dollars	Cumulative	Konni	0	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	N/A	Email from MCC Irrigation Lead 1/26/2018	N/A
			Sia Kouanza Tondika	0	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000			
			Total	0	3,900,000	3,900,000	3,900,000	3,900,000	3,900,000	3,900,000			

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compa	Baseline Source	Target Calculation + Source	Notes
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					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22	Actual Target			
<b>Project 1: Irrigation and Market Access Project</b>													
<b>Activity 2: Management Services and Market Facilitation Activity</b>													
<b>Sub-Activity: Land Tenure Security</b>													
Land rights formalized	Number	Cumulative	Konni	0	0	TBD	TBD	TBD	3,400	3,400	N/A	The target for Konni was calculated as follows by the MCC Land Team: there are 2,552 hectares in Konni and each parcel is approximately 0.75 ha, so that makes approximately 3,400 parcels. Assumption that there is approximately one household per parcel. MCC Land does not know how the SKT number was derived. No targets will be set by gender.	TBDs will be filled in during the first M&E Plan revision at the end of Year 1.
			Sia Kouanza Tondika	0	0	TBD	TBD	TBD	784	784			
			Household Head (Community-owned/Male-headed household/Female-headed household/Co-headed household)	0	N/A	N/A	N/A	N/A	N/A	N/A			
			Total	0	0	TBD	TBD	TBD	4,184	4,184			
Perimeters registered	Number	Cumulative	Konni	0	0	TBD	TBD	TBD	1	1	N/A	Land team believes there will be a single title for the Konni perimeter and 4 titles at Sia Kouanza, for a total target of 5 titles (land titles to the perimeters that will be in the name of the central government).	TBDs will be filled in during the first M&E Plan revision at the end of Year 1.
			Sia Kouanza Tondika	0	0	TBD	TBD	TBD	4	4			
			Total	0	0	TBD	TBD	TBD	5	5			

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
Communes formally adopting land allocation principles and criteria	Number	Cumulative	Konni	0	0	2	2	2	2	2	N/A	Targets came from MCC Land Team. This is a condition precedent and needs to happen by July 2019 for Konni and Sept 2020 for Sia Kouanza.	
			Sia Kouanza Tondika	0	0	0	3	3	3	3			
			Total	0	0	2	5	5	5	5			
Parcels corrected or incorporated in land system	Parcels	Cumulative	Konni	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	TBDs will be filled in during the first M&E Plan revision at the end of Year 1.
			Sia Kouanza Tondika	0	0	TBD	TBD	TBD	TBD	TBD			
			Total	0	0	TBD	TBD	TBD	TBD	TBD			
Conflicts successfully mediated	Number	Cumulative	None	TBD	0	N/A	N/A	N/A	N/A	N/A	Need to look at how to define conflict vs. grievance, and review existing data to establish the baseline.	No targets will be set for this indicator.	Baseline should be established by the first M&E Plan revision at the end of Year 1.

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes	
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22					
Stakeholders trained	Number	Cumulative	Sex (Female/Male)	0	105	TBD	TBD	TBD	TBD	TBD	N/A	MCC Lead Team provided Year 1 target from page 11 of the "TDR Formation ATQ et Cofocom_Phase." Once training plans are completed then interim targets will be set. No targets will be set by gender.	N/A	
COFOCOMs receive training and resources support	Number	Cumulative	None	0	TBD	N/A	N/A	N/A	N/A	TBD	N/A	TBD	Number and names of COFOCOMs will be determined and incorporated in the revised M&E Plans	
<b>Project 1: Irrigation and Market Access Project</b> <b>Activity 2: Management Services and Market Facilitation Activity</b> <b>Sub-Activity: Sustainable Management of Irrigation Systems</b>														
iWUAs that self-finance with fees covering assigned operations, maintenance, and rehabilitation	Number	Level	N/A	0	0	0	0	TBD	5	5	N/A	Compact	ONAHA stakeholders concerned that this may be too many. Konni for sure will be 1. For SKT, will know number of iWUAs and target dates after studies are completed. Then targets will be reviewed.	
Perception of quality of water service by water users	Percentage	Level	IWUAs 1-5		N/A	N/A	N/A	N/A	TBD	TBD	TBD	N/A	TBD	Sustainable Management of Irrigation Systems (GDSI-Gestion Durable du Systeme d'Irrigation) consultant to
			Male		N/A	N/A	N/A	N/A	TBD	TBD	TBD			
			Female		N/A	N/A	N/A	N/A	TBD	TBD	TBD			

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
			Total	N/A	N/A	N/A	N/A	TBD	TBD	TBD			provide ONAHA with enough capacity to do these surveys themselves Won't have data until year 4
Rate of collection of water fees	Percentage	Level	iWUAs	0	0	N/A	N/A	TBD	TBD	TBD	Since iWUAs are not established, there is no baseline.	TBD	This indicator is from sector leads (Damiana and Moussa). Baselines cannot be determined until iWUAs are established.  End-of-Compact target to be determined after study and design completion
Rate of investment from water fees in operation management	Percentage	Level	iWUAs	0	0	N/A	N/A	TBD	TBD	TBD	Since iWUAs are not established, there is no baseline.	TBD	TBDs will be filled in during the first M&E Plan revision at the end of Year 1.
iWUAs prepare financial reports and annual budgets	Number	Level	Konni	0	0	0	0	TBD	TBD	TBD	N/A	TBD	Targets will be set when the first year annual budget is prepared.
			Sia Kouanza Tondika	0	0	0	0	TBD	TBD	TBD			
			Total	0	0	0	0	TBD	TBD	TBD			
The role of the perimeter director is modified for ONAHA to become supervisor of the irrigation water user associations' performance management	Date	Date	None	N/A	TBD	TBD	TBD	TBD	TBD	TBD	N/A	TBD (See notes)	Based on the Implementing Entity Agreement to be signed between MCA and ONAHA. Detailed on the exact date to be determined by both sides

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
Percent of iWUA management which perceives that ONAHA has technical capacity to support them in the management of the system	Percentage	Level	None	0	0	0	N/A	TBD	TBD	TBD	N/A	TBD	This indicator is from Damiana and Moussa - with hopes that the source documentation will come when the consultant is hired
iWUAs created	Number	Cumulative	Konni	0	0	TBD	TBD	TBD	1	1	N/A	Compact	Baselines and targets to be determined after completion of feasibility studies
			Sia Kouanza Tondika	0	0	TBD	TBD	TBD	4	4			
			Total	0	0	TBD	TBD	TBD	5	5			
iWUA management trained	Number	Cumulative	Konni	0	0	TBD	TBD	TBD	1	1	N/A	Compact	N/A
			Sia Kouanza Tondika	0	0	TBD	TBD	TBD	4	4			
			Total	0	0	TBD	TBD	TBD	5	5			

**Project 1: Irrigation and Market Access Project**  
**Activity 2: Management Services and Market Facilitation Activity**  
**Sub-Activity: Agricultural Support Services**

Farmers who have applied improved practices as a result of training	Number	Cumulative	Konni	0	0	0	0	0	1,450	1,450	N/A	SAA RFP page 136. There aren't any target by gender or age.	N/A
			Sia Kouanza Tondika	0	0	0	0	0	1,800	1,800			
			Sex (Male, Female)	0	N/A	N/A	N/A	N/A	N/A	N/A			
			Niger Age (15-35 years old, Over 35 years old)	0	N/A	N/A	N/A	N/A	N/A	N/A			

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes	
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22					
			Total	0	0	0	0	0	3,250	3,250				
Hectares under improved practices as a result of training	Hectares	Cumulative	Konni	0	0	0	0	0	TBD	TBD	N/A	TBD	Targets to be set in agreement with the Management Services contractor	
			Sia Kouanza Tondika	0	0	0	0	0	TBD	TBD				
			Sex (Male, Female)	0	0	0	0	0	TBD	TBD				
			Total	0	0	0	0	0	TBD	TBD				
Enterprises that have applied improved techniques	Number	Cumulative	Location (Konni, Sia Kouanza Tondika)	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set in agreement with the Management Services contractor	
			Sex (Male, Female)											
Cooperatives providing key services to membership	Percentage	Level	None	TBD	TBD	TBD	TBD	60	60	60	N/A	SAA RFP pg 135	The number of cooperatives will be available in the future.	
Trained participants who pass the literacy test	Number	Cumulative	Konni	0	0	1,900	2,750	2,750	2,750	2,750	N/A	SAA RFP pg 133 Target was developed from an average test passing rate that assistant programs have. Estimates calculated from CARE and other organizations: estimated average based on previous experience of literacy projects, interviews done by MCC HCD staff and other implementers of similar projects.	N/A	
			Sia Kouanza Tondika	0	0	2,300	3,650	3,650	3,650	3,650				
			Sex (Male, Female)	0	N/A	N/A	N/A	N/A	N/A	N/A				N/A
			Niger Age (15-35 years old, Over 35 years old)	0	N/A	N/A	N/A	N/A	N/A	N/A				N/A
			Total	0	0	4,200	6,400	6,400	6,400	6,400				6,400

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
Youth groups implement business plans	Percentage	Level	None	0	0	0	40%	40%	40%	40%	N/A	SAA RFP pg 135	N/A
Farmers trained	Number	Cumulative	Konni	0	0	1,400	3,050	4,834	4,834	4,834	N/A	SAA RFP pg 133,135 PAPs inside perimeter: based on the estimated PAPs - Konni baseline report, Sia-Kouzana - from an estimation (ESIA is being done now, will have more accurate estimates in late summer 2018)	N/A
			Sia Kouanza Tondika	0	0	1,700	3,700	6,000	6,000	6,000			
			Sex (Male, Female)	0	N/A	N/A	N/A	N/A	N/A	N/A			
			Niger Age (15-35 years old, Over 35 years old)	0	N/A	N/A	N/A	N/A	N/A	N/A			
			Total	0	0	3,100	6,750	10,834	10,834	10,834			
Women trained in improved productive activities	Number	Cumulative	Konni	0	0	700	1,400	1,400	1,400	1,400	N/A	SAA RFP pg 134,135	N/A
			Sia Kouanza Tondika	0	0	800	1,600	1,600	1,600	1,600			
			Total	0	0	1,500	3,000	3,000	3,000	3,000			
Women trained in village savings and loan program	Number	Cumulative	None	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set in agreement with the Management Services contractor
Participants trained in literacy	Number	Cumulative	Konni	0	0	3,800	5,500	5,500	5,500	5,500	N/A	SAA RFP pg 133	N/A
			Sia Kouanza Tondika	0	0	4,600	7,300	7,300	7,300	7,300			
			Sex (Male, Female)	0	N/A	N/A	N/A	N/A	N/A	N/A			
			Total	0	0	8,400	12,800	12,800	12,800	12,800			
Savings and loans groups that have graduated from the program	Number	Cumulative	Konni	0	0	40	80	80	80	80	N/A	SAA RFP pg 133	N/A
			Sia Kouanza Tondika	0	0	50	100	100	100	100			

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
			Total	0	0	90	180	180	180	180			
Groups who have applied that have secured funding from CRA grant facility or financial institution	Percentage	Level	Konni	0	0	50	50	50	50	50	N/A	SAA RFP pg 133	N/A
			Sia Kouanza Tondika	0	0	50	50	50	50	50			
			Sex (Male, Female)	0	0	N/A	N/A	N/A	N/A	N/A			
			Niger Age (15-35 years old, Over 35 years old)	0	0	N/A	N/A	N/A	N/A	N/A			
			Organization Type (Cooperatives, Non-Cooperatives)	0	0	N/A	N/A	N/A	N/A	N/A			
			Average	0	0	50	50	50	50	50			
Demonstration plots installed	Number	Cumulative	Konni	0	0	45	100	160	160	160	N/A	SAA RFP pg 134,135	N/A
			Sia Kouanza Tondika	0	0	50	115	190	190	190			
			Total	0	0	95	215	350	350	350			
Innovation plots installed	Number	Cumulative	Konni	0	0	10	20	30	30	30	N/A	SAA RFP pg 133	N/A
			Sia Kouanza Tondika	0	0	15	30	45	45	45			
			Total	0	0	25	50	75	75	75			
Demonstration sites installed for women	Number	Cumulative	Konni	0	0	20	40	40	40	40	N/A	SAA RFP pg 133	N/A
			Sia Kouanza Tondika	0	0	25	50	50	50	50			

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
			Total	0	0	45	90	90	90	90			

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				

**Project 1: Irrigation and Market Access Project**  
**Activity 3: Roads for Market Access**

Roughness	Meters per kilometer	Level	RN-35	16	N/A	N/A	N/A	N/A	8	8	Due Diligence Report and Compact	HDM-4 Model (Compact, Annex III-12)	MCA - Niger will hire a supervising engineer for the works under a performance-based management and maintenance contract.
			RN-7	8	N/A	N/A	N/A	N/A	2	2			
			Rural Road	14.5	N/A	N/A	N/A	N/A	10	10			
Kilometers of roads completed	Kilometers	Cumulative	RN-35	0	0	TBD	TBD	TBD	187	187	N/A	HDM-4 Model (Compact, Annex III-12)	Road rehabilitation schedule will start after the feasibility study is complete.  Initial end-of-compact estimates were 82.5km for RN7 and 306.5km for total
			RN-7	0	0	TBD	TBD	TBD	83	83			
			Rural Road	0	0	TBD	TBD	TBD	37	37			
			Total	0	0	TBD	TBD	TBD	307	307			
Temporary employment generated in road construction	Number	Cumulative	Sex (Male, Female)	0	N/A	Targets are not required for this indicator.	N/A						
Kilometers of roads under works contracts	Kilometers	Cumulative	RN-35	0	0	TBD	TBD	TBD	TBD	TBD	N/A	Due Diligence Report	Targets will be set after the feasibility study is complete.
			RN-7	0	0	TBD	TBD	TBD	TBD	TBD			

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
			Rural Road	0	0	TBD	TBD	TBD	TBD	TBD			
			Total	0	0	TBD	TBD	TBD	TBD	307			
Percent disbursed of road construction contracts	Percentage	Level	None	0	0	TBD	TBD	TBD	100	100	N/A	TBD	Targets will be set after the feasibility study is complete.
Value disbursed of road construction contracts	US Dollars	Cumulative	RN-35	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets will be set after the feasibility study is complete.
			RN-7	0	0	TBD	TBD	TBD	TBD				
			Rural Road	0	0	TBD	TBD	TBD	TBD				
			Total	0	0	TBD	TBD	TBD	TBD				
Value of signed road construction contracts	US Dollars	Cumulative	RN-35	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets will be set after the feasibility study is complete.
			RN-7	0	0	TBD	TBD	TBD	TBD				
			Rural Road	0	0	TBD	TBD	TBD	TBD				
			Total	0	0	TBD	TBD	TBD	TBD				
Kilometers of roads under design	Kilometers	Cumulative	RN-35	0	0	TBD	TBD	TBD	187	187	N/A	TBD	N/A
			RN-7	0	0	TBD	TBD	TBD	83	83			
			Rural Road	0	0	TBD	TBD	TBD	37	37			
			Total	0	0	TBD	TBD	TBD	307	307			

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
Percent disbursed of road feasibility and design contracts	Percentage	Level	None	0	TBD	TBD	TBD	TBD	100	100	N/A	Calculated	N/A
Value disbursed of road feasibility and design contracts	US Dollars	Cumulative	RN-35	0	TBD	TBD	TBD	TBD	TBD	TBD	N/A	TBD	To be determined upon feasibility and design contract signing.
			RN-7	0	TBD	TBD	TBD	TBD	TBD				
			Rural Road	0	TBD	TBD	TBD	TBD	TBD				
			Total	0	TBD	TBD	TBD	TBD	TBD				
Value of signed road feasibility and design contracts	US Dollars	Cumulative	RN-35	0	TBD	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Signed contract values. To be determined upon feasibility and design contract signing.
			RN-7	0	TBD	TBD	TBD	TBD	TBD				
			Rural Road	0	TBD	TBD	TBD	TBD	TBD				
			Total	0	TBD	TBD	TBD	TBD	TBD				
Road maintenance reform adopted	Date	Level	N/A	N/A	TBD	TBD	TBD	TBD	TBD	TBD	N/A	TBD	
The Plan for sustainable Road maintenance is approved by MCC	Date	Level	N/A	N/A	N/A	N/A	Jan 26, 2020	N/A	N/A	Jan 26, 2020	N/A		Proposed but waiting for approval Target of Jan 26, 2020 proposed by MCC's R. Fishbein
<b>Project 1: Irrigation and Market Access Project Activity 4: Policy Reform Activity</b>													
Fertilizer sector reform approved	Date	Level	N/A	N/A	1/19/2018	N/A	N/A	N/A	N/A	1/19/2018	N/A	Government Decree	

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
COTEN installed	Date	Level	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	TBD	
OMEN installed	Date	Level	N/A	N/A	TBD	TBD	TBD	TBD	TBD	N/A	N/A	TBD	
Needs Assessments for Statistical Capacity	Date	Level	N/A	N/A	N/A	6/10/19	N/A	N/A	N/A	N/A	6/10/19		
Decree/Ordinance Adoption of CAIMA	Date	Level	N/A	N/A	1/12/18	N/A	N/A	N/A	N/A	N/A	1/12/18		

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				

**Project 2: Climate Resilient Communities**  
**Activity 1: Climate Resilient Agriculture**

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
Communes with market access infrastructure	Number	Cumulative	None	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set with the CRA contractor Values to be included in revised M&E Plans
Hectares under improved practices as a result of training	Number	Cumulative	None	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set with the CRA contractor Values to be included in revised M&E Plans
Grain storage facilities built or rehabilitated	Number	Cumulative	None	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set with the CRA contractor Values to be included in revised M&E Plans
Communes with increased access to water for irrigation	Number	Cumulative	None	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set with the CRA contractor Values to be included in revised M&E Plans
Communal subprojects (ICRIPs) funded	Number	Cumulative	None	0	TBD	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set with the CRA contractor Values to be included in revised M&E Plans
Amount granted for communal subprojects (ICRIPs)	CFA	Cumulative	None	0	0	TBD	TBD	TBD	TBD	\$ 34 553 349.12	N/A	From Mr. Laminou – MCA Niger - CRA	Targets to be set with the CRA contractor Values to be included in revised M&E Plans
Applications received for subprojects (ICRIPs)	Number	Cumulative	None	0	TBD	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set with the CRA contractor Values to be included in revised M&E Plans
Completed projects funded by CRA Grant Facility	Number	Cumulative	Type of Agro-Business (MSME Cooperatives, Cooperatives and Processor Groups, Youth Groups,	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set in agreement with Grant Manager. Target values to appear in revised M&E Plans

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
			Women's Groups)										
Amount leveraged	CFA	Cumulative	Type of Agro-Business (MSME Cooperatives, Cooperatives and Processor Groups, Youth Groups, Women's Groups)	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set in agreement with Grant Manager. Target values to appear in revised M&E Plans
Grant Facility projects funded	Number	Cumulative	Type of Agro-Business (MSME Cooperatives, Cooperatives and Processor Groups, Youth Groups, Women's Groups)	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set in agreement with Grant Manager. Target values to appear in revised M&E Plans
Amount granted for CRA Grant Facility projects	CFA	Cumulative	Type of Agro-Business (MSME Cooperatives, Cooperatives and Processor Groups, Youth Groups, Women's Groups)	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set in agreement with Grant Manager. Target values to appear in revised M&E Plans
Applications received by Grant Facility	Number	Cumulative	Type of Agro-Business (MSME Cooperatives,	0	0	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set in agreement with Grant Manager. Target values to appear in revised M&E Plans

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
			Cooperatives and Processor Groups, Youth Groups, Women's Groups)										
Participants trained	Number	Cumulative	None	0	TBD	TBD	TBD	TBD	TBD	TBD	N/A	TBD	Targets to be set in agreement with Grant Manager. Target values to appear in revised M&E Plans
Agreements with Communes	Date	Level	Dosso	N/A	5/29/18	N/A	N/A	N/A	N/A	5/29/18	MCA CRA Work Plan	N/A	Targets are the latest dates of completion of the agreement signing
	Date	Level	Maradi	N/A	5/29/18	N/A	N/A	N/A	N/A	5/29/18	MCA CRA Work Plan	N/A	Targets are the latest dates of completion of the agreement signing
	Date	Level	Tahoua	N/A	5/29/18	N/A	N/A	N/A	N/A	5/29/18	MCA CRA Work Plan	N/A	Targets are the latest dates of completion of the agreement signing
	Date	Level	Tillabery	N/A	5/29/18	N/A	N/A	N/A	N/A	5/29/18	MCA CRA Work Plan	N/A	Targets are the latest dates of completion of the agreement signing
Outreach campaigns	Date	Level	None	N/A	6/28/18	N/A	N/A	N/A	N/A	6/28/18	MCA CRA Work Plan	N/A	Targets are the latest dates of completion of the three-month-long campaigns
Grant Manager hired	Date	Level	None	N/A	TBD	TBD	TBD	TBD	TBD	TBD	MCA CRA Manager	N/A	Target to be set after preliminary studies and Grant Manager's TOR are completed

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
<b>Project 2: Climate Resilient Communities</b>													
<b>Activity 2: Regional Sahel Pastoralism Support Activity</b>													
Herd Prevalence of CBPP	Percentage	Level	Animal (Cow, Sheep, Goat)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	MCC and MCA Sector Leads have elected not to consider baseline and target values included in the World Bank documents for PRAPS. MCA Niger is working with the Ministry of livestock to update those data. Updated information will appear in revised M&E Plans (These notes apply to most indicators within PRAPS, below)
Herd Prevalence of PPR	Percentage	Level	Animal (Cow, Sheep, Goat)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Vaccination coverage rates	Percentage	Level	CBPP	52	TBD	TBD	TBD	TBD	80	80	World Bank (confirmed by MCC's EA)	TBD	Year 1 vaccination coverage data to be provided by the World Bank upon completion of Year 1 campaign
	Percentage	Level	PPR	40	TBD	TBD	TBD	TBD	80	80	World Bank (confirmed by MCC's EA)	TBD	Year 1 vaccination coverage data to be provided by the World Bank upon completion of Year 1 campaign
Dairy products sold	Kilogram	Cumulative	None	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
Production growth rate	Percentage	Level	Animal (Cow, Sheep, Goat)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Areas of grazing land created and improved	Hectares	Cumulative	None	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Distance between functional water points	Kilometers	Level	None	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Animals sold	Number	Cumulative	Cow	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Target values to be provided after market construction designs are completed Values to appear in revised M&E Plans
	Number	Cumulative	Sheep	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Target values to be provided after market construction designs are completed Values to appear in revised M&E Plans
	Number	Cumulative	Goat	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Target values to be provided after market construction designs are completed Values to appear in revised M&E Plans
Animals displayed for sale	Number	Level	Cow	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Target values to be provided after market construction designs are completed Values to appear in revised M&E Plans
	Number	Level	Sheep	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Target values to be provided after market construction designs are completed Values to appear in revised M&E Plans
	Number	Level	Goat	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Target values to be provided after market construction designs are completed Values to appear in revised M&E Plans

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
													M&E Plans
Average price of dairy products	CFA/Kilogram	Level	None	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Target values to be provided after market construction designs are completed Values to appear in revised M&E Plans
Veterinaries that complete training or re-training	Number	Cumulative	Sex (Male, Female)	0	0	TBD	TBD	TBD	TBD	TBD	TBD	Based on number of communes. 1 vet per commune.	From the: Service de consultation pour la mise en oeuvre des activites de renforcement des capacites des services veterinaires publics et prives (SBPP consultant TOR)
Auxiliaries that complete training or re-training	Number	Cumulative	None	0	0	350	350	350	350	350	N/A	Estimates based on villages within communes	
Veterinary technicians that complete training or re-training	Number	Cumulative	None	0	0	145	145	145	145	145	N/A	Estimates based on villages within communes	
New veterinary clinics upgraded or built	Number	Cumulative	None	0	0	0	4	8	16	16	N/A	Estimates based on activity design projections	
Public posts of veterinary control built	Number	Cumulative	None	0	0	0	2	4	4	4	N/A	Estimates based on activity design projections	
Participants trained in rangeland management	Number	Cumulative	Sex (Male, Female)	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Water sources constructed or rehabilitated	Number	Cumulative	None	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	

Indicator Name	Unit of Measure	Indicator Classification	Disaggregation	Baseline (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	End of Compact Target	Baseline Source	Target Calculation + Source	Notes
					Jan-18 to Dec-18	Jan-19 to Dec-19	Jan-20 to Dec-20	Jan-21 to Dec-21	Jan-22 to Dec-22				
Markets built or rehabilitated	Number	Cumulative	Type of infrastructure	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Organizations trained in management of pastoral land both locally and nationally	Number	Cumulative	None	0	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Veterinaries selected	Number	Cumulative	Sex (Male, Female)	0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Based on number of communes	
Auxiliaries selected	Number	Cumulative	None	0	350	350	350	350	350	350	N/A	Estimates based on villages within communes	
Veterinary technicians selected	Number	Cumulative	None	0	145	145	145	145	145	145	N/A	Estimates based on villages within communes	

## ANNEX III: M&E PLAN MODIFICATIONS

Indicators may need to be modified in the future versions of the M&E Plan. Modifications and revisions to the indicators may only be made according to the MCC M&E Policy. Justification for deleting an indicator, modifying an indicator baseline or target, modifying beneficiary information or major adjustments to the evaluation plan will be adequately documented in English and annexed to the revised M&E Plan.

Program	Compact Goal and Objective Level Indicators
Project:	Climate-Resilient Communities
Activity:	Climate-Resilient Agriculture
Sub-Activity:	N/A
<b>Increase in income or reduction of costs from PRAPS and CRA Activities (multiple indicators)</b>	
Change Description:	Indicator Modification
Change:	From “Increase in income or reduction of costs from PRAPS and CRA Activities) to “Improved economic welfare from agricultural activities”
Justification:	Existing indicators do not sufficiently meet adequacy criteria
<b>Individual producers trained</b>	
Change Description:	Indicator Modification
Change:	Replace “individual producers” with “Participants”
Justification:	Indicator quality is determined poorer than initially thought when included in Compact
<b>Hectares irrigated</b>	
Change Description:	Retire indicator
Justification:	Relevant due to change in Program, Project or Activity scope
Justification Description:	Indicator to be replaced by a more relevant one
<b>Hectares with access to rehabilitated irrigation</b>	
Change Description:	Retire indicator
Justification:	Relevant due to change in Program, Project or Activity scope
Justification Description:	Indicator to be replaced by a more relevant one
<b>Profit increase</b>	
Change Description:	Indicator Modification
Change:	From “profit increase” to “Rate of change in profit”
Justification:	Indicator quality is determined poorer than initially thought when included in the Compact
<b>Percentage of targeted communes which have constructed infrastructure to support CRA</b>	
Change Description:	Indicator Modification

Change:	Replace “percentage of targeted communes which have constructed infrastructure to support CRA” with three separate indicators: <ul style="list-style-type: none"> <li>- “Communes with market access infrastructure”,</li> <li>- “Communes with increased access to water for irrigation” and</li> <li>- “Grain storage facilities built or rehabilitated”</li> </ul>
Justification:	Existing indicators do not sufficiently meet adequacy criteria

Program	Compact Goal and Objective Level Indicators
Project:	Climate-Resilient Communities
Activity:	PRAPS
Sub-Activity:	N/A
<b>Increase in income or reduction of costs from PRAPS and CRA Activities (multiple indicators)</b>	
Change Description:	Indicator Modification
Change:	From “Increase in income or reduction of costs from PRAPS and CRA Activities) to “Improved economic welfare from livestock activities”
Justification:	Existing indicators do not sufficiently meet adequacy criteria
<b>Reduction in morbidity</b>	
Change Description:	Indicator Modification
Change:	From: “Reduction in morbidity” to “Livestock morbidity rate”
Justification:	Existing indicators do not sufficiently meet adequacy criteria
<b>Reduction in mortality</b>	
Change Description:	Indicator Modification
Change:	From: “Reduction in mortality” to “Livestock mortality rate”
Justification:	Existing indicators do not sufficiently meet adequacy criteria

## ANNEX IV: EVALUATION INDICATORS

Evaluation indicators will be analyzed through MCC's independent evaluations. These indicators will be refined and updated as the evaluation designs are completed and modified over time. Baselines and targets may also be updated once new data is collected.

Results Statement	Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information	Baseline (2015)	Targets
<b>Project 1: Irrigation and Market Access</b>											
Increased incomes for rural households	Goal	Gross agricultural income per hectare	Annual average gross agricultural income per hectare within the irrigation perimeters selected for improvements by MCC. This includes household consumption of agricultural products, which is valued at market prices. Investment and operating costs are not subtracted.	CFA	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	Farm Survey	MCC Independent Evaluator	TBD based on evaluation design	This indicator is in the Niger Compact.  All of the baselines and targets came from the ERR model presented at the time of finalizing the Compact.	Konni: 238,363  Sia: 544,631  Kouanza-Tondika: 166,975  Average: 316,656	Konni: Year 5 1,542,318 Year 8 1,789,177  Sia: Year 5 1,789,177 Year 8 2,633,905  Kouanza-Tondika: Year 5 3,085,210 Year 8 3,085,201  Average: Year 5 2,420,474 Year 8 2,502,761
Increased crop yields	Outcome	Average annual crop yield per hectare	Average annual output per hectare of certain crops	Kilograms	Sorghum Millet Cowpea(Nieb)	TBD by Independent Evaluator	MCC Independent Evaluator	TBD based on evaluation design	This indicator is in the Niger Compact.	Sorghum: 1,569	Sorghum: Year 5 2,170

Results Statement	Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information	Baseline (2015)	Targets
					e) Rice  Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)				All of the baselines and targets came from the ERR model presented at the time of finalizing the Compact. Targets can be pulled out of the ERR model to see expected increases by perimeter.	Millet: 394  Cowpea(Niebe): 346  Rice: 1,967	Year 8 2,466  Millet: Years 5 and 8 1,124  Cowpea(Niebe): Years 5 and 8 1,172  Rice: Years 5 and 8 5,649
Women are economically empowered in their household and community	Outcome	Abbreviated Women's Empowerment in Agriculture Index	The WEAI assesses the degree to which women are empowered in five domains of empowerment: (1) decisions about agricultural production, (2) access to and decision-making power about productive resources, (3) control of use of income, (4) leadership in the community, and (5) time allocation.	Index	None	Household Survey	TBD	Once after the Compact		.72 (disempowered)	N/A

Results Statement	Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information	Baseline (2015)	Targets
Land tenure is more secure	Outcome	TBD through the evaluation design	Percent of perimeter lands with proper land right documentation	Percent	Sex (Male, Female)  Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	TBD	MCC Independent Evaluator	TBD based on evaluation design			
Increased irrigated land	Outcome	Hectares irrigated	The number of hectares irrigated by the existing or new irrigation infrastructure that are either rehabilitated or constructed with MCC funding.	Number	Niger Irrigation Perimeters (Konni, Sia Kouanza Tondika)	TBD	MCC Independent Evaluator	TBD based on evaluation design	This indicator is in the Niger Compact.  Source are provided under the baseline and target values. NORDA is a due diligence report.  It's unclear if the targets actually represent irrigated land or cultivated land which may or may not be irrigated. This needs to be checked and clarified in the	Konni Rainy: 1,072 NORDA pg 43  Konni Dry: 519 ERR V154  Sia Rainy & Dry: 0  Ouna-Kouanza Rainy & Dry: 0	Konni Rainy: Year 5 - 2,439 ERR AD125 Year 8 - 2,452 ERR AG 125 & NORDA pg 44  Konni Dry: Year 5 - 1,090 ERR AD155 Year 8 - 1,226 ERR AG155 & NORDA pg 52  Sia Rainy & Dry: Year 5 - 689 Year 8 - 819  Ouna-Kouanza Rainy & Dry: Year 5 - 1,660 Year 8 - 1,754

Results Statement	Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information	Baseline (2015)	Targets
									next version of this M&E Plan.		
<b>Project 1: Irrigation and Market Access Activity 3: Roads for Market Access</b>											
Increased traffic volume	Outcome	Traffic count	Annual average number of vehicles on the rehabilitated roads	Number	Niger Road Sections (RN-35, RN-7, Rural Road)	Traffic Survey	MCC Independent Evaluator	TBD based on evaluation design	The baselines and targets came from the HDM-IV model presented at the time of developing the Compact.	RN-35: 581 RN-7: 1,625 Rural Road: 188	RN-35: Year 5 - 742 Year 8 - 1,643  RN-7: Year 5 - 2,125 Year 8 - 2,708  Rural Road: Year 5 - 240 Year 8 - 533
Reduced vehicle operating costs for users	Outcome	Vehicle operating costs	Average cost per kilometer traveled. This includes an average for: generic cars; four-wheel drives; mini-buses; medium buses; 2-ton, 13-ton & 28-ton trucks; and multicyles.	CFA	Niger Road Sections (RN-35, RN-7, Rural Road)	HDM-IV analysis	MCC Independent Evaluator	TBD based on evaluation design	The baselines and targets came from the HDM-IV model presented at the time of developing the Compact.	RN-35: 236 RN-7: 329 Rural Road: 119	RN-35: Year 5 - 140 Year 8 - 160  RN-7: Year 5 - 284 Year 8 - 284  Rural Road: Year 5 - 72 Year 8 - 81
Reduced travel time	Outcome	Travel time	TBD	TBD	Niger Road Sections (RN-35, RN-7, Rural Road)	Road surveys	MCC Independent Evaluator	TBD based on evaluation design			
Improved road conditions	Outcome	Roughness	The measure of the roughness of the road surface, in meters of height per	Meters per kilometer	Niger Road Sections (RN-35, RN-7,	TBD	MCC Independent Evaluator	TBD based on evaluation design	This is the International Roughness	RN-35: 16	RN-35: Year 5 - 8 Year 8 - 12

Results Statement	Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information	Baseline (2015)	Targets
			kilometer of distance traveled		Rural Road)				Index (IRI). Note that this indicator is both a monitoring and evaluation indicator.  The baselines and targets came from the HDM-IV model presented at the time of developing the Compact.	RN-7: 8  Rural Road: 14.5	RN-7: Year 5 - 2 Year 8 – 2.2  Rural Road: Year 5 - 10 Year 8 - 11
<b>Project 2: Climate Resilient Communities</b> <b>Activity 1: Climate Resilient Agriculture</b>											
Improved economic welfare from agricultural activities	Outcome	Change in households' revenues from agricultural activities	The increase in income due to increased area under small-scale irrigation and improved yields <sup>13</sup>	CFA	Sex (Male, Female)	Surveys	MCC Independent Evaluator	TBD based on evaluation design	These data came from the economic analysis of the compact	0	1,581,868
Improved resilience to shocks	Outcome	Individual household savings	Total values of household savings as a result of CRA investments	CFA	Sex of HH head (Male, Female)  Cash values,	Household surveys	MCC Independent Evaluator	TBD based on evaluation design			

<sup>13</sup> This indicator will only apply if ICRIps include small-scale irrigation as part of their communal plans to be funded by the program

Results Statement	Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information	Baseline (2015)	Targets
					In-kind values						
Improved agricultural productivity	Outcome	Rate of productivity	Percent change in agricultural productivity in intervention zones	Percentage	Sex of HH head (Male, Female)	Household surveys	MCC Independent Evaluator	TBD based on evaluation design			
Increased returns to funded agro-businesses	Outcome	Rate of change in profit	Average percent change in profit year after year		Type of Agro-Business (MSME Cooperatives, Cooperatives and Processor Groups, Youth Groups, Women's Groups)	Enterprise surveys	MCC Independent Evaluator	TBD based on evaluation design			
<b>Project 2: Climate Resilient Communities</b>											
<b>Activity 2: Regional Sahel Pastoralism Support</b>											
Improved economic welfare from livestock activities	Outcome	Change in households' revenues due to decreases in livestock mortality and morbidity	The per-household savings from avoided mortality and morbidity due to infectious diseases	CFA	Sex (Male, Female)	Household surveys	MCC Independent Evaluator	TBD based on evaluation design	These data came from the economic analysis of the compact	0	5,686
		Change in households' revenues from livestock fattening	The increase in net value of animal due to fattening before market sale	CFA	0	TBD	MCC Independent Evaluator	TBD based on evaluation design	These data came from the economic analysis of the	0	187,448

Results Statement	Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information	Baseline (2015)	Targets
									compact		
		Change in households' revenues due to pasture and water point improvement	The value of animal feed savings due to pasture and water point improvement	CFA	None	TBD	MCC Independent Evaluator	TBD based on evaluation design	These data came from the economic analysis of the compact	0	10,625
Greater quantities of pastoral products sold at higher prices	Outcome	Average price per unit	Average annual price per unit of pastoral product sold	CFA	None	TBD	MCC Independent Evaluator	TBD based on evaluation design			
	Outcome	Average quantity sold	Average annual quantity sold per unit of pastoral product	Number	Animal (Cow, Sheep, Goat)	Surveys	MCC Independent Evaluator	TBD based on evaluation design			
Lower animal mortality	Outcome	Livestock mortality rate	Percent change in livestock mortality in the country as a result of the investment	Percentage	Animal (Cow, Sheep, Goat)	Surveys	MCC Independent Evaluator	TBD based on evaluation design			
Lower animal morbidity	Outcome	Livestock morbidity rate	Percent change in livestock morbidity in the country as a result of the investment	Percentage	Animal (Cow, Sheep, Goat)	Surveys	MCC Independent Evaluator	TBD based on evaluation design			