

The Compact Program

Millennium Challenge Account – Moldova

Monitoring and Evaluation Plan

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Version 3

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1.0 Preamble

This Monitoring and Evaluation (M&E) Plan:

- is part of the action plan set out in the MILLENNIUM CHALLENGE COMPACT (Compact) signed on 01/22/2010 between the United States of America, acting through the Millennium Challenge Corporation, a United States Government corporation (MCC), and the Republic of Moldova (Moldova), acting through its government;
- to support provisions described in *Annex III. Description of Monitoring and Evaluation Plan* of the Compact;
- being governed and following principles stipulated in the *Policy for Monitoring and Evaluation of Compacts and Threshold Programs* (DCI-2007-55.2 from 05/12/2009) (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 (article 5.2), and if it is consistent with the requirements of the Compact and any other relevant supplemental legal documents.

2.0 List of Acronyms

AADT	Annual average daily traffic
AAF	Access to Agriculture Finance
AAFS	Access to Agriculture Finance Survey
ACED	Agricultural Competitiveness and Enterprise Development Project
AM	Agency “Apele Moldovei”
APR	Annual Portfolio Review
BAU	<i>Business as usual</i> post-rehabilitation maintenance
CCR	Compact Completion Report
CEO	Chief Executive Officer
CIS	Central Irrigation System
CISRA	Centralized Irrigation System Rehabilitation Activity
CLD	Credit Line Directorate
Compact	Millennium Challenge Compact
DAI	Development Alternatives, Inc.
DQR	Data Quality Review
EBRD	The European Bank for Reconstruction and Development
ERR	Economic Rates of Return
ESA	Environmental and Social Assessment
FOS	Farm Operator Survey
GDP	Gross domestic product
GHS	Growing High-Value Agriculture Sales
HBS	The Household Budget Survey
HDM	Highway Design and Maintenance Standards Model
HVA	High-Value Agriculture
IDS	Investment Development Service
IMF	The International Monetary Fund
IPPS	The International Plant Protection Convention
IRI	International Roughness Index
ISPM	The International Standards for Phytosanitary Measures
ISRA	Irrigation System Reform Activity
ITT	Indicator Tracking Table
M&E	Monitoring and Evaluation
MCA-Moldova	Millennium Challenge Account of the Government of the Republic of Moldova
MCC	Millennium Challenge Corporation, a United States Government corporation

MIS	Management Information System
MOF	Ministry of Finance
MOU	Memorandum of Understanding
MTRI	Ministry of Transport and Road Infrastructure
NBS	National Bureau of Statistics of Moldova
NGO	Non-governmental organization
PFI	Participating financial institutions
PIM	Project Implementation Manager
PPM	Post-Harvest Credit Facility Policies and Procedures Manual
QDRRP	Quarterly MCA Disbursement Request and Reporting Package
RAP	Resettlement Action Plan
RBM	River Basin Management
RD	Regression discontinuity
RRP	Roads Rehabilitation Project
SGA	Social and Gender Assessment
SPS	Sanitary and Phytosanitary Standards
SRA	State Road Administration
TBD	To be determined
THVA	Transition to High-Value Agriculture Project
TIBT	Table of Indicator Baselines and Targets
TIP	Trafficking in Persons
TOR	Terms of Reference
USAID	The United States Agency for International Development
USD	United States Dollar
USSR	The Union of Soviet Socialist Republics
WUA	Water User Association

3.0 Compact and Objective Overview

3.1. Introduction

The Government of the Republic of Moldova and the Millennium Challenge Corporation, on behalf of the United States Government, have signed a Compact Agreement for a US \$262 million grant to be implemented over a 5 year period. The Compact was signed on January 22nd, 2010 and entered into force on September 1st, 2010.

The Republic of Moldova has a population of 3.57 million inhabitants (without the Transnistrian region). Approximately 60% of the population lives in rural areas. In 2008 the economically active population of Moldova constituted around 1.3 million people. The employed population constituted 1.25 million people, of which nearly one third were active in the agricultural sector.

Moldova was one of the most important suppliers of agri-food products within the former USSR and the policies that governed the agricultural sector were based on three main pillars: (i) collectivization and agri-industrial integration, (ii) controlled prices and margins, (iii) and rural industrialization. The state was the dominant actor in pursuing these policies and production was dominated by about one thousand collective and state agricultural enterprises. After the collapse of the Soviet Union and declaration of its independence in 1991, Moldova's economy, including the agricultural sector, declined. Thus the country declined to the poorest in Europe, with poverty becoming a reality for the local population. The decline mostly affected the rural population, due to several factors:

- economic breakdown associated with the break-up of the USSR and continuing economic difficulties in its main markets;
- fundamental reforms of the agricultural production systems by implementing decollectivization initiatives of reorganization, privatization and land redistribution;
- considerable cost-price squeeze.

Unfortunately Moldova's economic growth since 2000 affected the agricultural sector to a limited degree; rural infrastructure remains poor, and agricultural technologies are inadequate. The rural population lacks on-farm and off-farm opportunities for income generating activities and employment due to poor access to reliable water, lack of financing, lack of access to markets, poor technologies, and lack of know-how. Since half of the active labor force (52.9% in 2009¹) lives in rural areas, where they depend on agriculture for their livelihoods, the majority of them remains very poor and locked in to subsistence production. The rural poor constituted some 67.8% of the total rural population in 2008.

Given the situation in rural areas, the Compact Program involves crucially needed investments in road and agricultural infrastructure, transfer of irrigation management to users, improved water management and increased access to finance, training, and market information. It is comprised of two Projects: the Roads Rehabilitation Project (RRP), which aims to enhance transportation conditions; and the Transition to High-Value Agriculture (THVA) Project, which aims to create efficient replicable models of transition to high-value agriculture in centrally irrigated areas and an enabling environment (legal, financial, and market) for replication of the models, with the intended impact to increase incomes and reduce poverty rates.

¹ Moldova National Bureau of Statistics

Monitoring and Evaluation is essential for a results-based approach to program management. It was a key component of program design and remains incorporated into all facets of the program cycle through to program completion.

The focus on results is one of the four principles on which Compact programs are based on, while monitoring and evaluation are called to put this principle into practice being integrated into the entire life cycle of a Compact from concept through implementation and beyond.

This Monitoring and Evaluation Plan serves as a guide for program implementation and management, so that MCA-Moldova management staff, Steering Committee members, Executive Committee, Consultative Group members, program 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:

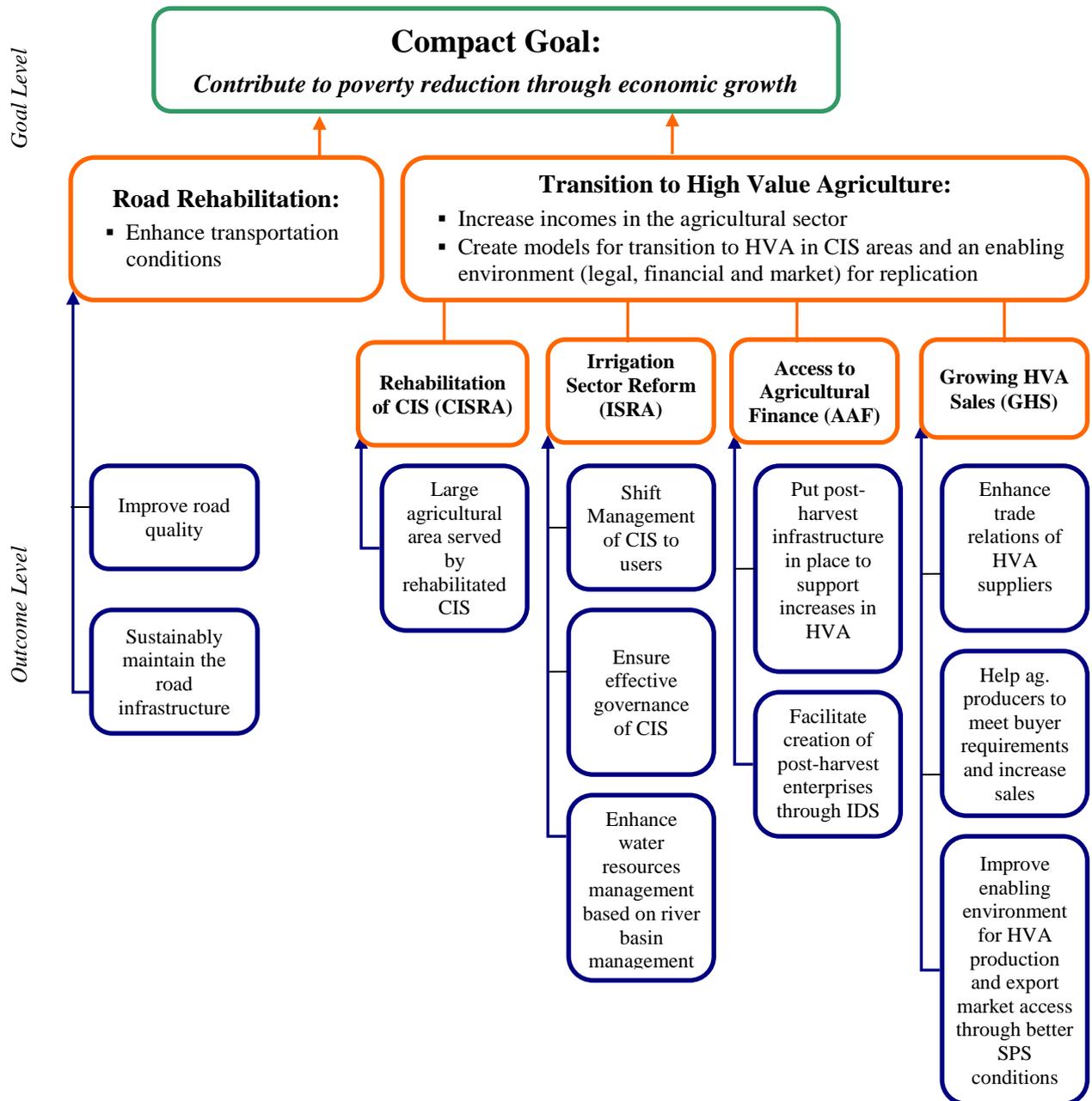
- Gives details about what impacts the Compact and each of its components are expected to produce in economic, social, and gender areas and how these effects will be achieved.
- Explains in detail how the Millennium Challenge Account (MCA) Moldova and MCC will monitor and assess the Compact Program interventions to determine whether they are achieving their intended results and measure their larger impacts over time through rigorous evaluations.
- Establishes and describes all indicators that must be reported.
- Establishes a process to alert implementers, stakeholders and MCC to any problems in program implementation and provides the basis for making any needed program adjustments.
- 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 sets the mechanisms that assure the quality, reliability and accuracy of program performance information and data.
- Outlines any M&E requirements that MCA-Moldova must meet in order to receive disbursements.
- Provides programmatic information and data for evidence-based decision making concerning expansion of selected interventions meant to serve as a model, under the current Compact, for subsequent replication.

MCA Moldova M&E lead is responsible for developing the M&E Plan. The M&E Plan is elaborated with the support and input from MCC's M&E lead and Economist, key stakeholders, including MCA leadership and MCA Project/Activity leads, the MCC Resident Country Mission, and others within MCC, such as Environmental and Social Assessment (ESA) and Social and Gender Assessment (SGA) leads.

3.2. Program Logic

The diagram below illustrates and describes the causal relationships among the program components and synthesizes expected outcomes intended to achieve the project objectives and the program goal.

Diagram 1. Program Logic



3.3. Projected Economic Benefits

It is expected that the implementation of the Compact will contribute to the achievement of national level goals as specified in the National Development Strategy. Goal level results to which the Project contributes, but are not solely attributable to the Project, are: a) absolute poverty rate nationwide: from 30.2% to 20.0% by the year 2015; and b) absolute rural poverty rate: from 34.1% to 22.6% by the year 2015.

Decisions to support the investments proposed by the Government of Moldova were based on economic rates of return (ERRs) greater than or equal to double the average of the economic growth rates in Moldova over the previous three years - 12.6². The hurdle rate for the irrigation rehabilitation project was lowered to 10 percent, since some components of the project are deemed to have positive spillover effects for other areas of the country. Monitoring indicators for the two Projects are tied closely to the assumptions used in the economic analysis of the Projects, and the baselines and targets for the objective level indicators have been extracted from the economic analyses.

3.3.1. Program Beneficiaries

According to the MCC's "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. These beneficiaries include owners and employees of firms whose value-added is expected to increase due to Compact interventions. MCC defines and counts as beneficiaries all members of households that have at least one individual who realizes income gains.

The economic rate of return analysis for proposed projects gives details on benefit streams through which beneficiaries should experience increased income (and is found in a later section of this plan).

At present there are approximately 273,000 potential beneficiaries living along the road³ proposed for rehabilitation within the Compact program, and approximately 29,000 individuals living outside the region who would also benefit by using the road for long-distance travel. In total, it is expected that approximately 302,000 beneficiaries will benefit from the Road Rehabilitation Project or approximately 78,000 households. This beneficiary count encompasses the users and owners of motorized vehicles utilizing the road, including local agricultural and other producers and buyers; providers and users of passenger transport services; and non-commercial owners of private motorized transport. Sellers, merchandisers, and consumers of products transported along this road will likely benefit as well.

Beneficiaries of the Transition to High Value Agriculture Project include households with owners or shareholders of farming enterprises, farmers or owners of land, producers and intermediaries investing in and working in the high agriculture value sector, and laborers employed in the operation of enterprise farms within the command areas where the Compact will rehabilitate the irrigation systems and producers and agribusinesses outside the systems targeted for rehabilitation that are already engaged in the high value agriculture sector. Up to 3,100 farm households are expected to benefit from the rehabilitation of centralized irrigation systems. Demand for seasonal labor is projected to increase as farms switch from grains to more labor-intensive high value agriculture crops. A projected 9,300 employees, most of whom are poor, will realize increased wage income due to greater demand for

² This hurdle rate corresponds to MCC Guidelines for Economic Analysis dated April 2009

³ During the original beneficiary analysis, the catchment area was defined as rraions and towns through which the road passes. This is larger than a 5 km buffer and justified by the road's status as a major artery.

agricultural labor in the centralized irrigation system areas. Landowners will also benefit from the increased productivity and value of their land once it has access to irrigation. It is projected that approximately 15,500 individuals renting out their agricultural land will realize increased rent income. The Access to Agricultural Finance Activity will directly benefit more than 75 post-production investors.

A general overview of the span of program benefits across the population of Moldova, used for Compact justification to MCC’s Investment Committee, is presented in the table below.

Overview of Program Beneficiaries Projected 20 Years after Compact EIF⁴

Project	Households	Individuals
Transition to High Value Agriculture Project		
<i>CISRA and ISRA:</i>		
Number of beneficiary farms	3,100	
Number of potential employees reaping wage increases	9,300	
Number of land owners renting out their land potentially reaping rental increase	15,000	
<i>AAF:</i>		
Entrepreneurs receiving credit	100	
<i>GHS:</i>		
Farmers receiving knowledge of and implementing technical assistance practices (outside of CIS only to avoid double counting of beneficiaries)	1,300	
<i>THVA: Total number of beneficiaries</i>	29,000 ⁵	112,000
Road Rehabilitation Project		
<i>Road Rehabilitation: Total number of beneficiaries</i>	78,000	302,000
Compact Total	106,800⁶	414,000

3.3.2. Transition to High Value Agriculture Project (THVA)

3.3.2.1. THVA Project Overview

The Transition to High Value Agriculture Project consists of reinforcing and integrating activities that, when implemented together, address the key constraints facing Moldovan producers: lack of reliable water, lack of financing, lack of access to markets and technologies, and lack of know-how. The THVA Project will increase the ability and willingness of farmers to make the transition to higher value fruit and vegetable production. By addressing infrastructure and institutional/market constraints, the THVA Project will break the vicious cycle of poor water service, low water tariff revenue, underinvestment in irrigation system maintenance, and low investment by farmers in high value agriculture (resulting in low agricultural incomes). The THVA Project provides the first opportunity to pilot a set of institutional and management reforms, together with much needed infrastructure rehabilitation that will set the stage for future investment and enable Moldova to benefit from its natural comparative advantage in agriculture.

⁴ Households were rounded to the nearest thousand and then converted to individuals at a rate of 3.86 individuals per households.

⁵ The numbers do not add perfectly because of rounding.

⁶ The CISs and road are geographically separated so overlap of beneficiaries between the projects is expected to be negligible.

The four THVA activities are:

- Centralized Irrigation System Rehabilitation Activity (CISRA) that will rehabilitate up to 11 irrigation systems covering a command area of up to approximately 15,500 hectares;
- Irrigation System Reform Activity (ISRA) that will provide technical assistance and capacity building to (1) support legal transfer of management and operations of MCC-rehabilitated systems from the Government to Water User Associations (WUA), (2) improve water resource management, including establishment of a modern water rights system, and (3) ensure the legal and institutional framework needed for private and/or donor investment in the irrigation sector;
- Access to Agriculture Finance (AAF) that will provide term financing and technical assistance to support high value agriculture-related investments by farmers and rural entrepreneurs;
- Growing High value agriculture Sales (GHS) will provide market development support and technical assistance and training to help producers and agribusinesses better access high value agriculture markets and support the shift to high value agriculture at the production and post-harvest level, and promote sustainable agricultural practices.

To carry out management responsibilities related to the THVA Project, MCA-Moldova intends to assign implementation responsibilities to implementing units (Implementing Entities) as follows:

- The Implementing Entity for both CISRA and ISRA is “Apele Moldovei” (AM), currently legal owner of irrigation infrastructure assets. A special Implementing Entity Agreement will be concluded between MCA-Moldova and AM outlining tasks and responsibilities. However, since AM faces a very constrained budget to properly deploy needed expertise and manpower to manage the implementation of these two Activities, MCA-Moldova will seek the services of a qualified management and engineering consulting firm to act as Project Implementation Manager (the PIM Consultant) for CISRA and ISRA. As the project manager, the PIM Consultant will provide technical support and oversight services to MCA-Moldova to ensure the CISRA and ISRA activities are fully integrated, and the related Compact targets and results are on track to be achieved in a timely manner. As such, the PIM Consultant will be the first contact for these consultants and contractors for the review and pre-clearance of all deliverables, supervising day-to-day activities, monitoring and reporting on the timely physical and financial progress of these contracts, and making recommendations to MCA-Moldova for the next steps, including the payment of invoices.
- The Implementing Entity for the Access to Finance (AAF) Activity will be the Credit Line Directorate (CLD), which is a structure of the Ministry of Finance specifically created to manage multiple donor credit lines through the banking systems of Moldova. The management of the Access to Finance Activity will take place jointly by the CLD and MCA-Moldova. MCA-Moldova will seek the services of a specialized consultant through a separate contract to help launch and monitor this activity.
- The Growing High Value Agriculture Sales (GHS) Activity will be co-financed by MCC and USAID. The later manages the GHS Activity under the Agricultural Competitiveness and Enterprise Development Project (ACED) implemented by DAI. In coordination with MCC and MCA-Moldova, USAID as the implementing agency will bear responsibility for the achievement of the Activity’s goals. A Memorandum of Understanding about the roles and responsibilities of USAID, MCC and MCA with respect to the implementation and coordination of the GHS include setting of proper targets and reporting mechanisms for the implementing contractor.

3.3.2.2. Outline of THVA Economic Analysis

The underlying economic analysis and assumptions for the THVA project were prepared by MCC in consultation with MCA shortly before Compact signing. The economic analysis spreadsheets can be found on MCC's website under "Programs and Activities" and then "Economic Rates of Return."

Economic analysis of the THVA Project was done separately for the Access to Agricultural Finance Activity (AAF) and the "Irrigated Agriculture" group of activities, which encompasses the CIS Rehabilitation, Irrigation Sector Reform, and Growing HVA Sales Activities. Although the AAF Activity is deemed to be complementary to the other THVA activities, the direct beneficiaries of the two groups of activities may be very different. In particular, entrepreneurs, farmers, farmer groups, and other non-farm investors both within and outside the rehabilitation project areas will have access to and potentially benefit from the AAF Activity, and impacts on the Irrigated Agriculture beneficiaries are likely to be indirect.

3.3.2.3. CISRA and ISRA: Economic Analysis and Assumptions

The ERR for the CIS Rehabilitation Activity, Growing HVA Sales Activity, and ISRA combined is approximately 14.3 percent. To arrive at the aggregate ERR, individual ERRs were calculated for each irrigation system and these range from 8.8 to 17.7 percent. The costs of the ISRA, the Growing HVA Sales Activity, and Implementing Entity support to AM are assigned proportionally by hectare across all systems selected for rehabilitation. Some aspects of the Growing HVA Sales Activity – in particular, the improvement of the enabling environment for HVA (i.e. Sanitary and Phytosanitary Standards and agricultural policy improvements) – will support the system specific ERRs, but could also carry benefits to the national HVA sector, and the Project-level ERR does not include the benefits accruing outside these systems (which if included would raise the aggregate ERR).

The main economic impact of the Irrigated Agriculture group of activities will be to raise farmers' crop incomes dramatically, from an estimated per hectare profit of approximately US\$150-200 to over US\$500 for grain crops, depending upon the size of farm and region of the country, and from an estimated per hectare profit of approximately US\$300-450 to approximately US\$1200-2700 per hectare for fruits and vegetables. At the same time, the fraction of land irrigated and cropped to HVA will rise significantly.⁷ The increase in farm profits will cover the cost of irrigation even in systems where irrigation cost will increase, even under somewhat conservative profitability assumptions. All production costs, including farm household labor and capital investment costs, are included in the profitability figures. It is expected that farmers will have a strong incentive, therefore, to irrigate and adopt HVA. Moreover, even if those farmers currently farming in these areas are not interested, the land market in Moldova appears to function sufficiently well that landowners will have opportunities to lease their land to farmers that do wish to grow HVA and can therefore afford to pay the higher rents one can expect on irrigated land. Other farmers may also migrate or expand into these areas and take advantage of the opportunity presented by irrigation. Thus the gains in productivity and profitability will be shared with landowners, as more competition for productive land will eventually lead to an increase in land prices. In addition, increased HVA production will raise the demand for some forms of labor, including casual harvest-season labor, and raise incomes for poor agricultural laborers.

The economic impacts of the irrigated agriculture group of activities were estimated using data collected through a detailed socio-economic survey of Moldovan farmers working both in the systems

⁷ The model assumes 45 percent of project area land will be irrigated in the first year following rehabilitation, given the 50 percent requirement for participation in the project. By Year 10 after Compact Entry Into Force, 85 percent of the land is projected to be irrigated, and 60 percent of the land used for HVA production.

to be rehabilitated and outside these areas. Using the data, econometric estimates were obtained of the impact of providing varying degrees of water service reliability on three outcomes: (i) farmers' decision to irrigate; (ii) the fraction of land cropped to high value crops; and (iii) farm income. Impacts were estimated controlling for a variety of factors that may affect these outcomes.⁸ The analysis showed that farmers are more likely to irrigate and grow high value crops if water provision is more reliable, and that in areas where it is reliable, the fraction of land devoted to high value crops is relatively high. In addition, the ERR was adjusted to account for the difference between average rainfall conditions and the conditions in the 2008 growing season.

Various sensitivity analyses were performed throughout the development of the project, and there are many factors that could change the economic impacts of the project. If water service delivery is not sufficiently sustainable, the ERRs drop significantly, to well below the hurdle rate. Thus, the strength of the ISRA, the WUA and Water Laws, and their implementation, are critical to the success of the project. In addition, output prices/ profitability; the transition time, currently estimated at eight years, to maximum adoption; and of course project costs are all important sensitivity factors.

3.3.2.4. AAF: Economic Analysis and Assumptions

The AAF Activity ERR is projected at 11.5 percent, with a likely rate of 5-19 percent. The main benefit streams of the Activity are: (i) the private returns (enjoyed by investors receiving financing) to the investments that result from the AAF Activity; and (ii) the benefits to producers through higher fruit and vegetable prices as these products enter an improved post-harvest system.⁹ Without the latter benefit stream, currently assumed to increase producer profitability in the CIS rehabilitation areas by 5 percent, the ERR would be at the low end of this range.

The returns estimated in the AAF Activity ERR are particularly uncertain, given the lack of evidence that similar programs have had sufficient impact to justify their costs, and the plausible range falls well below the hurdle rate for Moldova. Key parameters having an important effect on this ERR are unknown, but it is possible to establish a range for most of them, given the assumption that investors and banks are rational, and given recent Moldovan credit market conditions. Because the project relies on the financial sector and investors to take and evaluate risks, it is unlikely that the project will result in a high fraction of projects that do not cover the social cost of capital in Moldova. Nonetheless, some such projects could be financed. This risk increases with the subsidy element, which is highest under the Risk Capital Incentive Fund. At the same time, given the partial development of the Moldovan financial sector, there is a genuine risk that the THVA Project will have lower returns overall due to a lack of access to finance.¹⁰ Even if sufficient long-term financing were already available at market rates, the free market may not produce the optimal level of investment in a sector with high risks and returns, and in Moldova there are not adequate means for investors to hedge their risk. Delivering an investment subsidy through the private financial sector as this program does is, arguably, a reasonable approach, as it allows private investors and banks to evaluate the most optimal size, type, location, and configuration of investments within the category of investments to be subsidized. By making the financing available to any eligible borrower through any eligible financial institution, the risk of

⁸ This includes household composition, size of farm, level of education or training, and observed and unobserved system-area-specific factors. In addition, a two-step procedure was used to account for potential simultaneity related to unobserved farm characteristics.

⁹ Whereas it may seem reasonable to assume that any additional producer profits would be competed away, and entrepreneurs would reap all the profits from the improved cold chain, some degree of income benefit will probably still flow to producers, who will have a longer selling season and enjoy greater market access.

¹⁰ The farm survey shows that farmers who have taken out credit in the recent past have tended to expand the area cropped to HVA, probably through greenhouses, tunnels, and intercropping. While the program will not be used for on-farm equipment, this is evidence that access to credit through the financial sector has an impact on agricultural investments in the country.

distorting the allocation of resources in the economy is somewhat reduced, especially if the interest subsidy is low.¹¹

The key unknown sensitivity factors for the AAF Activity ERR are as follows: (i) the degree of ‘additionality’ of the resulting investments (that is, the degree to which the AAF Activity induces investments that would not take place otherwise, rather than simply subsidizing those investors’ or lenders’ returns); (ii) the social rate of return on those investments that are induced (this could be lower than the social cost of capital, since there is an interest subsidy element, particularly through the Risk Capital Incentive Fund); (iii) the risk premium required by investors to invest in projects that have an acceptable economic return but are nonetheless risky for that investor; (iv) the debt-equity mix for a typical investment in Moldova; and (v) the degree to which the profits from the CIS Rehabilitation Activity would decline in the absence of the investments stimulated by this project.

3.3.2.5. GHS: Economic Analysis and Assumptions

By enhancing farmers’ know-how and access to markets, the Growing HVA Sales Activity will support and ensure the profitability increases projected in the aforementioned analysis. The analysis counts as a cost of the project only the fraction of the total costs of the larger joint MCA-Moldova and -USAID Growing HVA Sales Activity equal to the fraction of total farmer beneficiaries represented by the irrigation systems to be rehabilitated using Compact funds, or approximately 53 percent.

Whereas it is difficult to estimate the exact magnitude of Growing HVA Sales Activity benefits, there is some evidence that the issues to be addressed by this activity require attention, and that as designed, the Activity will have a positive impact on incomes.

Respondents to the farm survey ranked risk surrounding the marketing of crops and output prices as their foremost obstacle to adopting HVA, apart from water.¹² In addition, since the CIS Rehabilitation Activity will substantially increase the amount of land under irrigation and thus the supply of fruits and vegetables within Moldova, it is likely that the prices enjoyed by farmers in 2008 would fall somewhat without the Growing HVA Sales Activity. Whereas Moldovan farmers exhibit a relatively high level of education for a developing country, in many cases they may lack up-to-date technical knowledge and market connections needed to meet market demands and make the investments needed. Indeed, farmers claiming to have the know-how to access external markets in particular exhibited higher profitability in the farm survey. Anecdotal and quantitative evidence of impacts of similar programs show increases in incomes, in some cases significant, resulting from providing technical assistance to farmers facing plant protection and other issues. While these reported results may be biased, as there was no control in the study for annual effects on crop profitability, the combined evidence is highly suggestive. Moreover, to the extent that the Growing HVA Sales Activity is successful in improving access to EU-registered seeds in a timely manner and meeting SPS standards in regional markets, this Activity would have an important impact on farm incomes throughout Moldova.

¹¹ In theory, the broader the category and eligibility, the less distortions such subsidies would produce. Governments or donors “picking winners and losers” can be especially problematic.

¹² The econometric tests using cropping and income data did not detect a statistically significant impact of farmer extension/training on cropping patterns or income.

3.3.3. Road Rehabilitation Project

3.3.3.1. Road Rehabilitation Project Overview

The Road Rehabilitation Project will be implemented by State Road Administration, a Public Entity which bears responsibility for road development and maintenance in Moldova. According to MCA-Moldova and MCC assessments, SRA has relatively good management capacity and relevant experience to efficiently implement the project. That capacity will be extended by additional financing from MCA-Moldova to establish a compact but efficient implementation team within the SRA.

3.3.3.2. Road Rehabilitation Project: Economic Analysis and Assumptions

ERR calculations for the M2 Road to be rehabilitated from the Compact funds has been made based on two different maintenance scenarios: (i) “optimal” or recommended post-rehabilitation maintenance, and (ii) “business as usual” (BAU) post-rehabilitation maintenance. The latter assumes maintenance levels consistent with Moldova’s recent past performance, which is significantly below the optimal level. Given Moldova’s past performance in maintaining its road network, the most prudent approach to selecting MCC investments was to use the BAU maintenance assumptions. The economic analysis spreadsheets can be found on MCC’s website under “Programs and Activities” and then “Economic Rates of Return.”

The segment of the M2 road was chosen for rehabilitation. Due to the significant volume of traffic on this segment, the projected economic rate of return for the proposed rehabilitation of the M2 from Sarateni to the Drochia junction is robust, at approximately 21.1 percent (using conservative calculation with BAU scenario).¹³ This rate of return was calculated using the Highway Design and Maintenance Standards Model (HDM-4) which was developed by World Bank’s Transportation Department.

The feasibility consultants concluded that there is little possibility that the road rehabilitation would generate or divert additional traffic beyond normal traffic growth. Thus, only normal traffic is used in the analysis. It is assumed that this traffic will grow with respect to the economy with an elasticity of 1.65 through 2019 and 1.40 from 2020 onwards for passenger vehicles, and of 1.20 for freight carrying vehicles through the entire period from 2009 to 2030. Both of these estimates are based on empirical analysis of these elasticities over the past several years. GDP growth was projected using an average of IMF, EBRD, and other projections, with the resulting assumptions of 3 percent growth until 2011, 4 percent from 2012-2019, and 3 percent thereafter.

This resulted in traffic counts for the relevant segments as shown:

Estimated Traffic Levels on M2 Road Segments

M2 sections	km	AADT 2009	AADT 2015	AADT 2025	
a	Sarateni – Floresti	27.1	2,556	3,600	6,000
b	Floresti – Soroca	47.6	3,429	4,900	8,100
c	Soroca - Drochia junction	18.0	2,469	3,500	5,800
d	Drochia junction - Arionesti	31.0	786	1,100	1,800
--	Arionesti – Otaci	10.0	786	1,100	1,800

¹³ The period of analysis is twenty years

As shown, traffic volumes are relatively high between Sarateni and the Drochia junction, the segment proposed for rehabilitation. Volumes drop considerably after the Drochia junction, and the origin-destination surveys showed a relatively high proportion of local trips. Thus, the M2 road will produce considerable benefits even without reconstruction to the border with Ukraine at Otaci or Unguri¹⁴.

The resulting median/ most likely traffic growth scenario used in the ERR, from year 2010 onward is as follows:

Distribution of Projected M2 Traffic Growth by Vehicle Type

Type of Vehicle	To 2011	2012-2020	2021--
Passenger vehicles	5.0%	6.6%	4.2%
Freight vehicles	3.6%	4.8%	3.6%

Based upon the HDM results, substantial project benefits would result from improvements to the current (June 2009) road surface, which exhibits a high International Roughness Index (IRI) with average overall IRI of 10 - 11 m/km. Without the project, significant annual patching would be required to keep the road reasonably serviceable, and even in this case it would remain rough. Therefore, reconstruction is a preferred option over just performing periodic maintenance. Moreover, the ERR does not differ substantially between the ‘optimal’ maintenance and BAU maintenance scenarios, and is sufficiently high for both. This is because the road is in such poor condition that project benefits will be very high in the early years, whereas on this particular road the volume of traffic and conditions do not dictate a high level of frequent periodic maintenance (resurfacing, etc.).

Consultants did not attempt to quantify possible accident reduction benefits, and thus these are not included in the analysis. The calculated rates of return include some project management costs, as well as environmental and social mitigation costs (assumed at 2.5 percent).

¹⁴ There are three small border crossings to Ukraine in the vicinity of Soroca.

4.0 Monitoring Component

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) process, (ii) output, (iii) outcome and (iv) goal. The various indicator levels map to the logical framework and thus allow Project developers and managers to understand to what extent planned activities are achieving their intended objectives. Monitoring data will be analyzed regularly to allow managers of MCA-Moldova and MCC to make programmatic adjustments as necessary with a view towards improving the overall implementation and results of the Program.

4.1. Summary of Monitoring Strategy

4.1.1. Indicator Levels

The M&E plan is framed and constructed using the program logic framework approach that classifies indicators as process, output, outcome, and goal indicators.

Goal indicators monitor progress on Compact goals and help determine if MCA-Moldova and MCC are meeting their founding principle of poverty reduction through economic growth. Outcome indicators measure intermediate or medium-term effects of an intervention and are directly related through the Program Logic to the output indicators. Output indicators measure the direct result of the project activities—most commonly these are goods or services produced by the implementation of an activity. Process indicators record an event or a sign of progress toward the completion of project activities. They are a precursor to the achievement of Project Outputs and a way to ensure the work plan is proceeding on time to sufficiently guarantee that outcomes will be met as projected.¹⁵

4.1.2. Indicator Classification

According to MCC's Monitoring and Evaluation Policy all indicators must be classified as one of the following types:

- Cumulative – to report a running total, so that each reported actual includes the previously reported actual and adds any progress made since the last reporting period.
- Level – to track trend over time.
- Date – to track calendar dates as targets

4.1.3. Common Indicator

MCC has introduced common indicators for external reporting across all MCC Compacts within certain sectors. Common indicators allow MCC to aggregate and reports about results across MCA countries. MCC sector experts have developed these indicators to document sector level progress relevant to different project activity types. Each MCA must include the common indicators in their M&E Plan when the indicators are relevant to that country's Compact Activities. The common indicators relevant to the MCA Moldova Compact are included in this M&E plan.

¹⁵ The indicator levels are formally defined in MCC's *Policy for Monitoring and Evaluation of Compacts and Threshold Programs*.

4.1.4. Indicator Documentation Table

The Indicator Documentation 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) title; (ii) definition; (iii) unit of measurement; (iv) data source; (v) method of collection; (vi) the frequency of collection; and (vii) party or parties responsible.

4.1.5. Indicator Definitions

This M&E Plan provides a succinct description of each indicator in Attachment 4. The definition of the Outcome and Objective indicators was developed by the M&E Units of MCC and MCA-Moldova in close coordination and are derived from Compact documents, the economic analysis, the baseline survey, participatory exercises with stakeholders' participation, from national strategies and sector papers including the National Development Strategy, and statistics published by the National Bureau of Statistics. The definitions for Output and Process indicators are (or will be if outstanding) derived from Compact documents, Implementing Entities and implementers' work plans, and MCC external reporting requirements.

4.1.6. Data Sources

Data sources have been identified and vetted for all the indicators listed in Annex I. Generally, monitoring data will be obtained from various primary sources, ranging from Implementing Entities and Service Providers to the MCA/MCC surveys. In addition, the MCA-Moldova M&E unit will obtain secondary data for the high level indicators from the relevant government agencies including National Bureau of Statistics.

Since GHS Activity of THVA Project is implemented by USAID in a direct agreement with MCC, the data flow on project implementation and progress, including project milestones and output indicators, will be directed to MCC. MCC will share this data with MCA-Moldova in a convenient and timely way.

4.1.7. Methods of Data Collection

The data for many objective and outcome indicators will be drawn from surveys conducted by MCA-Moldova in conjunction with Implementing Entities and Service providers while the lower-level indicators will be drawn from the Project implementers' records. Indicators will be reported through a Management Information System (MIS). Data will be reported to MCA-Moldova on a monthly, quarterly, or annual basis, depending on the indicator's requirements. To ensure this, MCA-Moldova will set proper cooperation and collaboration with Implementing Entities and Contractors by putting necessary requirements for Contractors to develop and put in place proper reporting mechanisms, including potentially connection to MCA-Moldova's future MIS.

Where and if necessary, MCA-Moldova will commission surveys to collect special data in coordination with the institutions in charge of each project area. Data collection instruments (including surveys and data collection forms and registries) will be designed in a participatory manner with the Dedicated Teams of the relevant Implementing Entities. In order to provide for the specific needs of evaluations, Impact Evaluators shall be involved in the design of the surveys, including in setting the survey strategy, designing questionnaires and helping developing TORs for survey contractors. Water

users/ clients/ beneficiaries registries, kept by implementers, will serve as one source for the sample frames.

4.1.8. Frequency of Data Collection

During the Compact period, data will be collected on a monthly, quarterly or annual basis, depending on the indicator.

Some of the Contractors and Implementing Entities will be required to report on project milestones and outputs quarterly, others annually. Those arrangements will be recorded in the respective contractor's TORs and Implementing Entity Agreements. Decisions on frequency will be taken for each individual implementation-related contract to reconcile MCA-Moldova's need for fresh data with administrative burden and cost efficiency.

4.1.9. Table of Indicator Baselines and Targets

To ensure that the Program is on track to meet its overall goals and objectives, the monitoring indicators are measured against established baselines and targets, derived from 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 the Table of Indicator Baselines and Targets (Annex II).

Baseline figures were established using the most current and appropriate data available prior to an Activity's implementation. This can include the MCC/MCA Baseline Survey, government surveys such as those conducted by the National Bureau of Statistics, and other organizations' records. If baseline figures are revised from those used in the economic analysis, the Activity's targets, should be revised accordingly.

Targets are derived from 1) the initial economic analysis used in justifying Program investments, 2) project documents, 3) discussions with experts and consultants, and 4) implementation work plans.

Any revision of baselines and targets must adhere to MCC's policies regarding baseline and target revisions and will require MCC's formal approval.

4.1.10. Disaggregation of Data

Where applicable, the data will be collected, analyzed, and reported by income level, gender, age groups, and farm size of beneficiaries in order to portray the benefits accruing to the different constituencies of the population. Additional data disaggregation will be used when necessary to investigate particular issues such as social infrastructure, rural business, transportation, etc. This information will be public and will be available on the MCA Moldova web page.

The Indicator Documentation Table (Annex 1) identifies which indicators should be disaggregated, to the extent that it is feasible and cost-effective. Select disaggregated figures identified in The Indicator Documentation Table (Annex 1) will be reported to MCC in the quarterly Indicator Tracking Table.

4.1.11. Pending Baselines and Targets

At earlier stages of Compact a certain number of each Project's indicators, baselines and targets could be pending, particularly for lower level output and process indicators. The majority of these baselines and targets will be established once the feasibility and design studies' results are known. Others are pending updated data from once implementation contracts are awarded and contractors have presented their work plans.

4.2. Data Quality Reviews (DQRs)

Data Quality Reviews 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 meets the standards defined in the MCC M&E Policy in the areas of validity, reliability, timeliness, precision and integrity. Data quality reviews 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. DQRs will help ensure that.

The particular objectives for the data quality reviews will be 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 field.

MCA Moldova will contract an independent data quality reviewer in compliance with MCC Program Procurement Guidelines. The entity responsible for data quality reviews should be hired in Year 3 of the Compact. The M&E Officer and other Officers, as appropriate, within MCA Moldova and the PIUs should also regularly check data quality. In doing so, MCA Moldova may hire individual data quality monitors to monitor data collection and quality, as needed. Besides independent DQRs, the MCA-Moldova M&E Unit will also 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. This exercise will be done in coordination with the respective project stakeholders.

4.3. Standard Reporting Requirements

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-Moldova submit a Quarterly MCA Disbursement Request and Reporting Package (QDRRP) each quarter. The QDRRP must contain a quarterly **Indicator Tracking Table (ITT)** which tracks progress against indicators in the M&E Plan. Guidance on fulfilling these reporting requirements is available on the MCC website at: (<http://www.mcc.gov/pages/countrytools/tools/compact-implementation>).

To sustain this system, the Implementing Entities will be required under this M&E Plan to report on the degree of Project performance under their portfolios, as further demonstrated in Attachment 2.

At the end of the Compact, MCA-Moldova will prepare a Compact Completion Report (CCR). The CCR shall be prepared according to guidelines provided by MCC.

5.0 Evaluation Component

5.1. Summary of Evaluation Strategy

Evaluations assess as systematically and objectively as possible the Program’s rationale, relevance, effectiveness, efficiency, merits, sustainability and impact. The evaluations will strive to estimate the impacts on the targeted beneficiaries and wider regional or national economy. The evaluations will provide MCC, MCA-Moldova and other stakeholders with information during the Compact on whether or not the intended outcomes are likely to be achieved and at the Compact’s end or after on the impacts that are attributable to the Program.

The evaluation strategy will be based upon scientific models that ensure the advantages of neutrality, accuracy, objectivity and the validity of the information. These models will comprise experimental and quasi-experimental designs as well as statistical modeling. Methodologies will be selected considering cost-effectiveness. Participant-oriented models will supplement the evaluation strategy to emphasize the central importance of rural individuals as beneficiaries of the Compact.

More than formal documentation of Program results, evaluation will serve as a learning tool during Compact implementation and beyond. MCC will strive to conduct evaluations in a participatory way to ensure their success and relevance while protecting the evaluations’ objectivity. The participatory approach will also include continuous training for Program staff and stakeholders on evaluation methods. Participatory, qualitative evaluation will provide an opportunity to better understand stakeholders’ perceptions of the results, engage a broad cross-section of stakeholders including by gender, and enhance ownership of the outcome of the development process.

The Respective Roles of MCA-Contracted Evaluations and MCC Impact Evaluations

Both MCC and MCA Moldova will fund evaluations of the Moldova Compact from their respective budgets. MCA Moldova will fund Ad Hoc Evaluations and Mid-Term/Final Evaluations. MCC will fund Impact or Performance Evaluations of every Project.

The roles of the various evaluations are different and are intended to be complementary. The primary difference is the source of funds and the respective scopes. Methodologies also tend to differ though not necessarily. Common differences for each evaluation are noted in the following sections. The table below highlights some key differences.

Common Differences among Evaluations Types

	Mid-Term and Final Evaluation	MCC Impact Evaluation	MCC Performance Evaluation	Ad Hoc Evaluations
Main Objective	Evaluate Compact progress and results in a comprehensive manner	Measures the changes in income and/or other aspects of well-being that are <i>attributable</i> to a defined (through a modeled counterfactual)	A study that seeks to answer descriptive questions, such as: what were the objectives, how was it implemented and perceived; whether expected	Address short-term information gaps

			results occurred and are sustainable	
Methodologies	<ul style="list-style-type: none"> • Interviews • Case studies • Statistical analysis of primary data • Summaries of secondary data (including Impact Evaluations) 	<ul style="list-style-type: none"> • Experiments • Quasi-experiments • Advanced statistical analysis 	<ul style="list-style-type: none"> • Pre-Post comparison • Ex-post ERR • Other 	(varies)
Strengths	<ul style="list-style-type: none"> • Broad survey of all issues • Focus on implementation issues 	<ul style="list-style-type: none"> • Attempts to establish attribution • Focus on high level results (impacts) • Use of highly specialized researchers • Quantitative focus 	<ul style="list-style-type: none"> • Attempts to answer important questions for learning about worked well and what could have been done better 	<ul style="list-style-type: none"> • Executed quickly • In depth analysis of a single issue
Funding	MCA Compact	MCC budget	MCC budget	MCA Compact

5.1.1. Mid-term Evaluation

The Mid-term Evaluation will assess progress towards meeting the Compact goals, objectives and outcomes. It will provide early lessons learned and identify significant discrepancies between expected results and actual achievements, including an analysis of these discrepancies. The specific purposes of the mid-term evaluation will be as follows:

- To assess the actual implementation of activities compared to original implementation plans. An account of “actual” compared to “designed” activities will help inform the final evaluation by defining what the intervention in fact was;
- To examine what aspects of the program components are most and least effective and how effectively these components contribute to achievement of projects’ objectives and program outputs. Correspondingly, the evaluation would be used to inform any mid-course corrections;
- To assess implementation progress and help MCA Moldova identify actions that will lead to successful implementation.

A Mid-Term Evaluation Report contracted by MCA-Moldova is due 36 months after Entry into Force of the Compact.

5.1.2. Final Evaluation

The Final Evaluation will be a major component of the Compact Completion Report (CCR). The CCR is the close-out report required by MCC; the CCR will require reporting from several units within MCA-Moldova, not only M&E. The Final Evaluation is the portion of this report which is contributed by the MCA M&E unit.

The Final Evaluation will assess the actual results of the Program against the Compact goals, objectives and outcomes. The emphasis of the evaluation will be to assess how Compact activities have affected poverty and economic growth, while also examining the more general impact of the Program and the sustainability of the projects. Therefore the final evaluation will include the following issues:

- To what extent were the planned objectives achieved for the program within the Compact timeframe;
- Which of the Compact program components reached their objective and which not? Why?
- Attribution of measurable outcomes to MCC/MCA Moldova interventions from any existing interim impact evaluations;
- Reasons behind the success or failure to achieve objectives and targets;
- What were the most significant constraints and/or difficulties in implementing the program and, where appropriate, how did the Compact overcome them;
- Unintended results of the program (positive and negative);
- Likelihood of long-term sustainability of results;
- Lessons learned applicable to similar projects;
- To what extent were the recommendations from the Mid-Term evaluation implemented.

A Final Evaluation Report contracted by MCA-Moldova has to be submitted by March 31st, 2015 (five month before the end date of the Compact).

5.1.3. MCC Impact and Performance Evaluations

Impact and performance evaluations support two objectives derived from MCC's core principles: accountability and learning. Accountability refers to MCC and MCA's obligations to report on their activities and attributable outcomes, accept responsibility for them, and disclose these findings in a public and transparent manner. Learning refers to improving the understanding of the causal relationships between interventions and changes in poverty and incomes. MCC advances the objectives of accountability and learning by selecting from a range of independent evaluation approaches. MCC currently distinguishes between two types of evaluations, impact and performance evaluations. At the minimum, each project should have an independent performance evaluation for accountability reasons.

To ensure the final impact/performance evaluations are independent, MCC directly procures and funds the final impact/performance evaluation teams, while MCA Moldova conducts the data collection process.

5.1.4. Ad Hoc Evaluations and Special Studies

MCC or MCA-Moldova may request ad hoc evaluations or special studies of Projects, Project Activities or the Program as a whole prior to the expiration of the Compact Term to be conducted by an outside entity contracted in compliance with MCC Program Procurement Guidelines. Ad Hoc Evaluation and Special Studies are designed to provide Management staff, Steering Committee members, program implementers, beneficiaries, and other stakeholders with information about Program implementation and results than cannot be uncovered from performance monitoring or Impact Evaluation alone. A number of such studies/evaluations have been initiated /conducted or are planned including the following:

Moldovan Farm Operators Survey was conducted while the Compact was being developed in 2009 and was aimed to measure the anticipated impact of an MCC investment in the rehabilitation of

centralized water pumping systems and small-scale irrigation on the transition of Moldovan farms to high value, fruit and vegetable production. The survey was designed to allow MCC to answer various questions regarding THVA Project, such as: What would the demand for water be per system if irrigation were available? What would be the likely magnitude of net benefits that would accrue from expansion of irrigation services? To whom would benefits accrue from expansion of irrigation services and what is the profile of these beneficiaries, including poorer segments of the rural population? What would be the likely magnitude of net benefits that would accrue from expansion of financial services for on farm investments? Would there be factors that would prevent women from fully participating in and benefiting from the project? A stratified sampling strategy was employed to measure the demands and benefits of a rehabilitated system for different size (small, medium and large) farms.

Moldova Farm Survey Gender Assessment. Based on the Moldovan Farm Operators Survey, the assessment conducted in 2009 was aimed to unfold the existing gender similarities and differences of Moldovan farmers to understand gender roles and responsibilities, sources of existing inequities and consequences to the participation of male and female beneficiaries in THVA Project.

Sanitary and Phytosanitary Standards Study will include an in-depth assessment of overall diagnostic capacities related to sanitary and phytosanitary measures associated with HVA products. It will be focused on an assessment of public, private, and academic capacity (facilities, equipment, and training) to detect, monitor, and control plant pests and pathogens, agro-chemical residues, toxins, and microbes that can cause food borne illness as well as the ability to meet private sector standards after Compact interventions. This study is planned to be conducted at the final stage of the program and it will be coordinated with USAID and the GHS implementer.

5.2. Specific Evaluation Plans

5.2.1. THVA Evaluation

5.2.1.1. ISRA - CISRA Evaluation

The main goal of the evaluation of ISRA-CISRA is to determine the extent, if any, to which these activities improved the productivity and profitability of farm operations in the rehabilitated CIS areas. This evaluation could yield important lessons for Moldova and other countries as they consider developing or scaling up combined irrigation management transfer and rehabilitation projects. More broadly, because a lack of reliable irrigation water is thought to be a major constraint facing farm operators in Moldova, the evaluation will enable us to assess the impact of relaxing this constraint on relevant outcomes.

ISRA-CISRA evaluation will address the following research questions:

1. What is the combined effect of ISRA-CISRA on farm profits?
2. Do rent payments to landowners in rehabilitated CIS areas increase as a result of these activities? If so, by how much?
3. Do wages paid to farm laborers in rehabilitated CIS areas increase as a result of these activities? If so, by how much?
4. What lessons can be drawn from the process of WUA formation? Are WUAs operating in a self-sufficient, effective and efficient manner?
5. Are the economic rates of return for the activities large enough to justify their respective investments?

In addition to these primary research questions, the evaluation will also explore several secondary questions of interest:

1. Does training of farmers in techniques of irrigated agriculture and marketing in combination with improved irrigation create greater impacts than improved irrigation alone?
2. How does any change in crop productivity affect the quantity of household and formal labor employed across gender and age demographics?
3. Do men/ or women report more or less direct involvement in the management, production, or sale grown on household garden plots as a result of CIS project?
4. What fraction of any increased wage income accrues to males versus females?
5. Do small farmers benefit proportionately to the larger, wealthier farmers? Is there a relative benefit across farm sizes or do certain farmers benefit disproportionately from access to irrigation and transition to high value agriculture?

The evaluation questions will be addressed using both quantitative and qualitative methods. The quantitative approach, a matched comparison group design, will match the treatment group of 11 CIS areas affected by the activities to a comparison group of similar but unaffected CIS areas. Then outcomes for farmers in the treatment and comparison areas will be compared. If the influence of external factors (such as rainfall and market conditions) is similar in both types of areas, any differences in outcomes can be attributed to the impact of the activities. The qualitative approach will use insights from farm operators and WUA officials to provide a richer understanding of the impact of the activities, which will complement the quantitative impact results.

For ISRA-CISRA evaluation MCA-Moldova will collect several different types of data. To identify a comparison group of CIS areas for the quantitative approach data on CIS characteristics will be obtained from Apele Moldovei and other sources. Data for the quantitative impact analysis will be collected through several rounds of the Farm Operator Survey (FOS), which will gather information on key outcomes from operators of farm plots in treatment and comparison areas before, during, and after implementation. Administrative data from WUA registries of water users will be used to conduct supplemental analyses focusing on the self-sufficiency, effectiveness, and efficiency of WUA operations. Finally, MCA-Moldova will collect data for qualitative analysis through focus groups with farm operators and interviews with WUA officials in selected communities in each of the 11 targeted areas.

The timing of the evaluation activities will correspond to that of implementation. The FOS baseline will occur before full implementation of ISRA (2012). The baseline round of qualitative data collection will provide information on the WUA formation process during ISRA implementation (2012-2013). A midterm FOS follow-up and round of qualitative data collection will capture outcomes after full ISRA implementation but before CISRA (2013–2014); an end-of-Compact FOS follow-up and round of qualitative data collection will capture outcomes shortly after CISRA is complete (2014–2015); and a post-Compact FOS follow-up will capture outcomes once sufficient time has elapsed for impacts on final outcomes to materialize (2015-2016). If data collection plans are modified, the analysis and reporting plans will be modified accordingly.

5.2.1.2. GHS Evaluation

The evaluation of the ACED training subactivity will focus on measuring the extent, if any, to which the training activities improved the productivity and profitability of participants. In particular, the evaluation will address the following research questions:

1. What is the impact of ACED farmer training on adoption of new practices, production, sales, and farm income within the context of a value chain project?
2. Does distance from a ACED farmer training site affect participation in ACED farmer training?
3. To what degree are new practices adopted by value chain participants who do not themselves participate in ACED farmer-training activities? Can adoption by nonparticipants be attributed to program ripple effects, rather than broader trends?
4. Is the economic rate of return (ERR) for the ACED training subactivity large enough to justify the investment?

In addition to addressing these primary research questions, the evaluation will explore how impacts on practice adoption, production, sales, and farm income vary across farmers with different characteristics.

The ACED training subactivity is just one element of the ACED activity and the impact evaluation is not designed to measure the overall impact of the ACED. Instead, the impact evaluation will be able to provide evidence on the impact of the training subactivity (alone) *in an environment in which other value chain constraints are concurrently addressed*. The evaluation will not necessarily be able to tell about the impact of training in other settings or contexts: the impacts of training might be quite different when conducted outside the context of a value chain project.

The impact evaluation of the ACED training subactivity will use a random assignment evaluation design. Potential training sites were randomly assigned to a treatment group - at which training activities will be conducted - or to a control group - at which training activities will not be conducted. If all the farmers who live in (or near) a treatment site participate in training, then impacts can then be estimated by comparing farmers who live in treatment sites with farmers who live in control sites.

The primary data source for the analysis will be several rounds of the Farm Operator Survey (FOS). Through the FOS, information from farm operators on key outcomes before, during, and after implementation will be collected. Implementation data from USAID (collected by its implementation contractor, DAI) will also inform the analysis. Finally, qualitative data from farmer focus groups will provide a richer understanding of the impact of the trainings and complement the quantitative impact results.

The baseline will occur before the ACED activities have had a chance to influence agricultural outcomes (2012). The midterm follow-up will capture outcomes one year later (2013–2014); an end-of-Compact follow-up will capture outcomes two years later (2014–2015); and a post-Compact follow-up funded by MCC will capture outcomes three years later, providing sufficient time for final outcomes to materialize (2015–2016). The timing of qualitative data collection will be aligned with the midterm and post-Compact FOS surveys in order to best complement the quantitative analysis.

5.2.1.3. AAF Evaluation

The final evaluation of the Access to Agriculture Finance Activity is under design and as soon as MCC and MCA agree on the primary evaluation questions and the evaluation methodology, they will be added to this M&E Plan.

5.2.2. Road Rehabilitation Project Evaluation

The evaluation will focus on the following research question:

- What is the ex-post cost-benefit ratio of the road rehabilitation? (Where benefits are defined by the HDM-4 model.)

HDM-4 analysis simulates total life cycle conditions and estimates benefits and total costs by comparing total cost streams for various design and maintenance strategies. The model estimates cost savings accruing to transport operators and consumers of transport services following the improvement of road surface conditions and geometries. This approach measures direct cost savings to road users, which approximate the full economic benefits accruing both directly and indirectly to the general population. Benefits can be realized as increased real incomes (or reduced cost of living), reduced costs of production in agriculture, industry, and services, and enhanced time availability. Whereas this approach allows for a relatively accurate quantification of project benefits, it does not allow one to project the precise nature and allocation of benefits. The primary effects that are considered include reduced vehicle operating costs, reduced travel time, changes in maintenance costs, increases in the value of goods moved, more frequent travel, and possibly environmental effects. These benefits can in principle accrue through normal, generated, and/or diverted traffic.¹⁶

Other methodologies for conducting an impact evaluation of the roads project were considered but not adopted. Most notably, at the end of the project household and firm incomes within the road catchment could be compared to a counterfactual (either a geographic comparison group or the same households/firms before the intervention). However, several factors made this option less attractive than the HDM-4 approach. First, MCC is currently using the household/firm income approach in other countries, so the absence of information in the road sector is not as great as the absence in other sectors. Second, the cost and complexity of a household/firm income evaluation methodology is much greater than the HDM-4 approach. Third, the timing of significant observable impacts is likely to be quite late with any methodology giving the implementation schedule and the expected time for the economy to react to the improvements; HDM-4 using traffic counts is expected to be able to observe results sooner than a household/firm income approach. Finally, finding a convincing counterfactual region and/or time would be extremely difficult given the uniqueness of the road being rehabilitated; any analysis based on a counterfactual would need to make very strong assumptions that could undermine the conclusions. Given these factors, the HDM-4 approach was selected.

Project outputs will be recorded and reported by the implementer (State Road Administration), who would also employ a Construction Supervisor to monitor the quality of the work with respect to the contract documents, detailed designs, and specifications.

Traffic counts and IRI will be collected by SRA with MCA-Moldova financial support as necessary. Input prices will be collected by SRA and/or the consultant hired to assist in running the model.

The evaluation report's scheduled due date is mid-2015.

¹⁶ Normal represents growth of existing baseline traffic. Generated traffic is a one-time jump of traffic due to the project – generally found in rehabilitation of roads that were previously impassible or new construction to something that was previously inaccessible. Diverted traffic is traffic that would move from an alternate route to the project road as a result of the rehabilitation.

6.0 Implementation and Management of M&E

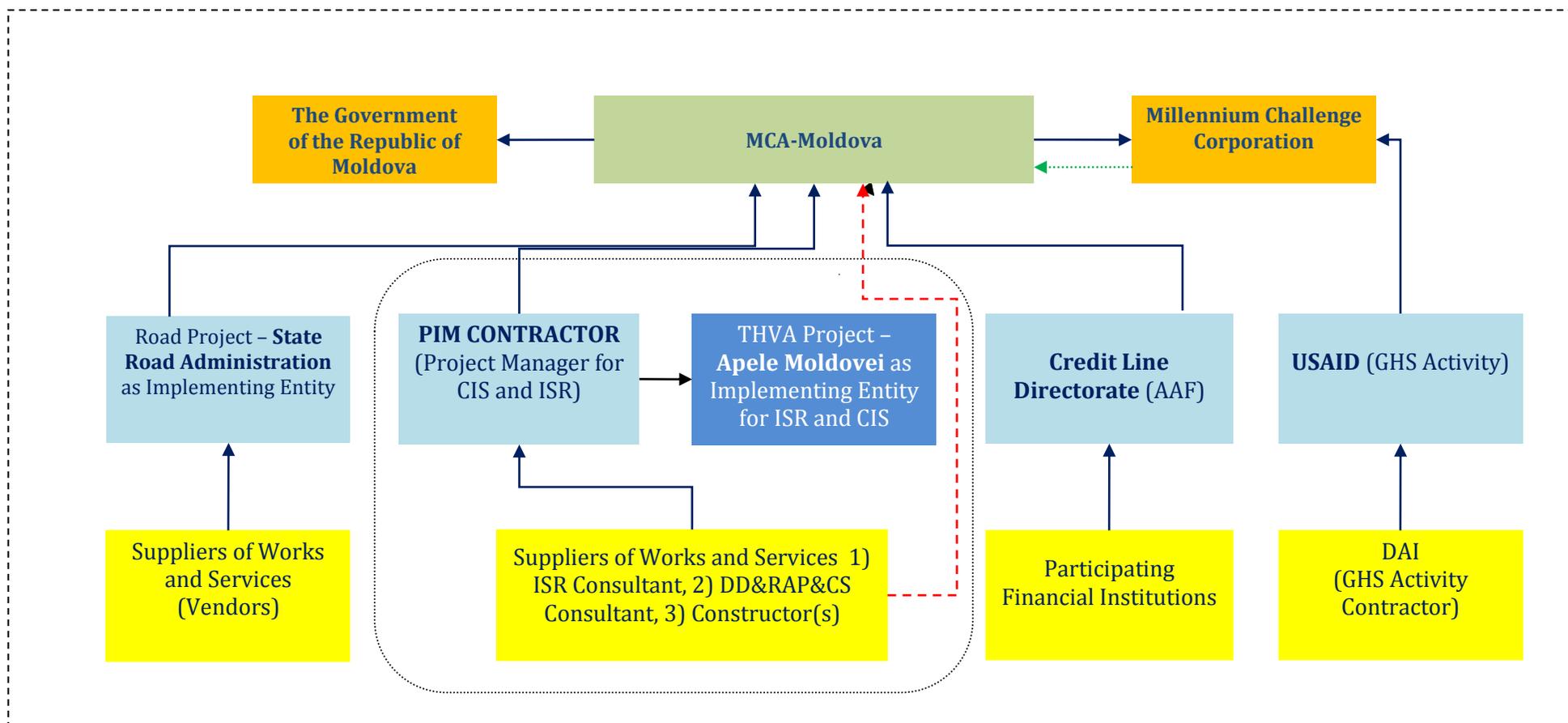
6.1. Responsibilities

The MCA-Moldova 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 activities; and an M&E Officer 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-Moldova;
- Ensure that the M&E Plan and ERR analysis are 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 Management Information System;
- Elaborate and document M&E Policies, Procedures and Processes in an M&E Manual or other format, to be used by all MCA-Moldova 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 and could focus on issues as:
 - Explaining indicator definitions, data collection methods and timing/frequency of data collection and reporting,
 - Data quality controls and verification procedures,
 - Impact 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:
 - Goal, objective and outcome indicators,
 - Performance indicators (to be developed by implementers and added subsequently to the M&E Plan),
 - Changes to the M&E Plan,
 - Key M&E deliverables including TORs, contracts/agreements, data collection instruments, reports/analyses, etc;
- Develop (with the Communication Unit and ESA/Gender officers) and implement a systematic dissemination approach to ensure participation of all the 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-Moldova;
- 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;
- Contribute to the design of the impact evaluation strategy;
- Collaborate with the Procurement Director to prepare and conduct procurement of M&E contracts;

Diagram 2. Reporting/Data Flow Structure of Moldova Compact



←..... USAID will share data on GHS Activity implementation with MCC and MCC will provide data to MCA Moldova

- - - - -> Suppliers of Works and Services for CISRA and ISRA will submit reports to MCA Moldova as well

- Ensure that data collection mechanisms are designed to collect data disaggregated by gender, age, and other dimensions, as applicable and practical, and that the findings are presented at the appropriate disaggregated level;
- As the champion of results based management, the M&E Unit will take steps to foster a results oriented culture throughout MCA-Moldova and its implementing partners.

The M&E Director will be a part of MCA-Moldova’s internal Management Unit, composed from MCA leadership, Project Directors and other Directors. M&E Director will report directly to MCA-Moldova CEO and maintain closest cooperation with Roads Rehabilitation Director, THVA Director, CIS Director, AAF and GHS Directors. Collaboration with procurement team will be very important to prepare and conduct 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 Communications Unit.

6.2. MCA Management Information System for M&E

M&E best practice shows that MCA-Moldova should establish and maintain a management information system (MIS) to track program progress and monitor the effect of each activity with timely and accurate reporting. The MIS should be developed and implemented in agreement with MCC M&E.

Currently a comprehensive Management Information System (MIDAS) is being developed by MCC for all of MCAs. MCA-Moldova is selected by MCC to perform the pretesting of MIDAS.

The M&E Director is responsible for ensuring that MCA M&E needs are addressed during the development of MIDAS.

6.3. 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. In the fourth quarter of every year, starting in calendar year 2011, or as necessary, the M&E Director of MCA Moldova and representatives of MCC M&E staff will review how well the M&E Plan has met its objectives (the “Annual Review”). The 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. The review is intended to ensure that the M&E Plan:

- Shows whether the logical sequence of intervention outcomes are 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-Moldova, in agreement with MCC M&E, when the need for change has been identified in the review. The revised M&E Plan will be submitted to the MCA-Moldova Steering Committee for approval (if changes are substantial) and to MCC for acceptance.

At the mid-point of the Compact Term, MCA-Moldova will conduct a **mid-term review** of the Program. The review will draw on all performance reports and analyses prepared to date. The purpose will be to determine if the Program and its component projects are on track to achieving the final targets established in the Compact and agree on corrective actions where needed. The format of the review and the specific questions/issues to be addressed will be determined by MCA Moldova in consultation with MCC. The mid-term review will replace the Annual Review (AR) for that year.

7.0 M&E Budget

The budget for the implementation of the proposed M&E activities for the five-year term of the Compact is US\$ 3.54 million. The line items of this budget will be reviewed and updated as the program develops, on 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-Moldova 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 reviews or quarterly if needed.

Summary M&E Budget (million USD)

Monitoring and Evaluation	Total, USD
Surveys and evaluations	\$2.80
Capacity Building	\$0.53
Data Quality Reviews	\$0.21
Total - M&E	\$3.54

While the resources for the carrying-out of surveys are allocated by MCA-Moldova from the Compact funds, the impact analysis is to be funded directly by MCC. MCC will commit approximately \$1.9 million to fund the external impact evaluators. The M&E Plan calls for coordination of research design and implementation with the impact analysis.

8.0 Other

8.1. M&E Requirements for Disbursements

The MCC M&E Policy states that the M&E Plan should include “any M&E requirements that an MCA must meet in order to receive disbursements” (article 5.1.1). The Policy notes that substantial compliance with M&E Plan is a condition for approval of quarterly disbursements. In accordance with these guidelines, the following are envisaged to meet the requirements for substantial compliance with the M&E Plan including, but not limited to:

1. Having fully staffed M&E personnel or actively seeking to fulfill M&E staffing, to MCC’s satisfaction.
2. Actively executing the M&E work plan to meet the reporting and data needs of professional monitoring and evaluation of the Compact Program, to MCC’s satisfaction.
3. Timely managing and utilizing M&E budget in pursuing the Plan’s purposes, to MCC’s satisfaction.
4. Maintaining sufficient progress towards achievement of target indicators as outlined in the annexes to this Plan, to MCC’s satisfaction.

8.2. M&E Plan Assumptions and Risks

As with any large Compact program, a number of assumptions and risks could influence the normal process of its implementation according to the schedule and resources allocated. The assumptions and risks presented below are deemed to be applicable to this Monitoring and Evaluation Plan and other program components that relate directly to monitoring and evaluation issues. Assumptions are basically details associated with activities assumed ahead that need to occur for the monitoring and evaluation to be successfully implemented, while risks are considered factors that might restrict or limit the success of M&E.

Monitoring
<p>Assumptions</p> <ul style="list-style-type: none">• The Compact Goal, the Program Objective and the Project Objectives and key indicators of long-term impact are limited to those described in the Millennium Challenge Compact• The monitoring indicators are measured against established baselines and targets, derived from ex-ante economic rate of return analysis, and other types of analysis and other project planning documents• The milestones are completed according to project procurement plan timeline and project deliverables are subject to the specified number of review cycles.
<p>Risks</p> <ul style="list-style-type: none">• Any modifications of Compact Goal, the Program Objective and the Project Objectives will require Program Logic revision with indicator definition table adjustment for amending the M&E Plan. This could affect the monitoring process and developed strategies for impact evaluations.• Modifications to Program Objective and the Project Objectives may constrain the ability of the project team and implementing entities to meet interim dates identified in the original project procurement plan timetable• Due to the gap between the surveys that were used for calculation of the baselines (2008) and the time scheduled to conduct project evaluations MCC and/or stakeholders may require the revision of baselines indicators

<ul style="list-style-type: none"> • Changes in completing certain deliverables by a specific date may be required by Program Management and stakeholders
Evaluations
<p>Assumptions</p> <ul style="list-style-type: none"> • Evaluation strategies and implementation plan are supported by all involved stakeholders • Evaluation objectives, hypotheses to be tested, evaluation methodology design, quality control and data analysis are limited to those described in the Impact Evaluation Strategies elaborated by the Impact Evaluation Contractor • Impact Evaluation Contractor provides staff qualified on the methodologies, techniques and tools needed to support the implementation process of the impact evaluations as required by MCC • USAID GHS Activity Contractor coordinates the design of GHS Activity interventions with the Impact Evaluation Contractor to ensure the project is implemented in a manner suitable for impact evaluation • Impact evaluation deliverables complies with the quality and clarity criteria outlined by MCC • The Impact Evaluation Report for the AAF Pilot Phase provides explicit findings to inform the decision on AAF Activity extension • Mid-Term Phase Evaluation Report provides exhaustive conclusions to assess the implantation process and design interventions if necessary • Final Impact Evaluation Report presents clear conclusions to establish whether Program results can be reliably attributed to MCC funded interventions
<p>Risks</p> <ul style="list-style-type: none"> • Changes to evaluation strategies and implementation plan could be required by Program Management and the key stakeholders, based on the results provided within initial project evaluations • Impact Evaluation Contractor may face staffing constraints in providing impact evaluation services that will directly affect evaluation strategies and implementation plan • Impact evaluation deliverables may partially or entirely disregard the quality and clarity requirements that will considerably extend the review and examination cycle • GHS Activity is implemented jointly with USAID and GHS Impact Evaluation depends on the implementation status and performance of USAID GHS Activity Contractor • Mid-Term Phase Evaluation may report incomplete and/or inadequate information about the status of project components that may affect the decision making process on interventions to be made in order to achieve program objectives • Delays in implementing project components according to project procurement plan timeline may affect the impact evaluation implementation plan • Deficiencies in final impact evaluation strategy may underestimate/overestimate the impacts and results attributed to MCC funded interventions
Capacity building
<p>Assumptions</p> <ul style="list-style-type: none"> • M&E staff resources are available when and as they are required • MCA Moldova personnel will be properly trained on the tools and techniques needed to support Program monitoring and evaluation. • Investments to develop a highly qualified monitoring and evaluation personnel are ensured by the continuity of the staff
<p>Risks</p> <ul style="list-style-type: none"> • Project components key staff recourses for monitoring and evaluation activities will not be available on a ‘full-time’ basis. • The continuity of the personnel may be affected by various MCA Moldova internal staff policy or/and external grounds

Budget
<p>Assumptions</p> <ul style="list-style-type: none"> • Agricultural Survey services, Ad Hoc and Special studies, and other services to support monitoring and evaluation activities are procured within the limits of the M&E Budget • Impact Evaluation Contractor allocates resources according to the evaluation strategies and implementation plan
<p>Risks</p> <ul style="list-style-type: none"> • Impact evaluation budgets may be inaccurately prepared • Reduced budgets or limited resources may force Program Management to select the most affordable solution instead of the best solution. • Impact Evaluation Contractor may require for new personnel which will affect the budget for the Impact Evaluation

ANNEX 1. Indicator Documentation Table

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
Compact Goals									
	Goal	Absolute poverty rate nationwide	National absolute poverty rate	Percentage	Gender	Household Budget Survey	Ministry of Economy / National Bureau of Statistics	Annual	The Household Budget Survey (HBS) is a nationally representative survey that provides information on living standards in Moldova. The HBS is used to calculate poverty lines and poverty measures and generate poverty profiles that describe poverty characteristics and assess how policies and programs affect the socio-economic situation of the population. The HBS is regularly conducted by the National Bureau of Statistics and will not require MCA-Moldova financial support. The results of this survey related to the poverty are reported by the Ministry of Economy.
	Goal	Absolute poverty rate in rural areas	Absolute poverty rate in villages	Percentage	Gender	Household Budget Survey	Ministry of Economy / National Bureau of Statistics	Annual	
Project 1: Transition to High Value Agriculture Project									
	Outcome	Annual profits of crop production per hectare in Target Area	Average annual profits of farms in Target Areas (defined as average annual	US Dollars		Farm Survey	MCC Impact Evaluation Consultant	Annual	Reporting Years: Pre-Compact Baseline, 3, 4, 5.; Target Areas are defined as “areas targeted by the Centralized Irrigation

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
			profits from crop production/average size of farm)						System Rehabilitation Activity”
	Outcome	Rent for land paid to lessors per hectare in Target Area	Average rent paid by lessee to lessor per hectare of rented land in Target Areas	US Dollars		Farm Survey	MCC Impact Evaluation Consultant	Annual	Reporting Years: Pre-Compact Baseline, 4, 5, 6.
	Outcome	Wage bill paid to labor per hectare in Target Area	Value of labor (defined as annual person-days of labor per hectare in target areas × average daily wage excluding household labor)	US Dollars		Farm Survey	MCC Impact Evaluation Consultant	Annual	Reporting Years: Pre-Compact Baseline, 4, 5, 6.
	Outcome	Area irrigated in Target Areas	Number of hectares of irrigated crops (high value agriculture, grains and technical crops) in Target Areas	Hectares		Farm Survey	MCC Impact Evaluation Consultant	Annual	Reporting Years: Pre-Compact Baseline, 4, 5, 6.
	Outcome	Adoption of HVA crops in Target Areas	Number of hectares of irrigated and non-irrigated high value agriculture crops (fruits, grapes, vegetables, potatoes, etc.) in Target Areas	Hectares		Farm Survey	MCC Impact Evaluation Consultant	Annual	Reporting Years: Pre-Compact Baseline, 4, 5, 6.

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
AI-12	Outcome	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		Farm Survey	MCC Impact Evaluation Consultant	Annual	Reporting Years: 2, 3, 4, 5, 6. The indicator's targets are based on the number of farmers trained by GHS adopting the new practices. It is assumed each farmer will apply the practices to 3 hectares. ACED Indicator 1.2.3 The targets for this indicator in the MCA M&E Plan are different from the ACED PMEP targets for two reasons: the MCA targets were set before the ACED implementation contract was signed and the Compact year covers a different timeframe than the ACED contract year. It was agreed between MCC, USAID and MCA not to adjust the MCA targets because it did not make sense for ACED to recalculate their targets based on the Compact year.

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Outcome	Increase in the annual profits among assisted farms outside of Target Areas	Percent differential between the annual per hectare profit (excluding rent and labor costs) realized among assisted farms outside of Target Areas and a comparison farm group	Percentage		Farm Survey	MCC Impact Evaluation Consultant	Annual	Reporting Years: 2, 3, 4, 5, 6.
Activity 1: Centralized Irrigation System Rehabilitation Activity									
AI-8	Outcome	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		Administrative; Project Implementation documents	PIM/ISRA	Annual	Formerly “Command area with access to functional systems expands.”
	Output	Centralized irrigation systems rehabilitated	Number of centralized irrigation systems with rehabilitation works completed under Compact	Number		Administrative; Project Implementation documents	PIM/CISRA	Annual	
AI-1	Process	Value of signed irrigation feasibility and design contracts	The value of all signed feasibility, design, and environmental contracts,	US Dollars		Administrative; Project Implementation documents	PIM / Fiscal Agent	Quarterly	

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
			including resettlement action plans, for agricultural irrigation investments using 609(g) and compact funds.						
	Process	Value of contracted irrigation feasibility and/or design studies disbursed	The value of all disbursements for feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments.	US Dollars		Administrative; Project Implementation documents	PIM / Fiscal Agent	Quarterly	
AI-2	Process	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	Percentage		Administrative; Project Implementation documents	PIM / Fiscal Agent	Quarterly	

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
			of all signed contracts.						
AI-3	Process	Value of signed irrigation construction contracts	The value of all signed construction contracts for agricultural irrigation investments using compact funds.	US Dollars		Administrative; Project Implementation documents	PIM / Fiscal Agent	Quarterly	
	Process	Value of contracted irrigation construction works disbursed	Total value of disbursements for all signed construction contracts for agricultural irrigation investments.	US Dollars		Administrative; Project Implementation documents	PIM / Fiscal Agent	Quarterly	

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
AI-4	Process	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		Administrative; Project Implementation documents	PIM / Fiscal Agent	Quarterly	
AI-5	Process	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	Gender	Administrative; Project Implementation documents	PIM	Annual	The indicator does not have targets because it is a common indicator required by MCC but was not part of the original program logic.
Activity 2: Irrigation Sector Reform Activity									
	Outcome	Improved perception of quality of service by water users	Percentage of centralized irrigation systems users satisfied with the timeliness, cost and administration of	Percentage	Gender	Farm Survey	MCC Impact Evaluation Consultant	Annual	Reporting Years: Pre-Compact Baseline, 4, 5, 6.

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
			Irrigation.						
	Outcome	WUAs achieving financial sustainability	Number of assisted WUAs (with schemes completed and fully operational and assuming state still subsidize the pumping costs) where tariffs collected covers 100% of operating costs plus an amount for capital/replacement costs	Number		Administrative; Project Implementation documents	PIM / ISRA	Annual	
	Outcome	WUAs with active and representative governance	Number of WUAs complying with transparent governance practices including an annual plan and year end report approved by the respective general assembly.	Number		Administrative; Project Implementation documents	PIM / ISRA	Annual	

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Outcome	WUAs with gender-balanced management and governance	Number of WUAs having at least 20% of board member positions filled by women	Number		Administrative; Project Implementation documents	PIM / ISRA	Annual	
	Outcome	Revised water management policy framework - with long-term water rights defined - established	The Water Law which establish long-term water rights is in full force and effect	Date		Administrative	Publication in the Official Monitor (Monitorul Oficial)	Once	
	Outcome	Revised legal water management framework	Four secondary regulations to be passed establishing the water rights, water registry and basin management	Date		Administrative	PIM / ISRA	Once	
	Output	Management Transfer Agreements signed	Number of Management Transfer Agreements signed	Number		Administrative; Project Implementation documents	PIM / ISRA	Quarterly	
	Output	Information campaign awareness	Percentage of farm operators within Target Area aware about ISRA out of the total number of farm operators in Target Area	Percentage	Gender	Farm Survey	Local Contractor	Annual	Reporting Years: 2, 3, 4, 5, 6.

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Output	WUAs established under new law	Number of WUAs registered under new specific WUA law	Number		Administrative; Project Implementation documents	PIM / ISRA	Quarterly	
	Output	Water resource management plans prepared	The number of water basin and sub-basin management plans prepared that included the participation of local institutions and stakeholders.	Number		Administrative; Project Implementation documents	PIM / ISRA	Annual	The indicator's target number of management plans will be defined by ISRA Consultant in Year 1 of its activity.
	Process	ISRA contractor mobilized	Contract with ISRA Consultant is signed and local teams are recruited	Date		Administrative; Project Implementation documents	MCA Moldova	Once	
	Process	Secured structures for new RBM equipment provided	Government has contributed safe and secure structures and places for housing equipment for water measurements	Date		Administrative; Project Implementation documents	MCA Moldova / PIM / ISRA	Once	
	Process	Expressions of interest obtained	Approval of the expression of interest report showing that a sufficient percentage of potential WUA	Date		Administrative; Project Implementation documents	PIM / ISRA	Once	

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
			members have expressed interest in forming WUAs						
Activity 3: Access to Agriculture Finance Activity (includes Target and non-Target areas)									
	Outcome	New HVA infrastructure in place	Operational cold-storage capacity of high value agriculture post-harvest structures financed under the AAF	Metric tonnes	Gender	AAF Survey	MCC Impact Evaluation Consultant	Annual	Reporting Years: 3, 5.
	Outcome	Additionality factor of AAF investments	Percentage of the financed amount of the investment deemed to be additional.	Percentage		AAF Survey	MCC Impact Evaluation Consultant	Annual	Reporting Years: 3, 5; For example, if the “additionality target” was 75 percent, then similar individuals who do not access financing from the project are expected to find financing equivalent to or less than 25 percent (100 - 75 = 25) of the financing received by project beneficiaries.
	Outcome	Loans past due	Percent of loans more than 60 days overdue on latest payment	Percentage	Gender	Administrative; Project Implementation documents	Credit Line Directorate / PFI	Quarterly	

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
AI-10	Output	Value of agricultural and rural loans	The value of agricultural loans and rural loans disbursed for on-farm, off-farm, and rural investments.	US Dollars	Gender	Administrative; Project Implementation documents	Credit Line Directorate / PFI	Quarterly	Formerly “Affordable financing provided for post-harvest infrastructure through the High Value Agriculture Post-Harvest Credit Facility.” This indicator will include re-lent funds towards the end of the compact.
AI-9	Output	Loan borrowers	The number of borrowers (primary sector producers, rural entrepreneurs, and associations) who access loans for on-farm, off-farm, and rural investment through MCC financial assistance.	Number	Gender	Administrative; Project Implementation documents	Credit Line Directorate / PFI	Quarterly	
	Output	Agricultural loans resulting from Investment Development Services	Number of loans received by borrowers which received support from Investment Development Services	Number	Gender	Administrative; Project Implementation documents	Credit Line Directorate / IDS	Quarterly	
	Process	HVA Post-Harvest Credit Facility Policies and Procedures Manual (PPM) Finalized	PPM finalized and approved by MCC	Date		Administrative; Project Implementation documents	MCA Moldova	Once	

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Process	HVA Post-Harvest Credit Facility Launched	Participating Financial Institutions selected and public outreach program underway	Date		Administrative; Project Implementation documents	MCA Moldova	Once	
	Process	Impact Evaluation Process finalized and decision made regarding pilot expansion	Impact Evaluation completed, results processed and decision made by MCC	Date		Administrative; Project Implementation documents	MCA Moldova	Once	
	Process	Close-Out and Facility Transition Plan approved by MCC	Plan as to how the funds will be managed/used after the life of the compact approved by MCC	Date		Administrative; Project Implementation documents	MCA Moldova	Once	This target date will be provided by MCA-Moldova when they finish their AAF work plan.
Activity 4: Growing High Value Sales									
	Outcome	Value of sales facilitated	Value of annual sales facilitated by the Activity contractor on behalf of Moldovan producers or producer groups	US Dollars	Gender	Administrative; Project Implementation documents	GHS / USAID GHS Activity Contractor	Quarterly	ACED Indicator 1.1.1 The targets for this indicator in the MCA M&E Plan are different from the ACED PME targets for two reasons: the MCA targets were set before the ACED implementation contract was signed and the Compact year covers a different timeframe than the ACED contract year. It was agreed between MCC, USAID and MCA not

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
									to adjust the MCA targets because it did not make sense for ACED to recalculate their targets based on the Compact year.
	Outcome	Agricultural businesses with sales facilitated	Number of farmers, producers, processing enterprises reporting transactions facilitated through GHS	Number		Administrative; Project Implementation documents	GHS / USAID GHS Activity Contractor	Quarterly	ACED Indicator 1.1.3 The targets for this indicator in the MCA M&E Plan are different from the ACED PMP targets for two reasons: the MCA targets were set before the ACED implementation contract was signed and the Compact year covers a different timeframe than the ACED contract year. It was agreed between MCC, USAID and MCA not to adjust the MCA targets because it did not make sense for ACED to recalculate their targets based on the Compact year.
AI-11	Outcome	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	Number	Gender	Administrative; Project Implementation documents (confirmed by MCC Impact Evaluation)	GHS/USAID GHS Activity Contractor	Quarterly	The MCC Impact Evaluation contractor will report on this indicator as well using data from the Farm Survey. That data will not be available until Year 5 of the Compact; therefore until then, this indicator will be tracked through USAID and the GHS Activity Contractor. ACED Indicator 1.2.2

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
			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.						The targets for this indicator in the MCA M&E Plan are different from the ACED PMEP targets for two reasons: the MCA targets were set before the ACED implementation contract was signed and the Compact year covers a different timeframe than the ACED contract year. It was agreed between MCC, USAID and MCA not to adjust the MCA targets because it did not make sense for ACED to recalculate their targets based on the Compact year.
AI-13	Outcome	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	Number	Gender	Administrative; Project Implementation documents (confirmed by MCC Impact Evaluation)	GHS/USAID GHS Activity Contractor	Quarterly	ACED Indicator 1.3.5 MCA did not have targets set initially for this indicator, so the targets from the ACED PMEP are being used. However, the targets in the ACED PMEP cover a different time period than the Compact year. The Compact year is from October of one year to September of the next year; whereas the ACED contract year covers March of one year to February of the next year.

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
			supported by MCC.						
	Outcome	Reduced risk of export bans due to improved export certification and inspection systems	Moldova sanitary and phytosanitary services achieve compliance with IPPC, ISPM Guidelines 7, 20 and 23 and the Central Phytosanitary Laboratory is certified to ISO 9000	Date		Independent audit	GHS / USAID GHS Activity Contractor	Once	ACED Indicator 1.4.3
AI-6	Output	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,	Number	Gender	Administrative; Project Implementation documents	GHS / USAID GHS Activity Contractor	Quarterly	ACED Indicator 1.2.1 The targets for this indicator in the MCA M&E Plan are different from the ACED PMEP targets for two reasons: the MCA targets were set before the ACED implementation contract was signed and the Compact year covers a different timeframe than the ACED contract year. It was agreed between MCC, USAID and MCA not to adjust the MCA targets because it did not make sense for ACED to recalculate their targets based on the Compact year.

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
			developing business, financial, or marketing planning, accessing credit or finance, or accessing input and output markets).						
AI-7	Output	Enterprises assisted	The number of enterprises; producer, processing, and marketing organizations; water users associations; trade and business associations; and community-based organizations receiving assistance.	Number	Gender	Administrative; Project Implementation documents	GHS / USAID GHS Activity Contractor	Quarterly	ACED Indicator 1.3.4 MCA did not have targets set initially for this indicator, so the targets from the ACED PMEP are being used. However, the targets in the ACED PMEP cover a different time period than the Compact year. The Compact year is from October of one year to September of the next year; whereas the ACED contract year covers March of one year to February of the next year.
	Process	MOU in force	A MOU between MCC, MCA Moldova and USAID is signed to set out the understanding of the parties about the roles and	Date		Administrative; Project Implementation documents	MCC / MCA / USAID	Once	

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
			responsibilities of USAID, MCC and MCA with respect to the implementation and coordination of the GHS Activity						
	Process	GHS activity launched	GHS Contractor mobilized and teams are mobilized	Date		Administrative; Project Implementation documents	MCC / MCA / USAID	Once	
	Process	Central Phytosanitary Lab is certified	The Central Phytosanitary Lab is certified to ISO family of standards and / or another appropriate international standard as confirmed by a Certification or Accreditation body.	Date		Administrative; Project Implementation documents	USAID to MCC	Once	ACED Indicator 1.4.4

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
Project 2: Roads Rehabilitation Project									
Activity 1: Sarateni – Drochia Junction M2									
	Outcome	Reduced cost to road users	Value of time savings and reduced vehicle operating costs with the project compared to no rehabilitation (modeled by HDM4)	US Dollars		HDM 4 modeling run by SRA with financial support from MCA Moldova	SRA	Once	Reporting Year: 5
R-10	Outcome	Average annual daily traffic	The average number and type of vehicles per day, averaged over different times (day and night) and over different seasons to arrive at an annualized daily average.	Number	Road Type	Traffic survey	SRA or independent Traffic Count	Once	Beginning of Year 5 of the Compact. The period of count (past year or past 12 months) will be decided according to road rehabilitation and completion schedule to account for seasonality. AADT for the full road was calculated using a weighted average for road segments based on each segment's length. See file "Roads Beneficiary and Indicators Calculations v5.xlsx" for details on this calculation.
	Outcome	Enhanced traffic safety	Number of road accidents on the rehabilitated portion of road	Number		Road Police Department written reports	Road Police Department of the Ministry of Internal Affairs	Annual	The number of traffic accident will be provided by Road Police Department in Year 5. This indicator is for tracking purposes only and no target will be assigned to it.

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
R-9	Outcome	Roughness	The measure of the roughness of the road surface, in meters of height per kilometer of distance traveled.	Meters per kilometer	Road Type	Road survey	SRA/Supervising Engineer		Upon completion of each road section
	Outcome	Road maintenance expenditure	Annual expenditure for roads maintenance nationwide	US Dollars		Administrative, from reports on State budget execution by MTRI and MOF	Ministry of Transport and Road Infrastructure (MTRI) / Ministry of Finance (MOF)	Annual	
	Outcome	Revised legislative basis for road maintenance funding designed to meet the needs for sustainability of roads infrastructure	Appropriate legislation is in full force and effect in accordance with the Program Implementation Agreement to ensure a sufficient percentage of revenue from the fuel excise tax is automatically allocated to the Road Fund	Date		Administrative	Publication in the Official Monitor (Monitorul Oficial)	Once	At the moment of publication of Road Fund Law

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
R-8	Output	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	Road Type	Administrative; Project Implementation documents	SRA	Quarterly	Detailed Design will include information on the length of rehabilitated roads by Year
	Output	Trafficking in Persons training participants	Number of trained workers on Trafficking in Persons (TIP) by Contractor for their workforce	Number		Construction Contractor monitoring	Contractors' Reports	Annual	Reported twice - on commencement of construction operations and end of construction
	Output	Trafficking in Persons training sessions	Number of training sessions on Trafficking in Persons (TIP) by Contractor for their workforce	Number		Construction Contractor monitoring	Contractors' Reports	Annual	Reported twice - on commencement of construction operations and end of construction
	Output	Road safety training for teachers	Number of teachers participants in the road safety trainings for women and children	Number	Gender	Construction Contractor monitoring	Contractors' Reports	Annual	Reported twice - on commencement of construction operations and end of construction

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Output	Road safety training for children	Number of children participants in the road safety trainings for women and children	Number		Construction Contractor monitoring	Contractors' Reports	Annual	Reported twice - on commencement of construction operations and end of construction
	Process	Final Design	Final design prepared, reviewed and approved	Date		Administrative; Project Implementation documents	SRA / Nathan (with URS/UNIVERS INJ)	Once	
	Process	RAP implemented	RAP implementation completed and approved	Date		Administrative; Project Implementation documents	SRA, MCA Board	Once	
	Process	Permission for Construction	Permission for Construction obtained by SRA for all portions planned for rehabilitation	Date		Administrative; Project Implementation documents	SRA	Once	
R-3	Process	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	Kilometers	Road Type	Administrative; Project Implementation documents	SRA	Quarterly	

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
			upgrading existing roads.						
R-6	Process	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	Road Type	Administrative; Project Implementation documents	SRA	Quarterly	
R-4	Process	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	Road Type	Administrative; Project Implementation documents	SRA / Fiscal Agent	Quarterly	
	Process	Value of contracted roads works disbursed	The value of disbursement for all contracts signed that MCA has signed with contractors for construction of new or rehabilitated roads.	US Dollars		Administrative; Project Implementation documents	SRA / Fiscal Agent	Quarterly	MCA-Moldova Infrastructure Unit to provide targets for disbursements of road construction.

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
R-5	Process	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	Road Type	Administrative; Project Implementation documents	SRA / Fiscal Agent	Quarterly	MCA-Moldova Infrastructure Unit to provide targets for disbursements of road construction.
R-7	Process	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	Gender	Administrative; Project Implementation documents	SRA / Fiscal Agent	Annual	The indicator does not have targets because it is a common indicator required by MCC but was not part of the original program logic.

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis - aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
R-11	Outcome	Road traffic fatalities	The number of road traffic fatalities per year on roads constructed, rehabilitated or improved with MCC funding.	Number	Road Type	Road Police Department written reports	Road Police Department of the Ministry of Internal Affairs	Annual	The number of traffic accident will be provided by Road Police Department in Year 5. This indicator is for tracking purposes only and no target will be assigned to it.

ANNEX 1. Table of Indicator Baselines and Targets

Indicator Name	Unit of Measure	Indicator Classification	Baseline (year)	Year 1	Year 2	Year 3	Year 4	Year 5
Compact Goals								
Absolute poverty rate nationwide	Percentage	level	30.2% (2007)	24.5%	23.4%	22.3%	21.1%	20.0%

Indicator Name	Unit of Measure	Indicator Classification	Baseline (year)	Year 1	Year 2	Year 3	Year 4	Year 5
Absolute poverty rate in rural areas	Percentage	level	34.1% (2007)	27.7%	26.4%	25.1%	23.9%	22.6%
Project 1: Transition to High Value Agriculture Project								
Annual profits of crop production per hectare in Target Area	US Dollars	level	180 (2009)			180	180	390
Rent for land paid to lessors per hectare in Target Area	US Dollars	level	80 (2009)			80	80	100
Wage bill paid to labor per hectare in Target Area	US Dollars	level	40 (2009)			40	40	180
Area irrigated in Target Areas	Hectares	level	1,100 (2009)			1,100	2,280	3,460
Adoption of HVA crops in Target Areas	Hectares	level	1,800 (2009)			1,800	2,320	2,840
Hectares under improved practices as a result of training	Hectares	cumulative	0	990		4,020	6,150	8,400
Increase in the annual profits among assisted farms outside of Target Areas	Percentage	level	0%	0%		10%	15%	20%
Activity 1: Centralized Irrigation System Rehabilitation Activity								
Hectares under improved irrigation	Hectares	level	0	0	0	0	6,200	15,500
Centralized irrigation systems rehabilitated	Number	cumulative	0	0	0	0	4	11
Value of signed irrigation feasibility and design contracts	US Dollars	cumulative	0	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000
Value of contracted irrigation feasibility and/or design studies disbursed	US Dollars	cumulative	0	1,800,000	3,600,000	3,600,000	3,600,000	3,600,000
Percent disbursed of irrigation feasibility and design contracts	Percentage	cumulative	0%	50%	100%	100%	100%	100%
Value of signed irrigation construction contracts	US Dollars	cumulative	0			53,900,000	53,900,000	53,900,000
Value of contracted irrigation construction works disbursed	US Dollars	cumulative	0			16,200,000	43,100,000	53,900,000
Percent disbursed of irrigation construction contracts	Percentage	cumulative	0%			30%	80%	100%
Temporary employment generated in irrigation	Number	cumulative	0					
Activity 2: Irrigation Sector Reform Activity								

Indicator Name	Unit of Measure	Indicator Classification	Baseline (year)	Year 1	Year 2	Year 3	Year 4	Year 5
Improved perception of quality of service by water users	Percentage	level	41% (2009)			41%	43%	75%
WUAs achieving financial sustainability	Number	level	0	0	0	7	7	11
WUAs with active and representative governance	Number	level	0	0	7	7	7	11
WUAs with gender-balanced management and governance	Number	level	0	0	6	6	6	9
Revised water management policy framework - with long-term water rights defined - established	Date	date		30-Apr-11				
Revised Legal Water Management Framework	Date	date				31-Aug-13		
Management Transfer Agreements signed	Number	cumulative	0	0	7	7	11	11
Information campaign awareness	Percentage	level	0%	95%				
WUAs established under new law	Number	cumulative	0	0	11	11	11	11
Water Resource Management Plans prepared	Number	cumulative	0	0	0	TBD	TBD	TBD
ISRA Contractor mobilized	Date	date		30-Nov-10				
Secured structures for new RBM equipment provided	Date	date			30-Sep-11			
Expressions of interest obtained	Date	date		28-Feb-11				
Activity 3: Access to Agriculture Finance Activity (includes Target and non-Target areas)								
New HVA infrastructure in place	Metric tones	cumulative	0	0		3,800		10,500
Additionality factor of AAF investments	Percentage	level	0			75%		75%
Loans past due	Percentage	level			5%	5%	5%	5%
Value of agricultural and rural loans	US Dollars	cumulative	0	1,500,000	3,500,000	4,500,000	9,500,000	14,900,000
Loan borrowers	Number	cumulative	0	8	18	23	48	75
Agricultural loans resulting from Investment Development Services	Number	cumulative	0	5	12	16	35	55
HVA Post-Harvest Credit Facility Policies and Procedures Manual (PPM) Finalized	Date	date		30-Jun-11				

Indicator Name	Unit of Measure	Indicator Classification	Baseline (year)	Year 1	Year 2	Year 3	Year 4	Year 5
HVA Post-Harvest Credit Facility Launched	Date	date		31-Aug-11				
Impact Evaluation Process finalized and decision made regarding pilot expansion	Date	date				31-May-13		
Close-Out and Facility Transition Plan approved by MCC	Date	date				TBD		
Activity 4: Growing High Value Sales								
Value of sales facilitated	US Dollars	cumulative	0	2,100,000	6,300,000	12,600,000	21,000,000	31,500,000
Agricultural businesses with sales facilitated	Number	cumulative	0	100	300	600	1,000	1,500
Farmers who have applied improved practices as a result of training	Number	cumulative	0	330	550	1,340	2,050	2,800
Enterprises that have applied improved techniques	Number	cumulative	0	5	20	35	55	75
Reduced risk of export bans due to improved export certification and inspection systems	Date	date						31-Aug-15
Farmers trained	Number	cumulative	0	500	850	1,340	3,150	4,300
Enterprises assisted	Number	cumulative	0	8	30	53	84	120
MOU in force	Date	date		31-Dec-10				
GHS activity launched	Date	date		31-Jan-11				
Central Phytosanitary Lab is certified	Date	date						31-Aug-2015
Project 2: Roads Rehabilitation Project								
Activity 1: Sarateni – Drochia Junction M2								
Reduced cost to road users	US Dollars	level	0					112,000,000
Average annual daily traffic	Number	level	3,009 (2009)					4,270
Enhanced traffic safety	Number	level	28 (2009)					-
Roughness	m/km	level	12 (2009)					2.5
Road maintenance expenditure	US Dollars	level	35,800,000 (2009)	49,700,000	63,600,000	81,500,000	99,000,000	106,000,000
Revised legislative basis for road maintenance funding designed to meet the needs for sustainability of roads	Date	date		31-Jan-10				

Indicator Name	Unit of Measure	Indicator Classification	Baseline (year)	Year 1	Year 2	Year 3	Year 4	Year 5
infrastructure								
Kilometers of roads completed	Kilometers	cumulative	0	0	0	0	93	93
Trafficking in Persons training participants	Number	cumulative	0	0	75	150	150	150
Trafficking in Persons training sessions	Number	cumulative	0	0	2	4	4	4
Road safety training for teachers	Number	cumulative	0	0	50	50	50	50
Road safety training for children	Number	cumulative	0	0	0	1,000	2,000	2,000
Final Design	Date	date		30-Jun-11				
RAP implemented	Date	date			30-Sep-11			
Permission for Construction	Date	date			30-Sep-11			
Kilometers of roads under design	Kilometers	cumulative	0	93	93	93	93	93
Kilometers of roads under works contracts	Kilometers	cumulative	0	0	93	93	93	93
Value of signed road construction contracts	US Dollars	cumulative	0	0	122,000,000	122,000,000	122,000,000	122,000,000
Value of contracted roads works disbursed	US Dollars	cumulative	0		7,000,000	40,000,000	36,000,000	10,000,000
Percent disbursed of road construction contracts	Percentage	cumulative	0		8%	51%	89%	100%
Temporary employment generated in road construction	Number	cumulative	0					
Road traffic fatalities	Number	level						

ANNEX 3. Summary of Modification to Indicators, Baselines and Targets

Version 2

This section summarizes changes in content, indicators, baselines, and target modification to date.

(A) Changes in content.

- **Sections 6.1.1. and 6.1.2.** For the mid-term and final evaluations MCA-Moldova will hire independent contractors and these evaluations are due respectively (i) 36 months after Entry into Force of the Compact and (ii) one month before the end date of the Compact.
- **Section 6.1.4. Sanitary and Phytosanitary Standards Study** will be conducted in coordination with USAID and USAID GHS Implementer to assess the overall diagnostic capacities related to sanitary and phytosanitary measures associated with HVA products.
- **Section 6.2.1.** There are changes related to ISRA/CISRA evaluation methodology.
- **Section 6.2.2.** There are changes related to AAF evaluation methodology.
- **Section 6.2.3.** There are changes related to GHS evaluation methodology.
- **Attachment 2.** The content of the budget was reduced to minimum information, keeping the reasonable degree of transparency, but without details that could be used during procurement of M&E services.
- **Attachment 4. and Attachment 5.** The units for indicators were changed according to new TIBT requirements.

(B) Changes to indicators, baselines, and target.

Transition to High Value Project

Indicator Modification Form	
Date	September 2011
Project/ Activity	MCA THVA / Objective
Indicator	Hectares under improved practices as a result of training
Indicator Definition	Total 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, harvesting and farm management techniques. This indicator is directly linked to the indicator capturing the number of farmers who applied improved practices when new techniques are crop related.

Modification Type	Indicator name and definition change
Details and Justification	The new indicator name and definition reflects details necessary to match with USAID / GHS similar indicator.

Indicator Modification Form	
Date	April 2011
Project/ Activity	ISRA / Process
Indicator	Expressions of interest obtained
Indicator Definition	Approval of the expression of interest report showing that a sufficient percentage of potential WUA members have expressed interest in forming WUAs
Modification Type	Indicator name and definition change
Details and Justification	The new definition contains the stipulation expression of interest instead of ‘contracts of associations’.

Road Rehabilitation Project

Following the discussions during the Implementation Workshop held in April 2011 two additional indicators related to Social and Gender Integration Plan.

Indicator Modification Form	
Date	April 2011
Project/ Activity	MCA Moldova Road Rehabilitation Project
Indicator	Revised legislative basis for road maintenance funding designed to meet the needs for sustainability of roads infrastructure
Indicator Definition	Appropriate legislation is in full force and effect in accordance with the Program Implementation Agreement to ensure a sufficient percentage of revenue from the fuel excise tax is automatically allocated to the Road Fund
Modification Type	New indicators to be added
Details and Justification	Road funds have to secure a more stable and predictable flow of funds for road maintenance. However, although a country might have established a road fund, this does not necessarily mean that it is either fully efficient, or fully autonomous. I.e. the establishment of a road fund not always contributes to resolve the insufficiency of funds for road maintenance. The results will show how more efforts are required to capture and sustain the efficiency gains that could derive from the improvement of road

	management practices and better use of available resources. Overall, the road maintenance needs are becoming more visible.
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Indicator Modification Form	
Date	April 2011
Project/ Activity	MCA Moldova Road Rehabilitation Project
Indicator	TIP training participants
Indicator Definition	Number of trained workers on Trafficking in Persons (TIP) by Contractor for their workforce
Modification Type	New indicators to be added
Details and Justification	The M&E plan includes a provision that its indicators may be revised following the compilation of the MCA Moldova Social and Gender Integration Plan. Indicator are suggested to the M&E Plan as indicated above, put forward following consultation and agreement with M&E and road teams.

Indicator Modification Form	
Date	April 2011
Project/ Activity	MCA Moldova Road Rehabilitation Project
Indicator	TIP training sessions
Indicator Definition	Number of training sessions on Trafficking in Persons (TIP) by Contractor for their workforce
Modification Type	New indicators to be added
Details and Justification	The M&E plan includes a provision that its indicators may be revised following the compilation of the MCA Moldova Social and Gender Integration Plan. Indicator are suggested to the M&E Plan as indicated above, put forward following consultation and agreement with M&E and road teams.

Indicator Modification Form	
Date	April 2011
Project/ Activity	MCA Moldova Road Rehabilitation Project
Indicator	Road safety training for teachers
Indicator Definition	Number of teachers participants in the road safety trainings for women and children

Modification Type	New indicators to be added
Details and Justification	The M&E plan includes a provision that its indicators may be revised following the compilation of the MCA Moldova Social and Gender Integration Plan. Two indicators are suggested to the M&E Plan as indicated above, put forward following consultation and agreement with M&E and road teams.

Indicator Modification Form	
Date	April 2011
Project/ Activity	MCA Moldova Road Rehabilitation Project
Indicator	Road safety training for children
Indicator Definition	Number of children participants in the road safety trainings for women and children
Modification Type	New indicators to be added
Details and Justification	The M&E plan includes a provision that its indicators may be revised following the compilation of the MCA Moldova Social and Gender Integration Plan. Two indicators are suggested to the M&E Plan as indicated above, put forward following consultation and agreement with M&E and road teams.

Version 3

This section summarizes changes in content, indicators, baselines, and target modification to date.

(A) Changes in content.

- **Table of Content.** The content of M&E Plan as well as the Table of Content were rearranged according to the para. *4.1.8 Contents of an M&E Plan* of the most recent *Policy for Monitoring and Evaluation of Compacts and Threshold Programs, May 1, 2012*:
 1. Overview of the Compact and its Objectives
 - 1.1. Program Logic
 - 1.2. Projected Economic Benefits and Beneficiaries
 2. Monitoring Component
 - 2.1. Summary of Monitoring Strategy
 - 2.2. Data Quality Reviews
 3. Evaluation Component
 - 3.1. Key evaluation questions
 - 3.2. Evaluation methodologies
 - 3.3. Data collection plans
 - 3.4. Timing of analytical reports
 4. Implementation and Management of M&E
 - 4.1. Responsibilities
 - 4.2. MCA's Management Information System for M&E
 - 4.3. Review and Revision of the M&E Plan
 5. M&E Budget
 6. Annex: Indicator Documentation Table
 7. Annex: Table of Indicator Baselines and Targets
 8. Annex: Modifications to the M&E Plan
- **List of Acronyms.** Updated.

- **Introduction.** Added paragraphs about Compact programs principles and entity responsible for M&E Plan.
- **Section 4.** Moved to Section 3 according to new M&E Plan content requirements.
- **3.4. Program beneficiaries.** Added MCC explanation about Compact programs beneficiaries.
- **Section 5. Monitoring Component.** Moved into Section 4.
 Edited the level of M&E indicators according to *Policy for Monitoring and Evaluation of Compacts and Threshold Programs, May 1, 2012* requirements.
 Added para. 4.1.2 Indicator Classification.
 Added para. 4.1.3 Common Indicators.
 Added para. 4.1.4 Indicator Documentation Table.
 Added para. 4.1.9 Table of Indicator Baselines and Targets.
 Added para. 4.2. Data Quality Reviews (DQRs).
 Added para. 4.3. Standard Reporting Requirements.
 Added para. 4.4. M&E Requirements for Disbursements.
- **Section 6. Evaluation Component.** Moved to Section 5.
Table Common Differences among Evaluations Types. Changed the content and added a new column with MCC Performance Evaluation.
5.1.3. MCC Impact and Performance Evaluations. Changed content.
5.2. Specific Evaluation Plans. Changed the content according to the evaluation methodology of the following sections: 5.2.1. THVA Evaluation; 5.2.1.1. ISRA - CISRA Evaluation; 5.2.1.2.GHS Evaluation; 5.2.1.3. AAF Evaluation.
- **Section 7 Implementation and Management of M&E.** Moved to Section 6.
 Added para. 6.1. Responcibilities
 Added Diagram 2.Reporting/Data Flow Structure of Moldova Compact
- Added section **7.0 M&E Budget.**
- Added section **8.0 Other** that includes: 8.1. M&E Requirements for Disbursements; 8.2. M&E Assumptions and Risks.
- **Attachments.** Renamed into Annexes.

(B) Changes to indicators, baselines, and target.

Indicator Modification Form	
Date	October 2012
Project/ Activity	Compact Goal
Indicator	Absolute poverty rate nationwide
Indicator Definition	National absolute poverty rate
Modification Type	New responsible added: Ministry of Economy
Details and Justification	The Household Budget Survey (HBS) is used to calculate poverty profiles that describe poverty characteristics and assess how policies and programs affect the socio-economic situation of the population. The results of this survey related to the poverty are reported by the Ministry of Economy.

Indicator Modification Form	
Date	October 2012
Project/ Activity	Compact Goal
Indicator	Absolute poverty rate in rural areas
Indicator Definition	Absolute poverty rate in villages
Modification Type	New responsible added: Ministry of Economy
Details and Justification	The Household Budget Survey (HBS) is used to calculate poverty profiles that describe poverty characteristics and assess how policies and programs affect the socio-economic situation of the population. The results of this survey related to the poverty are reported by the Ministry of Economy.

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project
Indicator	Objective Level
Indicator Definition	n/a
Modification Type	Modification of name: Outcome Level
Details and Justification	According to para 4.1.5.1. Indicator Levels of the <i>Policy for Monitoring and Evaluation of Compacts and Threshold Programs, May 1, 2012</i> at MCC indicators are separated into: process, output, outcome, and goal indicators.

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project
Indicator	Hectares under improved practices as a result of training
Indicator Definition	Total 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, harvesting and farm management techniques. This indicator is directly linked to the indicator capturing the number of farmers who applied improved practices when new techniques are crop related.
Modification Type	Modification of name, definition and targets
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: (AI-12) Hectares under improved practices as a result of training

	<p>New definition: 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.</p> <p>This indicator is directly linked to the indicator capturing the number of farmers who applied improved practices (AI-11) when new techniques are crop related.</p>
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Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Centralized Irrigation System Rehabilitation Activity (refers to Target Area only)
Indicator	Hectares under improved irrigation
Indicator Definition	The number of hectares served by existing or new irrigation infrastructure that are either rehabilitated or constructed with MCC funding. This indicator reports on the number of hectares affected by infrastructure interventions once they have been completed. The indicator includes all hectares within the service area of an improved irrigation system regardless of whether or not they are under production.
Modification Type	Moved from outcomes to outputs. Modification of name.
Details and Justification	<p>Modification of name according to MCC's <i>Guidance on Common Indicators, May 2012</i>.</p> <p>New name: (AI-8) Hectares under improved irrigation</p> <p>Moved according to para 4.1.5.1. Indicator Levels of the Policy for Monitoring and Evaluation of Compacts and Threshold Programs, May 1, 2012.</p>

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Centralized Irrigation System Rehabilitation Activity (refers to Target Area only).
Indicator	Value of signed irrigation feasibility and design contracts
Indicator Definition	The value of all signed feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments. If the value of a contract changes, the amount of the change (either + or -) should be reported in the quarter where the change occurred.
Modification Type	Modification of name and definition
Details and Justification	<p>Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i>:</p> <p>New name: (AI-1) Value of signed irrigation feasibility and design contracts</p> <p>New definition: The value of all signed feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments using 609(g) and compact funds. If the value of a contract changes, the total contract value should be reported in the quarter that the change occurred. Costs associated with pre-feasibility, supervision or management should not be included.</p>

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Centralized Irrigation System Rehabilitation Activity (refers to Target Area only)

Indicator	Value of contracted irrigation feasibility and/or design studies disbursed
Indicator Definition	The value of all disbursements for feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments.
Modification Type	Modification of name
Details and Justification	Modification of name according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: Value disbursed of irrigation feasibility and design contracts

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Centralized Irrigation System Rehabilitation Activity (refers to Target Area only)
Indicator	Percent of contracted irrigation feasibility and/or design studies disbursed
Indicator Definition	Total amount of all signed feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments disbursed divided by total value of all contracts awarded. Denominator = Value of signed contracts for studies. Numerator = Amount of money disbursed on these contracts.
Modification Type	Modification of name and definition
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: (AI-2) Percent disbursed of irrigation feasibility and design contracts New definition: The total amount of all signed feasibility, design, and environmental contracts, including resettlement action plans, for agricultural irrigation investments disbursed divided by the total value of all signed contracts. Numerator = Value disbursed of irrigation feasibility and design contracts. Denominator = Value of signed irrigation feasibility and design contracts (AI-1).

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Centralized Irrigation System Rehabilitation Activity (refers to Target Area only)
Indicator	Value of irrigation construction contracts signed
Indicator Definition	Total value of all signed construction contracts for agricultural irrigation investments. If the value of a contract changes, the amount of the change (either + or -) should be reported in the quarter where the change occurred. Cost sharing by others (e.g., cofinancing by other donors or government) should not be included.
Modification Type	Modification of name and definition
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: (AI-3) Value of signed irrigation construction contracts New definition: The value of all signed construction contracts for agricultural irrigation investments using compact funds. If the value of a contract changes, the total contract value should be reported in the quarter that the change occurred. Cost sharing by others (e.g., the non-MCC funding component of any co-financing with other donors or government) should not be included. Cost associated with supervision or management should not be included.

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Centralized Irrigation System Rehabilitation Activity (refers to Target Area only)
Indicator	Value of contracted irrigation construction works disbursed
Indicator Definition	Total value of disbursements for all signed irrigation construction contracts for agricultural investments.
Modification Type	Modification of name and definition
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: Value of disbursed irrigation construction contracts New definition: Total value of disbursements for all signed irrigation construction contracts.

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Centralized Irrigation System Rehabilitation Activity (refers to Target Area only)
Indicator	Percent of contracted irrigation construction works disbursed
Indicator Definition	Total amount of all signed construction contracts for agricultural irrigation investments disbursed divided by total value of all contracts awarded. Denominator = Value of signed contracts for construction. Numerator = Amount of money disbursed on these contracts.
Modification Type	Modification of name and definition
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: (AI-4) Percent disbursed of irrigation construction contracts New definition: The total amount of all signed construction contracts for agricultural irrigation investments disbursed divided by the total value of all signed contracts. Numerator = Value disbursed of irrigation construction contracts. Denominator = Value of signed irrigation construction contracts (AI-3).

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Centralized Irrigation System Rehabilitation Activity (refers to Target Area only)
Indicator	Temporary employment generated in irrigation
Indicator Definition	The number of people temporarily employed or contracted by MCA-contracted construction companies to work on construction of irrigation systems.
Modification Type	Adding new indicator
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> . No targets set.

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Access to Agriculture Finance Activity (includes Target and non-Target areas)

Indicator	Value of agricultural and rural loans
Indicator Definition	Total value of agricultural and/or rural loan funds for on-farm, off-farm, and rural investments provided under the Access to Agriculture Finance Activity for post-harvest infrastructure.
Modification Type	Modification of name and definition
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: (AI-10) Value of agricultural and rural loans New definition: The value of agricultural loans and rural loans disbursed for on-farm, off-farm, and rural investments. Loans and credit can be extended to farmers and agribusinesses by financial institutions such as commercial banks, government banks, non-bank financial institutions, financial NGOs and input suppliers, or equity financing. Only MCC's contribution to the loan should be counted. Disaggregation: Male/Female

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Access to Agriculture Finance Activity (includes Target and non-Target areas)
Indicator	Number of all loans
Indicator Definition	Number of loans provided under the AAF Activity for post-harvest infrastructure (both those receiving IDS support and those not using IDS)
Modification Type	Modification of name and definition
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: (AI-9) Loan borrowers New definition: The number of borrowers (primary sector producers, rural entrepreneurs, and associations) who access loans for on-farm, off-farm, and rural investment through MCC financial assistance. Disaggregation: Male/Female

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Access to Agriculture Finance Activity (includes Target and non-Target areas)
Indicator	Agricultural loans resulting from Investment Development
Indicator Definition	Number of loans received by borrowers which received support from Investment Development Services
Modification Type	Modification of name and definition
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: Loan borrowers resulting from Investment Development Services New definition: Number of borrowers which received support from Investment Development Services

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Growing High Value Sales Activity (includes Target and non-Target areas)
Indicator	Number of farmers that have applied improved techniques (GHS)
Indicator Definition	Total number of farmers or rural entrepreneurs that are applying new production or managerial techniques introduced or supported by MCC, such

	as input use, production techniques, irrigation, post harvest treatment, and farm management techniques.
Modification Type	Modification of name and definition
Details and Justification	<p>Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i>:</p> <p>New name: (AI-11) Farmers who have applied improved practices as a result of training</p> <p>New definition: 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.</p> <p>This indicator should be directly linked to the indicator on number of farmers trained (AI-6).</p> <p>In the case where a farmer applies more than one improved technique, the farmer is counted only once.</p> <p>Disaggregation: Male/Female</p>

Indicator Modification Form																			
Date	October 2012																		
Project/ Activity	Transition to High Value Agriculture Project / Growing High Value Sales Activity (includes Target and non-Target areas)																		
Indicator	Number of enterprises that have applied improved techniques(GHS)																		
Indicator Definition	Total number of farmers' associations, post-harvest or processing enterprises, water management entities, or other rural enterprises that are applying managerial or processing techniques introduced or supported by MCC. When a number of farmers are involved in an association or cooperative, they are not counted individually, but as one entity.																		
Modification Type	Modification of name, definition adding targets																		
Details and Justification	<p>Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i>. Adding targets according USAID GHS Contractor PMP.</p> <p>New name: (AI-13) Enterprises that have applied improved techniques</p> <p>New definition: 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.</p> <p>This indicator should be directly linked to the indicator of number of enterprises assisted (AI-7). In the case where an enterprise applies more than one improved technique, the enterprise is counted only once.</p> <p>Disaggregation: Male/Female (ownership)</p> <table border="1" data-bbox="630 1560 1469 1696"> <thead> <tr> <th></th> <th>Year 1</th> <th>Year 2</th> <th>Year 3</th> <th>Year 4</th> <th>Year 5</th> </tr> </thead> <tbody> <tr> <td>Old targets</td> <td>TBD</td> <td>TBD</td> <td>TBD</td> <td>TBD</td> <td>TBD</td> </tr> <tr> <td>New targets</td> <td>5</td> <td>20</td> <td>35</td> <td>55</td> <td>75</td> </tr> </tbody> </table>		Year 1	Year 2	Year 3	Year 4	Year 5	Old targets	TBD	TBD	TBD	TBD	TBD	New targets	5	20	35	55	75
	Year 1	Year 2	Year 3	Year 4	Year 5														
Old targets	TBD	TBD	TBD	TBD	TBD														
New targets	5	20	35	55	75														

Indicator Modification Form	
Date	October 2012
Project/ Activity	Transition to High Value Agriculture Project / Growing High Value Sales Activity (includes Target and non-Target areas)
Indicator	Number of farmers trained

Indicator Definition	Total number of farmers or rural entrepreneurs receiving technical assistance (training on production, use of new technologies, and linking to markets) within Target Area and non-Target area.
Modification Type	Modification of name and definition
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: (AI-6) Farmers trained New definition: The number of primary sector producers within Target Area and non-Target area (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). An individual who receives training or technical assistance multiple times is counted only once, as one individual trained. Disaggregation: Male/Female

Indicator Modification Form																			
Date	October 2012																		
Project/ Activity	Transition to High Value Agriculture Project / Growing High Value Sales Activity (includes Target and non-Target areas)																		
Indicator	Number of enterprises assisted																		
Indicator Definition	Total number of farmers' associations, post-harvest or processing enterprises, water management entities, or other rural enterprises receiving technical or financial assistance within Target Area and non-Target area.																		
Modification Type	Modification of name, definition adding targets																		
Details and Justification	<p>Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i>. Adding targets according USAID GHS Contractor PMEPE.</p> <p>New name: (AI-7) Enterprises assisted</p> <p>New definition: The number of enterprises; producer, processing, and marketing organizations; water users associations; trade and business associations; and community-based organizations receiving assistance within Target Area and non-Target area. This assistance includes interventions that focus on enterprise or association/cooperative functions, such as processing, marketing, or any downstream techniques, as well as managerial and financial practices. In the case of training or assistance to associations or cooperatives, if the intervention focuses on the associative functions, such as the management or strategic planning of the association as a whole, individual members are not counted separately, but as one entity. If the training or technical assistance is provided to a group of enterprises but focuses on productive functions at the individual enterprise level, each enterprise is counted separately. An individual can be considered an enterprise.</p> <p>Disaggregation: Male/Female (ownership).</p> <p>Disaggregation: Male/Female (ownership).</p> <table border="1" data-bbox="630 1654 1464 1793"> <thead> <tr> <th></th> <th>Year 1</th> <th>Year 2</th> <th>Year 3</th> <th>Year 4</th> <th>Year 5</th> </tr> </thead> <tbody> <tr> <td>Old targets</td> <td>TBD</td> <td>TBD</td> <td>TBD</td> <td>TBD</td> <td>TBD</td> </tr> <tr> <td>New targets</td> <td>8</td> <td>30</td> <td>53</td> <td>84</td> <td>120</td> </tr> </tbody> </table>		Year 1	Year 2	Year 3	Year 4	Year 5	Old targets	TBD	TBD	TBD	TBD	TBD	New targets	8	30	53	84	120
	Year 1	Year 2	Year 3	Year 4	Year 5														
Old targets	TBD	TBD	TBD	TBD	TBD														
New targets	8	30	53	84	120														

Indicator Modification Form																			
Date	October 2012																		
Project/ Activity	Transition to High Value Agriculture Project / Growing High Value Sales Activity (includes Target and non-Target areas)																		
Indicator	Phyosanitary laboratory equipped																		
Indicator Definition	Laboratory equipment shipped to Phyosanitary laboratory.																		
Modification Type	Modification of name, definition adding target																		
Details and Justification	Modification according to USAID GHS Contractor PMEP indicators: New name: (AI-7) The Central Phyosanitary Lab is certified New definition: The Central Phyosanitary Lab is certified to ISO family of standards and / or another appropriate international standard as confirmed by a Certification or Accreditation body.																		
	<table border="1"> <thead> <tr> <th></th> <th>Year 1</th> <th>Year 2</th> <th>Year 3</th> <th>Year 4</th> <th>Year 5</th> </tr> </thead> <tbody> <tr> <td>Old targets</td> <td></td> <td></td> <td>TBD</td> <td>TBD</td> <td>TBD</td> </tr> <tr> <td>New targets</td> <td></td> <td></td> <td></td> <td></td> <td>31-Aug-2015</td> </tr> </tbody> </table>		Year 1	Year 2	Year 3	Year 4	Year 5	Old targets			TBD	TBD	TBD	New targets					31-Aug-2015
		Year 1	Year 2	Year 3	Year 4	Year 5													
Old targets			TBD	TBD	TBD														
New targets					31-Aug-2015														

Indicator Modification Form	
Date	October 2012
Project/ Activity	Road Rehabilitation Project
Indicator	Objective Level
Indicator Definition	n/a
Modification Type	Modification of name: Outcome Level
Details and Justification	According to para 4.1.5.1. Indicator Levels of the <i>Policy for Monitoring and Evaluation of Compacts and Threshold Programs, May 1, 2012</i> at MCC indicators are separated into: process, output, outcome, and goal indicators.

Indicator Modification Form	
Date	October 2012
Project/ Activity	Road Rehabilitation Project
Indicator	Average Annual Daily Traffic
Indicator Definition	Average number of vehicles per day, averaged over different times (day and night) and over different seasons to arrive at an annualized daily average on the road segment rehabilitated under Compact
Modification Type	Modification of name and definition
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: (R-10) Average annual daily traffic New definition: The average number and type of vehicles per day, averaged over different times (day and night) and over different seasons to arrive at an annualized daily average.

Indicator Modification Form	
Date	October 2012
Project/ Activity	Road Rehabilitation Project
Indicator	Roughness of the road
Indicator Definition	International Roughness Index (IRI) measures the roughness of the rehabilitated road and is used to define a characteristic of the longitudinal

	profile of a traveled wheel track and constitutes a standardized roughness measurement																		
Modification Type	Modification of name, definition and target																		
Details and Justification	<p>Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i>: New name: (R-9) Roughness New definition: The measure of the roughness of the road surface, in meters of height per kilometer of distance traveled. This is measured by either an International Roughness Index (IRI) machine, taking the maximum speed that a vehicle can travel on a road and finding the corresponding roughness measure, or in tight budget situations, through a visual inspection using strict criteria. A lower value means a smoother road.</p> <p>Modification of target: According to the Technical Specifications elaborated by the Designer (Nathan/URS) for the road rehabilitation contracts, the asphalt concrete wearing course shall be accepted for all road sections where the IRI is not greater than 2.50 m/km (250 cm/km), and where all other applicable contract requirements are met. The new target figures for the road roughness were proposed based on the better knowledge of road condition and technical solutions to be used for the rehabilitation of the road.</p> <table border="1"> <thead> <tr> <th></th> <th>Year 1</th> <th>Year 2</th> <th>Year 3</th> <th>Year 4</th> <th>Year 5</th> </tr> </thead> <tbody> <tr> <td>Old targets</td> <td></td> <td></td> <td></td> <td></td> <td>2</td> </tr> <tr> <td>New targets</td> <td></td> <td></td> <td></td> <td></td> <td>2.5</td> </tr> </tbody> </table>		Year 1	Year 2	Year 3	Year 4	Year 5	Old targets					2	New targets					2.5
	Year 1	Year 2	Year 3	Year 4	Year 5														
Old targets					2														
New targets					2.5														

Indicator Modification Form																			
Date	October 2012																		
Project/ Activity	Road Rehabilitation Project																		
Indicator	Kilometers of roads completed																		
Indicator Definition	The length of roads on which construction or rehabilitation is complete																		
Modification Type	Modification of name and definition																		
Details and Justification	<p>Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i>: New name: (R-8) Kilometers of roads completed New definition: The length of roads in kilometers on which construction of new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads is complete (certificates handed over and approved).</p> <table border="1"> <thead> <tr> <th></th> <th>Year 1</th> <th>Year 2</th> <th>Year 3</th> <th>Year 4</th> <th>Year 5</th> </tr> </thead> <tbody> <tr> <td>Old targets</td> <td></td> <td>TBD</td> <td>TBD</td> <td>TBD</td> <td>93</td> </tr> <tr> <td>New targets</td> <td>0</td> <td>0</td> <td>0</td> <td>93</td> <td>93</td> </tr> </tbody> </table>		Year 1	Year 2	Year 3	Year 4	Year 5	Old targets		TBD	TBD	TBD	93	New targets	0	0	0	93	93
	Year 1	Year 2	Year 3	Year 4	Year 5														
Old targets		TBD	TBD	TBD	93														
New targets	0	0	0	93	93														

Indicator Modification Form	
Date	October 2012
Project/ Activity	Road Rehabilitation Project
Indicator	Kilometers of roads under design

Indicator Definition	The length of roads under design contracts. This may include building new roads, modifying existing roads, reconstruction, rehabilitation, resurfacing or upgrading
Modification Type	Modification of name and definition
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: (R-3) Kilometers of roads under design New definition: The length of roads in kilometers under design contracts. This includes designs for building new roads and reconstructing, rehabilitating, resurfacing or upgrading existing roads.

Indicator Modification Form	
Date	October 2012
Project/ Activity	Road Rehabilitation Project
Indicator	Kilometers (km) of roads under works contracts
Indicator Definition	The length of roads under works contract for construction or rehabilitation. This may include building new roads or modifying existing roads
Modification Type	Modification of name and definition
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: (R-6) Kilometers of roads under works contracts New definition: The length of roads in kilometers under works contracts for construction of new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads.

Indicator Modification Form	
Date	October 2012
Project/ Activity	Road Rehabilitation Project
Indicator	Value of signed contracts for road works
Indicator Definition	The value of all contracts that MCA has signed with contractors for construction of new or rehabilitated roads. If the value of the contract changes, the amount of the change (either + or -) should be reported in the quarter that the change occurred. Cost sharing by others (e.g., co financing by other donors or government) should not be included.
Modification Type	Modification of name and definition
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : New name: (R-4) Value of signed road construction contracts New definition: The value of all signed construction contracts for new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads using compact funds. If the value of a contract changes, the total contract value should be reported in the quarter that the change occurred. Cost sharing by others (e.g., the non-MCC funding component of any co-financing with other donors or government) is not included. Costs associated with supervision or management is not included.

Indicator Modification Form	
Date	October 2012
Project/ Activity	Road Rehabilitation Project
Indicator	Value of contracted roads works disbursed
Indicator Definition	The value of disbursement for all contracts that MCA has signed with

	contractors for construction of new or rehabilitated roads.																		
Modification Type	Modification of name and definition																		
Details and Justification	<p>Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i>:</p> <p>New name: Value disbursed of road construction contracts</p> <p>New definition: The value of all disbursed construction contracts for new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads using compact funds.</p> <table border="1" data-bbox="626 493 1468 699"> <thead> <tr> <th></th> <th>Year 1</th> <th>Year 2</th> <th>Year 3</th> <th>Year 4</th> <th>Year 5</th> </tr> </thead> <tbody> <tr> <td>Old targets</td> <td>0</td> <td>TBD</td> <td>TBD</td> <td>TBD</td> <td>TBD</td> </tr> <tr> <td>New targets</td> <td>0</td> <td>7,000,000</td> <td>40,000,000</td> <td>36,000,000</td> <td>10,000,000</td> </tr> </tbody> </table>		Year 1	Year 2	Year 3	Year 4	Year 5	Old targets	0	TBD	TBD	TBD	TBD	New targets	0	7,000,000	40,000,000	36,000,000	10,000,000
	Year 1	Year 2	Year 3	Year 4	Year 5														
Old targets	0	TBD	TBD	TBD	TBD														
New targets	0	7,000,000	40,000,000	36,000,000	10,000,000														

Indicator Modification Form																			
Date	October 2012																		
Project/ Activity	Road Rehabilitation Project																		
Indicator	Percent of contracted roads works disbursed																		
Indicator Definition	The aggregate amount disbursed divided by all signed contracts for construction of new or rehabilitated roads. Denominator = Value of signed contracts for roads works as defined above. Numerator = Amount of money disbursed on the signed contracts for roads works. This is a proxy indicator for physical completion of road works. However, since the numerator includes industry standard advance payments and mobilization fees, it does not correlate perfectly with physical progress. (cumulative)..																		
Modification Type	Modification of name and definition																		
Details and Justification	<p>Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i>:</p> <p>New name: (R-5) Percent disbursed of road construction contracts</p> <p>New definition: The total amount of all signed construction contracts for new roads or reconstruction, rehabilitation, resurfacing or upgrading of existing roads disbursed divided by the total value of all signed contracts.</p> <p>Numerator = Value disbursed of road construction contracts. Denominator = Value of signed road construction contracts (R-4).</p> <table border="1" data-bbox="626 1455 1468 1627"> <thead> <tr> <th></th> <th>Year 1</th> <th>Year 2</th> <th>Year 3</th> <th>Year 4</th> <th>Year 5</th> </tr> </thead> <tbody> <tr> <td>Old targets</td> <td>0</td> <td>TBD</td> <td>TBD</td> <td>TBD</td> <td>100%</td> </tr> <tr> <td>New targets</td> <td>0</td> <td>8%</td> <td>51%</td> <td>89%</td> <td>100%</td> </tr> </tbody> </table>		Year 1	Year 2	Year 3	Year 4	Year 5	Old targets	0	TBD	TBD	TBD	100%	New targets	0	8%	51%	89%	100%
	Year 1	Year 2	Year 3	Year 4	Year 5														
Old targets	0	TBD	TBD	TBD	100%														
New targets	0	8%	51%	89%	100%														

Indicator Modification Form	
Date	October 2012
Project/ Activity	Road Rehabilitation Project
Indicator	(R-7) Temporary employment generated in road construction
Indicator Definition	The number of people temporarily employed or contracted by MCA-contracted construction companies to work on construction of new roads or

	reconstruction, rehabilitation, resurfacing or upgrading of existing roads.
Modification Type	Adding a new indicator
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> . No targets set

Indicator Modification Form	
Date	October 2012
Project/ Activity	Road Rehabilitation Project
Indicator	(R-11) Road traffic fatalities
Indicator Definition	The number of road traffic fatalities per year on roads constructed, rehabilitated or improved with MCC funding.
Modification Type	Adding a new indicator
Details and Justification	Modification of name and definition according to MCC's <i>Guidance on Common Indicators, May 2012</i> : No targets set