

Armenia Post-Compact
Monitoring and Evaluation Plan

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1. PREAMBLE

This Post Compact Monitoring and Evaluation (M&E) Plan is required according to the M&E Policy approved on May 1, 2012. As stated in the Policy on Monitoring and Evaluation of Compacts and Threshold Programs “In conjunction with the Program Closure Plan, MCC and MCA will develop a Post Compact monitoring and evaluation plan designed to observe the persistence of benefits created under the Compact. This plan should describe future monitoring and evaluation activities, identify the individuals and organizations that would undertake these activities, and provide a budget framework for future monitoring and evaluation which would draw upon both MCC and country resources.”

The Post Compact Monitoring and Evaluation Plan serves as a guide for monitoring Post Compact sustainability of Millennium Challenge Corporation (MCC) investment. Post Compact Monitoring and Evaluation Plan may be modified or amended based on the agreement between the designated representative, Foreign Finance Projects Management Center (FFPMC) of the Ministry of Finance of Armenia and Millennium Challenge Corporation.

2. LIST OF ACRONYMS

DLP	Defect Liability Period
DQR	Data Quality Review
ERR	Economic Rate of Return
ESHS	Environmental, Social, Health and Safety
FFPMC	Foreign Financing Project Management Center
HVA	High Value Agriculture
IA	Irrigated Agriculture
IE	Impact Evaluation
IEA	Implementing Entity Agreement
IFAD PIU	International Fund for Agricultural Development Project Implementation Unit
ILCS	Integrated Living Conditions Survey
ITT	Indicator Tracking Table
MCA	Millennium Challenge Account
MCC	Millennium Challenge Corporation
M&E	Monitoring and Evaluation
MIS	Management Information System
NSS	National Statistical Survey
OFWM	On-Farm Water Management
PCP	Program Closure Plan
PMG	Program Management Group
PPM	Post-Harvest Processing and Marketing
RRRP	Rural Roads Rehabilitation Project
RFF	Rural Finance Facility
TCS	Tertiary Canal Survey
WTM	Water to Market
WUA	Water Users Association

3. COMPACT AND OBJECTIVE OVERVIEW

3.1. Introduction

On March 27, 2006, the United States of America, acting through the Millennium Challenge Corporation, and the Government of the Republic of Armenia signed a Compact. The 5-year Compact entered into force on September 29, 2006 and ended on September 29, 2011.

On October 1, 2011, after the Armenia Compact was closed out, the Government of Armenia established a permanent Project Management Group (PMG) within the Ministry of Finance's Foreign Financing Projects Management Center to manage Millennium Challenge Account – Armenia (MCA-Armenia) assets and monitor Post Compact sustainability of MCC investment. The MCA-Armenia PMG is comprised of MCA-Armenia former programmatic and cross-cutting officers that are accountable for current projects under the Compact, namely Irrigation Infrastructure, Credit, M&E and Environmental and Social Assessment.

As MCA-Armenia's designated representative, and in accordance with the Program Closure Plan (PCP) agreed between the Government of Armenia and MCC, the FFPMC is responsible for on-going monitoring and evaluation of the Armenia Compact program in addition to oversight of the on-going credit program and the defects liability period. The purpose of the Post Compact M&E Plan is to explain what MCC expects FFPMC to monitor after the Compact closure period and how FFPMC and MCC will conduct Post Compact M&E to observe the persistence of benefits created under the Compact and confirm that proper operations and maintenance of Compact investments is taking place.

This Post Compact M&E Plan is a tool that provides the following functions:

- Gives details about Post Compact Monitoring. Under the PCP, FFPMC is responsible for on-going monitoring of a small set of indicators. The Indicator Documentation Table in Annex 1 provides a detailed definition of each indicator, unit of measurement, source of data, responsible entity, and frequency of reporting.
- Provides information about Post Compact Evaluation. In addition to Post Compact monitoring, MCC will be publishing final evaluations after the Compact. MCC has contracted Mathematica Policy Research, an independent evaluator, to conduct the final evaluation surveys and produce independent Post Compact evaluations of all Compact activities. FFPMC is responsible for funding, organizing and facilitating the presentations of the findings of the final evaluations as well as for posting the results on the Post Compact section of the MCA-Armenia website. Annex 4 provides a summary of surveys and evaluations.

- Discusses Post Compact Reporting requirements and other Obligations. In accordance with the Post Compact M&E Plan the FPPMC is responsible for developing and submitting Annual Summary Report, Credit Annual Performance and Credit Quarterly Activity Reports, Additionally, the Post Compact Obligations include permitting any authorized MCC representative to conduct assessments, review, evaluate or audit and inspect activities funded by MCC, and providing documentation as may be requested from time to time by MCC.

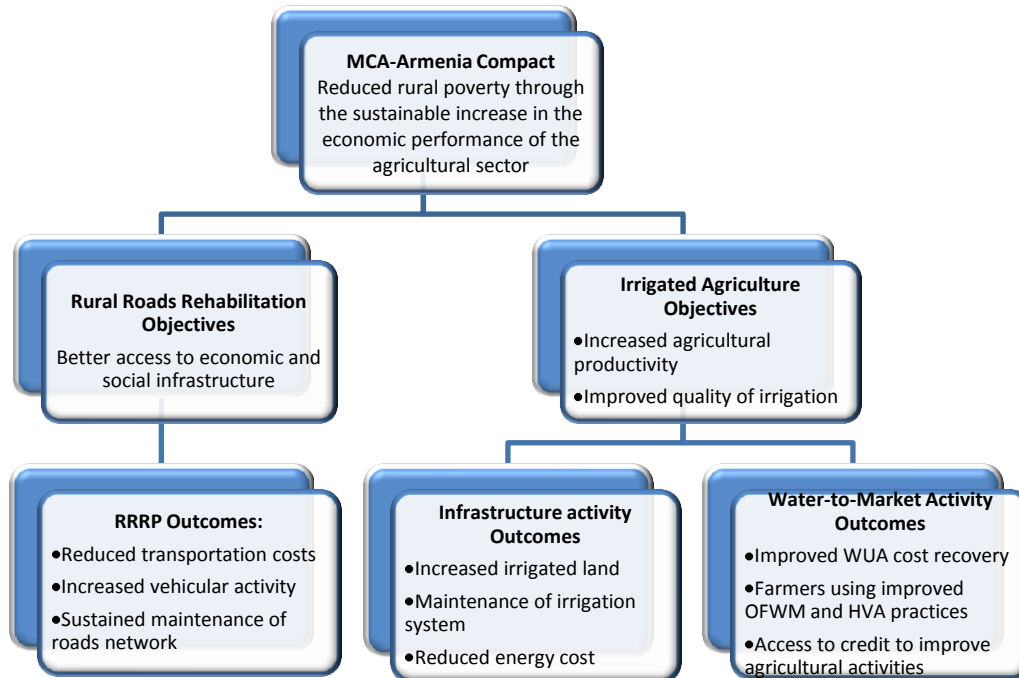
3.2. Program Logic

The goal of the Millennium Challenge Corporation's Compact with the Government of Armenia was to increase household income and reduce rural poverty through better economic performance in the agricultural sector.

The U.S. Government funded Millennium Challenge Account-Armenia Program was initially designed to include two interrelated projects: Rural Roads Rehabilitation Project (RRRP) and Irrigated Agriculture (IA) Project. The goal of RRRP was to ensure easier access to economic and social infrastructure through rehabilitation of rural and state roads. The Irrigated Agriculture project aimed at increasing the area of irrigated lands through improvements in irrigation infrastructure (Irrigation Infrastructure Activity), and fostering the adoption of best practices in irrigated agriculture through trainings on improved water management (OFWM) and high-value agriculture (HVA) as well as post harvest processing and marketing (PPM). This was complemented with extensive technical and financial assistance to the government irrigation entities that support farmers (Water to Market Activity).

The Irrigation Infrastructure and Water to Market Activities (WtM) were particularly designed to be complementary: WtM was intended to help farmers use irrigation improvements to introduce new technologies and shift to HVA which would improve their income and lead to future economic growth in rural areas.

The Objectives and Outcomes of the MCA-Armenia Program are summarized below in Chart 1:



The Armenia Compact Projects and Activities are described below.

Project 1: Rural Road Rehabilitation (RRRP)

The objective of the MCA-Armenia Rural Road Rehabilitation Project was to ensure better access to economic and social infrastructure through rehabilitation of high priority rural roads in the road lifeline network. The original project economic rate of return (ERR) was 26%, which was based on data from pre-feasibility studies. During the project re-scoping, revised ERRs were calculated using data from the feasibility studies and designs. All of the road links included in the re-scoped project had ERRs that passed the 12.5% hurdle; however, a new project ERR has not been re-calculated.

Project 2: Irrigated Agriculture (IA)

The objective of the MCA-Armenia Irrigated Agriculture Project was to increase agricultural productivity and improve the quality of irrigation through investments in irrigation infrastructure, training, technical assistance and increased availability of credits for farmers. The IA project consisted of two separate activities: Irrigation Infrastructure and Water-to-Market. The original Irrigated Agriculture Project economic rate of return (ERR) was 25%, which was based on data from pre-feasibility studies and other data available during due diligence.

Activity 1: Irrigation Infrastructure

The goal of the Irrigation Infrastructure Activity was to increase irrigated land and secure reliable irrigation water by rehabilitating and constructing vital irrigation infrastructure in Armenia, such as main canals, gravity systems, drainage systems, tertiary canals and pumping

stations. For the Irrigation Infrastructure Activity during the project re-scoping revised ERRs were calculated using data from the feasibility studies and designs. The entire irrigation infrastructure component included in the re-scoped project had ERRs that passed the 12.5% hurdle; however, a new project ERR has not been re-calculated.

Activity 2: Water-to-Market (WtM)

The Water-to-Market Activity of the Irrigated Agriculture consisted of two sub-activities: (a) Strengthening Irrigation System Entities; and (b) Improving the Profitability of WUA member farmers by:

- Providing member farmers with access to technology and training in on-farm water management and higher value agricultural (HVA) production;
- Providing training and consulting to individual member farmers, farmer groups and small and medium enterprises on post-harvest, processing and marketing investments;
- Building capacity within credit organizations and providing funding to such credit organizations which will on-lend to member farmers and related enterprises; and
- Building capacity of the end-borrowers.

The WtM ERR¹ was 15.5 %; however, in June 2009 the ERR was re-calculated to include data that had been collected during implementation to analyze the allocation of trainings between high-value agriculture and on-farm water management. The new ERR has been estimated at 22.5%. As a result of the analysis and on-the-ground experience by MCA-Armenia, the allocation of trainings has been adjusted.

Armenia Post Compact Activities

As MCA-Armenia's designated representative, Foreign Financing Projects Management Center of the Ministry of Finance is responsible for on-going post Compact activities. These activities are presented below.

Irrigation Infrastructure

The FFPMC is responsible for the infrastructure defect liability period (DLP) which is a one year phase following the infrastructure rehabilitation and/or construction.

Credit Program

The designated representative is responsible for the oversight of the on-going Credit Program.

Environmental and Social Assessment

¹ Note, that this includes "Improving the Profitability of WUA member farmers" component only, which is usually referred to as Water-to-Market Activity (WtM)

The FPPMC is responsible for reporting on the status of outstanding measures to be completed as outlined in the Environmental, Social, Health and Safety (ESHS) Data Sheets by component through the end of the defects liability period.

Monitoring and Evaluation

The designated representative is responsible for on-going monitoring and evaluation of the Armenia Compact program.

3.3. Projected Economic Benefits

MCC’s investment of approximately \$177 million in the irrigation and agricultural sectors of Armenia is expected to increase rural incomes by nearly \$300 million over 20 years, benefiting more than 420,000 farmers. For every \$1 invested, it is anticipated that rural beneficiary incomes will increase by \$1.69, amounting to a rate of return of 22 percent.

Improving the water supply and increasing farmer know-how through training are expected to incentivize farmers to transition from low-value crops such as wheat, to high-value crops, like apricots or tomatoes. Farmers’ annual agricultural income is expected to increase by 150 percent over 20 years, from a baseline of \$310. The irrigation infrastructure improvements will result in about 9,000 hectares of newly irrigated land (an increase of 7% in irrigated land), more reliable water supply for approximately 38,000 hectares of currently irrigated agricultural land and improved drainage for about 10,000 hectares. Thus, irrigation condition in Armenia will improve on 47,000 hectares of land. In all, the MCC funding will benefit approximately 37 percent of all land under irrigation.

Project	Original Economic Rate of Return (ERR)	Date Original Economic Rate of Return (ERR) Established	Current Economic Rate of Return (ERR)	Date Current Economic Rate of Return (ERR) Established
Irrigated Agriculture Project	25%	November 2005	N/A	N/A
Rural Road Rehabilitation Project	26%	November 2005	N/A	N/A

3.4. Program Beneficiaries

In July 2009 MCA-Armenia made the beneficiary analysis consistent with the MCC updated approach which, on top of conceptual issues addressed in the analysis, reflected the approach of identifying and counting the expected individual beneficiaries of the project ex ante. The Beneficiary Analysis Guidance served as a tool in discussing the evidence/assumptions used to forecast the project's impact on the poor and ensuring that MCA-Armenia is focused on cost-effective poverty reduction.

Through this analysis MCA-Armenia updated and determined the number of beneficiaries of investments into Rural Roads Rehabilitation Project (RRRP), Irrigation Infrastructure and Water to Market Activities of the Irrigated Agriculture Project (IAP).

There were two main reasons for updating the beneficiary numbers:

- (a) To reflect the impact of the changes in the Program's scope on the number of beneficiaries;
- (b) To align the MCA-Armenia beneficiary approach with the most recent MCC approach to beneficiary analysis.

MCA-Armenia programmatic interventions (outputs) with their respective beneficiary numbers are presented in Annex 7.

Project	Estimated Number of Beneficiaries	Present Value (PV) of Benefits
Irrigated Agriculture Project	421,407	\$434,000,000
Rural Road Rehabilitation Project	6,356	\$1,000,000

4. MONITORING COMPONENT

4.1. Summary of Monitoring Strategy

The Post Compact performance will be monitored systematically and progress reported annually through a small set of indicators listed in the indicator tracking table (ITT). There are three levels of indicators provided in the Post Compact ITT that follow from the program logic framework: (i) goal, (ii) outcome, and (iii) output. This analysis allows FPPMC and MCC to track the use of Compact investments and sustainability such as operations and maintenance of infrastructure improved under the Compact and make relevant decisions.

Goal-level indicators monitor progress on Compact goals and help determine if Armenia Program and MCC met their founding principle of poverty reduction through economic growth. Project and Activity level outcomes measure the long-term effects on an intervention's outputs.

Actuals of some high-level indicators included in the Post Compact M&E Plan come from evaluations. The Output Indicators presented in the table track the performance of the on-going Credit Program. New indicators may also be added to the extent deemed necessary by the designated representative or MCC.

The Indicator Documentation Table in Annex 1 provides a detailed definition of each indicator; unit of measurement, source of data, frequency of data collection, and the entity responsible for collecting the data.

The baselines and targets for the indicators included in the Post Compact ITT are shown in the Performance Tracking Table in Annex 2. Targets are derived from the revised economic analysis justifying Program investments. The targets of the goal level indicators were revised in March 2010 with consideration of the changes in the scope of the program, the revised economic analyses and the subsequent changes in those benefit streams that underlay the Compact estimates.

The following indicators are disaggregated by gender and will be reported in this manner to FFPMC and MCC.

Credit Program

- The number of borrowers who access loans for on-farm, off-farm, and rural investment through MCC financial assistance.
- The value of agricultural loans and rural loans disbursed for on-farm, off-farm, and rural investments.
- The number of outstanding loans with payments current within 60 days.

The MCC M&E point of contact worked with MCA-Armenia and the designated representative along with the sector experts to select the Post Compact indicators. All the selected indicators were imported into the Post Compact M&E Plan in January 2012 when the document was developed. This Post Compact M&E Plan will be amended to reflect any changes made to those indicators, after they have been approved by MCC.

4.2. Data Quality Reviews (DQR)

The designated representative will be responsible for ensuring data quality and conducting data quality reviews to verify data reported during the Post Compact period by checking the accuracy and reliability of performance data submitted by responsible entities.

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.

These reviews will cover data reported from sub-contractors, government agencies and other data sources as necessary. The third party independent evaluator will not be contracted to conduct DQRs for Post Compact indicators. In case of the Tertiary Canal Survey (TCS), either the FFPMC or MCC independent evaluator will do the data quality checks for TCS.

4.3. Standard Reporting Requirements

As per the terms of the PCP, FFPMC will be responsible for submitting regular reports to MCC covering the period through the end of calendar year 2015. These reports should be submitted to MCC via email to the Vice President of the Department of Compact Operations at VPOperations@mcc.gov with the subject line “Armenia Post-Compact Reporting” and the dates of report coverage. Copies should also go to (a) US Embassy; Ambassador, usinfo@usa.am; and (b) US Embassy; Assistance Coordinator.

FFPMC will be responsible for sending the following reports (see Table 1):

Table 1. FFPMC Reporting Schedule			
Report	Frequency	First Due Date	Subsequent Due Dates
Annual Summary Report	Annual	May 4, 2012	February 8, 2013 February 7, 2014 February 6, 2015 February 5, 2016 (covering 2015)
Credit Annual Performance Report	Annual	February 8, 2013	February 8, 2013 February 7, 2014 February 6, 2015 February 5, 2016 (covering 2015)
Credit Quarterly Activity Report	Quarterly	May 4, 2012	By 25 th business day after quarter end, through the end of calendar year 2015. This report will be submitted for 3 quarters in one year and the information covering the last quarter of the year will be included in the Annual Summary Report.

The Annual Summary Report about Compact program activities should include the following:

- Status of outstanding snag list items (completed, in process, not started, including timing for addressing items if not complete) by irrigation infrastructure component through the end of the defects liability period.
- Status of outstanding measures to be completed as outlined in the Environmental, Social, Health and Safety (ESHS) Data Sheets by component (completed, in process, not started, including timeline for addressing items if not complete) through the end of the defects liability period.
- Issues with operations and maintenance of irrigation infrastructure by component, if such are raised by Operators and/or Contractors/Engineer.
- A Post-Compact Indicator Tracking Table (ITT) that includes all of the indicators included in Annex 1 of this plan for the preceding calendar year. MCC provided FFPMC with the template for the Post-Compact ITT.
- The results of any audits conducted by the Government or FFPMC (or any other donor) regarding implementation of the continuing credit component starting from 2013.

The Credit Annual Performance and Quarterly Activity Reports should include the following:

- Information required in the Implementing Entity Agreement (IEA Annex V) between the Rural Finance Facility (RFF/IFAD PIU)² and MCA-Armenia, assigned to FFPMC (and, as needed, RFF/IFAD PIU's successor) after January 27, 2012, which includes a description of the reports to be delivered. See Annex 6 of this plan for a copy of the reporting requirements outlined in the IEA.
- The monthly summary loan activity report required in the IEA does not need to be sent to MCC. It should be sent from RFF/IFAD PIU to FFPMC, as required in the IEA, but MCC does not need to receive monthly reports.

MCC may also include other reports in this section as deemed necessary by the MCC country team.

The Annual Summary Report will be sent to MCC for information by FFPMC. It should be made public by posting it on the Post Compact section of the MCA-Armenia website developed by the FFPMC. The report can be also posted on MCC's website.

5. EVALUATION COMPONENT

5.1. Summary of Evaluation Strategy

²As of February 2012, there exists a government decree on renaming the Rural Finance Facility (RFF) to International Fund for Agricultural Development Project Implementation Unit (IFAD PIU), thus we have used the combined naming convention.

Evaluation is an essential element of the Armenia Compact. One of the key features of the MCC’s approach to development assistance is its strong commitment to conducting rigorous impact evaluations of its programs, which employ, whenever possible, methodologies that determine whether results can be reliably attributed to MCC interventions. In addition, evaluation indicators can improve program management and provide lessons for future program implementation.

Evaluations assess as systematically and objectively as possible the Program’s rationale, relevance, effectiveness, efficiency, merits, sustainability and impact. The evaluations strive to estimate the impacts on the targeted beneficiaries and wider regional or national economy. The evaluations provide MCC, FFPMC and other stakeholders with information on whether or not the intended outcomes were achieved and the impacts are attributable to the Program.

MCC has contracted the independent evaluator, Mathematica Policy Research to conduct the final evaluation surveys and produce independent post-Compact evaluations of all Compact activities. In addition to Post Compact monitoring, final evaluation results will be published both in MCC and MCA-Armenia Post Compact section of the website.

MCC will be responsible for managing Mathematica Policy Research and all final evaluations. This includes reviewing and distributing deliverables from Mathematica, gathering comments from relevant parties, and working with FFPMC to organize trips and presentations.

Mathematica Policy Research is responsible for drafting, revising, and presenting evaluations as needed. Mathematica will use the results of five main surveys and other qualitative research contracted by MCA-Armenia during the Compact. However, during Post Compact phase, Mathematica will sub-contract the final surveys directly. Please see Annex 4 for a summary of surveys and deadlines.

FFPMC is responsible for organizing/logistics, facilitating as well as funding the public presentations of the final evaluations.

The expected schedule for presentation of survey and evaluation results in Yerevan, Armenia is the following (Table 2):

Table 2. Survey and Evaluation Presentation Schedule			
Results	Expected Date of Presentation	Presenters	Some Expected Participants
Water-to-Market Final Evaluation	Spring 2012 (completed)	Mathematica	FFPMC; former MCA and implementer staff; other Government entities, others interested in Yerevan;

			MCC from DC
WUA Survey #3 Results	Fall 2012	Avag Solutions	FFPMC and others interested in the irrigation sector in Yerevan
ILCS 2011 Results	Fall 2012	National Statistical Service	FFPMC, former MCA-Armenia staff and NSS invitees
Road Rehabilitation Final Evaluation	Spring 2013 ³	Mathematica	FFPMC; former MCA staff; Armenian Road Directorate; other Government entities, World Bank; others interested in Yerevan; MCC from DC
Irrigation Infrastructure Final Evaluation	Spring 2015	Mathematica	FFPMC; former MCA and implementer staff; other Government entities, Irrigation PIU; WUA directors; World Bank; others interested in Yerevan; MCC from DC

The Armenia evaluations will also be presented in Washington, DC as results become available during MCC's annual impact evaluation conference. The last conference was organized in November 2012 and the next one is tentatively scheduled for 2013.

5.2. Specific Evaluation Plans

Summary of Specific Evaluation Plans

The following table summarizes the specific evaluation plans.

Table 3. Summary of Specific Evaluation Plans				
Evaluation Name	Evaluation Type	Evaluator	Methodology	Expected Final Report Date
Farmer Training Evaluation	Impact	Mathematica Policy Research	Randomized roll-out	January 2013
Credit Evaluation	Performance	Mathematica Policy Research	Matched Comparison Group	January 2013

³ This presentation may be moved to spring 2015 to coincide with the irrigation presentation if MCC does not have enough funding available to pay for a roads presentation in 2013.

Post-Harvest, Processing, & Marketing Evaluation	Performance	Mathematica Policy Research	Ex-Post	January 2013
Institutional Strengthening of Water User Associations Evaluation	Performance	Mathematica Policy Research	Pre-Post	January 2013
Road Rehabilitation Evaluation	Impact	Mathematica Policy Research	Matched comparison group	July 2014
Irrigation Infrastructure Evaluation – Large Components	Performance	Mathematica Policy Research	Regression analysis	July 2015
Irrigation Infrastructure Evaluation – Tertiary Canals	Impact	Mathematica Policy Research	Matched comparison group	July 2015

Farmer Training Evaluation

The largest component of the Water-to-Market Activity, Farmer Training, included two types of training: (1) On-Farm Water Management (OFWM) training, which included both classroom and practical components and the establishment of demonstration plots to demonstrate irrigation technologies in practice; and (2) High-Value Agriculture (HVA) training, which consisted of establishing demonstration plots and conducting training sessions for farmers on high-value crop substitution and cropping intensity.

The Farmer Training Evaluation was released to the public by MCC in October 2012 and the full report can be found on MCC’s website.

Evaluation questions

The following primary research questions were answered related to this activity:

- Did the program affect the irrigation and agricultural practices of Armenian farmers?
- Did the program affect agricultural productivity?
- Did the program improve household well-being for the targeted farmers, including income and poverty?
- Was the overall investment cost effective?

Evaluation Methodology Description

To assess the impacts of farmer training, the evaluation used a phase-in random assignment design, whereby communities were randomly assigned into a treatment group and a control group. Farmers in treatment communities were offered training, whereas farmers in control communities were not offered training during the evaluation period. Nearly 300 communities (out of over 400 eventually provided training) that were determined to have adequate access to irrigation water in 2007 were randomly assigned to one of three groups: the treatment group (eligible to receive training starting in Compact Year 2), the control group (eligible to receive training in Compact Year 5), and a non-research sample of communities (which could receive training in Compact Years 3 or 4). The impacts of the training component were estimated by comparing outcomes of the treatment group with outcomes of the control group over time.

Data Sources

The Farming Practices Survey (FPS) was developed for the impact evaluation of the farmer training activity. Fielded by a consortium of AREG, an Armenia-based NGO, and Jen Consult, the FPS is a longitudinal survey of farming households interviewed at three points in time: at baseline in 2007 (before the program was implemented), one year after training began, and three years after training began (the final follow-up in 2010). The evaluation includes 3,547 farming households in the treatment and control communities that were interviewed at baseline and again in the final round of surveys. The FPS asked each household about their cropping patterns, irrigation and agricultural practices, crop yields, agricultural revenues and costs, other household expenditures, household employment, and other sources of household income.

Credit Evaluation

The WTM credit component made long-term credit available to qualified farmers who participated in WTM farmer training and met other selection criteria. Access to credit would allow farmers who participated in HVA and OFWM training to adopt new irrigation and production technologies, and thus generate higher output and sales.

Evaluation Questions

- Who did the program benefit?
- To what extent was the program subsidized?
- How did the program affect lending to the agriculture sector?
- Did the program improve household well-being for the targeted farmers?
- Was the program cost effective?

Evaluation Methodology Description

Our analysis of the WTM credit component compared outcomes for WTM credit recipients against other farmers in the Farming Practices Survey (FPS), regardless of whether or not they received any non-MCA credit. This group provided our estimate of the counterfactual, that is, what farmers' outcomes would have been in the absence of WTM credit. Given the non-experimental nature of the credit evaluation, it is critical to use regression modeling to control for

preexisting differences in the characteristics of WtM borrowers and other farmers who did not receive WtM loans.

Data Sources

The evaluation of WTM credit relied on the WTM loan program data from the Rural Finance Facility (RFF), as well as FPS data. The evaluation used the RFF data to summarize loan characteristics, and FPS data to describe WtM loan recipients and assess the relationship between receiving WtM credit and key outcomes including investment, production, sales, and income. As originally designed, the FPS was not intended to be used to determine the impact of WtM credit on farmers' agricultural and economic outcomes. However, in the final round of the FPS, the survey attempted to include an additional sub-sample of WtM and recipients of credit from other sources who had not been interviewed in earlier rounds to facilitate some analysis of the credit component. The survey interviewed 1,106 farmers in the final round of the FPS who reported receiving credit in the previous year, of whom 64 reported receiving WtM credit (around 6 percent of all credit recipients that were interviewed).

Post-Harvest, Processing, & Marketing Evaluation

Under the Post-Harvest, Processing, and Marketing (PPM) component, enterprises and producer groups were to be trained in processing technologies, food safety, quality standards, financial analysis, and developing commercial linkages. The objective of PPM was to improve post-harvest preservation procedures, strengthen processing enterprises, and provide WtM beneficiary farmers with increased opportunities to sell their products.

Evaluation Questions

- What types of enterprises did the program target?
- Did the program lead to the use of new practices by enterprises?
- Did the program improve enterprise profitability?
- Was the assistance cost effective?

Evaluation Methodology Description

The evaluation combines information from a variety of data sources to draw conclusions about how the component was implemented and its effectiveness. A rigorous analysis of PPM was not planned prior to its implementation, particularly due to the infeasibility of identifying an adequate comparison group for PPM participants.

Data Sources

The data sources for this evaluation include key informant interviews, focus groups, a process evaluation, and an ex-post survey of assisted enterprises. To answer questions about enterprises' characteristics, adoption of post-harvest practices, profitability, and sustainability, the evaluation used the Enterprise Adoption Survey (EAS). Its purpose was to measure the use of post-harvest practices by enterprises, farmer groups, and individual farmers who received PPM assistance.

Administered through in-person interviews based on a standardized questionnaire, the survey covered the following domains: participants' general information, assistance provided, use of practices and business outcomes, and future plans. AREG administered the EAS once from January 2010 to March 2011, several months after most PPM participants had received PPM assistance. The 2010–2011 EAS covered the entire universe of 191 enterprises assisted by ACIDI by September 2010.

Institutional Strengthening of Water User Associations Evaluation

The primary objective of the Institutional Strengthening of Irrigation Management Entities Sub-Activity (ISSA) was to improve the managerial, technical, structural, and financial capacity of WUAs (and WSAs) operating in rural Armenia. According to the ISSA design, WUAs' enhanced capacity would allow them to manage irrigation systems more efficiently and autonomously, and eventually reach financial sustainability. In addition, strengthened WUAs could more effectively operate and maintain Armenia's rural irrigation infrastructure, thus ensuring reliable water supply and supporting long-term rural agricultural development.

Evaluation Questions

- Did the program improve WUA management such as irrigation service fee collection, dispute resolution, and cost recovery?
- Did the program help to ensure sustainability of the new irrigation infrastructure?

Evaluation Methodology Description

The evaluation makes a before-after comparison of WUA and water user outcomes. This before-after design was not rigorous, but it was the only viable option given the absence of a comparison group for the 44 WUAs assisted under the project.

Data Sources

To describe WUAs' characteristics and outcomes before ISSA implementation, the evaluation used the 2009 WUA administration survey. The survey covered the following domains for each WUA: characteristics, infrastructure and technical capacity, human resources, office space and equipment, water intake and delivery, finances, and institutional arrangements. Because ISSA began in late 2008, WUA administrative survey data collected in 2009 (covering WUA expenses and activities in 2008) can be considered baseline data. To describe WUAs' financial and irrigation outcomes over time, the evaluation also used WUA administrative data for the 2007, 2008, 2009, and 2010 fiscal years.

To analyze changes in water users' outcomes over the course of ISSA implementation, the evaluation used the 2009 and 2010 Water User Surveys. These surveys covered the following domains: WUA membership and contracts, dispute resolution among water users, irrigation service fee collection, and WUA representative elections. AVAG Solutions conducted the survey

in 2009 and 2010 among households in the geographic service area of WUAs served by ISSA. The total number of surveyed households in 2009 and 2010 was 1,420.

Road Rehabilitation Evaluation

This evaluation was originally designed to evaluate the impact of roads that were planned to be included in the Rural Road Rehabilitation Project (RRRP). The original evaluation design planned to compare roads selected for rehabilitation to road projects that were considered but not selected for rehabilitation by MCA. The evaluation design would have leveraged the systematic process MCA used to select roads for rehabilitation to estimate credible program impacts. However, MCC funding for the RRRP was put on hold indefinitely due to concerns about the Armenian government's commitment to democratic governance, stemming from the government's crackdown on protests following the last presidential election. As part of its own rehabilitation effort, the World Bank decided to fund the rehabilitation of some but not all of the road links included in MCA's plans. For the roads it funded, the World Bank followed the road project designs developed by MCA, with some of the designs updated due to changes in conditions since designs were developed. The revised impact evaluation will estimate impacts by focusing primarily on road projects originally designed by MCA but now funded by the World Bank.

Evaluation Questions

- Did rehabilitating roads affect the quality of roads?
- Did rehabilitating roads improve access to markets and social services?
- Did rehabilitating roads affect agricultural productivity and profits, and if so, by how much?
- Did rehabilitating roads improve household well-being for communities served by these roads, especially income and poverty?
- Was the overall investment cost effective?

Evaluation Methodology Description

The evaluation of rural road rehabilitation will use a comparison group design. The revised evaluation design identifies the counterfactual by defining a comparison group of roads selected from those initially proposed by MCA that share similar characteristics as those selected by the World Bank, but that were not rehabilitated.

Data Sources

The key outcome data for the RRRP impact evaluation will come from the Integrated Living Conditions Survey (ILCS). The ILCS is an annual, nationally representative, repeated cross-sectional household survey fielded by the National Statistical Service of Armenia (NSS) and covering a broad range of topical domains including demographics, employment, income, agriculture, and public services, among others. The core sample of the ILCS includes 768 enumeration areas, each containing 8 households for a total sample of approximately 6,100

households. Additionally, MCA funded an oversample of 216 enumeration areas in rural communities, an increase of approximately 1,700 households. This oversample is dedicated exclusively to communities served by roads in MCA’s initial set of rehabilitation-eligible roads. Additional communities served by rehabilitation-eligible roads were selected into the core sample by chance, and a total of approximately 2,200 households served by the original, eligible project roads are in the sample each year. The sample includes communities served by 82 of the 85 original eligible roads.

Irrigation Infrastructure Evaluation – Large Components

The irrigation rehabilitation efforts covered several different types of irrigation infrastructure, including main canals, the Ararat Valley drainage system, pumping stations, gravity schemes, and tertiary canals. This evaluation will cover the larger projects encompassed in the irrigation infrastructure activity, including all types of infrastructure except tertiary canals (“large projects”). A separate evaluation examines the impacts of tertiary canals, which route irrigation water from larger irrigation infrastructure such as main canals or reservoirs to the farmers’ fields. Collectively, 268 communities will benefit from the large rehabilitation projects that are completed or in progress.

Evaluation Questions

- Did the program affect the quantity and reliability of irrigation water provided to Armenian farmers?
- Did the program affect agricultural productivity?
- Did the program improve household well-being for farmers, especially income and poverty?
- Was the overall investment cost effective?
- Did the combination of irrigation infrastructure plus training have a larger impact than infrastructure alone?

Evaluation Methodology Description

The evaluation design focuses on comparing communities served by any large project (“treatment communities”) to other communities whose infrastructure was not rehabilitated (“comparison communities”). The evaluation will estimate the impacts of the program by comparing the post-rehabilitation outcomes for these two sets of communities.

Data Sources

The Tertiary Canal Survey (TCS) is the primary data source for this evaluation. The key outcomes of interest from the TCS include crops cultivated, crop production, agricultural profit, household income, and poverty. The TCS also features questions about reliability and quality of irrigation water. The baseline TCS was fielded in late 2009 through early 2010. Most of the large irrigation projects began at about the same time, but only after the agricultural season to which the baseline TCS referred had ended, so the baseline data were not influenced by project

initiation. The second and final round will be fielded in late 2013 through early 2014, at which point the projects will have been completed.

Irrigation Infrastructure Evaluation – Tertiary Canals

The irrigation rehabilitation efforts covered several different types of irrigation infrastructure, including main canals, the Ararat Valley drainage system, pumping stations, gravity schemes, and tertiary canals. This evaluation focuses on the tertiary canal rehabilitation efforts because there will be a sufficient number of tertiary canals to yield precise impact estimates.

Evaluation Questions

- Did the program affect the quantity and reliability of irrigation water provided to Armenian farmers?
- Did the program affect agricultural productivity?
- Did the program improve household well-being for farmers, especially income and poverty?
- Was the overall investment cost effective?
- Did the combination of irrigation infrastructure plus training have a larger impact than infrastructure alone?

Evaluation Methodology Description

This evaluation will use a comparison group design. Tertiary canals for which rehabilitation is planned will be matched to other canals sharing similar geography, pre-rehabilitation conditions, and where similar crops are grown. Examining how outcomes change for farmers in the comparison group, whose canals were not rehabilitated, will inform us about how those outcomes would have changed in the absence of the rehabilitation efforts.

Data Sources

The primary data source will be a new household survey tailored to this impact evaluation, the Tertiary Canal Survey (TCS). The key outcomes of interest from the TCS include crops cultivated, crop production, agricultural profit, household income, and poverty. The TCS also features questions about reliability and quality of irrigation water. The baseline TCS was fielded in late 2009 and finished in early 2010. The final round is planned to begin in late 2013 and finish in early 2014. The total sample size and number of communities will include approximately 3,500 farming households across 200 communities.

6. IMPLEMENTATION AND MANAGEMENT OF M&E

6.1. Responsibilities

The designated representative is responsible for the implementation of the following activities. Each programmatic and cross-cutting unit officer's agreement with the designated representative and the duration of services is summarized below under the respective activity.

Irrigation Infrastructure

The FFPMC is responsible for the infrastructure defect liability period (DLP). This implies elimination of any defects observed after the infrastructure is taken over. FFPMC responsibilities include reporting on the status of outstanding snag list items (completed, in process, not started, including timing for addressing items if not complete) by irrigation infrastructure component through the end of the defects liability period. In addition, it comprises summarizing issues with operations and maintenance of irrigation infrastructure by component, if such are raised by Operators and/or Contractors/Engineer.

- The Irrigation Officer will work at FFPMC until March 1, 2013. The FFPMC is entitled to extend the agreement with the Irrigation Officer if it is deemed necessary in consultation with MCC. In case of contract extension the Scope of Work and duration of services of the Irrigation Officer will be agreed between FFPMC and MCC.

Credit Program

The FFPMC is responsible for the oversight of the on-going Credit Program. This includes the following:

- Developing Credit Annual Performance and Quarterly Activity Reports;
 - Provision of overall management of the Credit Program implementation, final approval of loans, monitoring program implementation and reporting;
 - Clearance of invoices submitted by the Rural Finance Facility;
 - Reporting the results of any audits conducted by the Government of Armenia or FFPMC (or any other donor) regarding implementation of the continuing credit component starting from 2013.
-
- According to the agreement between the FFPMC and financial institutions, the implementation of the Credit Program will remain under FFPMC responsibility until September 2020. Taking into consideration the duration of this agreement, the Credit Officer will perform his/her duties until 2020. All the changes in the Scope of Work and duration of services of the Credit Program Officer, if any, will be agreed between FFPMC and MCC.

Environmental and Social Assessment

The FFPMC is responsible for reporting on the status of outstanding measures to be completed as outlined in the Environmental, Social, Health and Safety (ESHS) Data Sheets by component

(completed, in process, not started, including timeline for addressing items if not complete) through the end of the defects liability period.

- The Environmental, Social, Health and Safety Officer will work at FPPMC until March 1, 2013. The FPPMC is entitled to extend the agreement with the Environmental, Social, Health and Safety Officer if it is deemed necessary in consultation with MCC. In case of contract extension the Scope of Work and duration of services of the Environmental, Social, Health and Safety Officer will be agreed between FPPMC and MCC.

Monitoring and Evaluation

The FPPMC is responsible for on-going monitoring and evaluation of the Armenia Compact program. This includes the following activities:

- Reporting Post Compact monitoring indicators through a modified post-Compact Indicator Tracking Table (see Annex 1 for the Indicator Documentation Table and Annex 2 for the Performance Tracking Table).
- Reporting other MCC required information as described in the reporting section of this plan.
- Coordinating with the RFF/IFAD PIU (or its successor) to ensure that MCC is provided with quarterly and annual credit program reports, per the terms of the IEA between RFF/IFAD PIU and MCA-Armenia (to be assigned to MCA-Armenia's and RFF/IFAD PIU's successors).
- Providing the final 2011 Integrated Living Conditions Survey (ILCS) dataset from NSS to MCC and Mathematica Policy Research. Participating in 2012 Social Snapshot and Poverty in Armenia presentation as MCA-Armenia program legal successor.
- Facilitating in-country review of final evaluations.
- Organizing the presentation of final survey and evaluation results.
- Managing MCA-Armenia's MIS developed by Synergy.
- Collaborating with MCC sub-contractors (local companies) responsible for data collection and reporting.
- Maintaining MCA-Armenia's website until the end of 2015, which would include posting results from post-Compact surveys and evaluations and updating credit information (www.mca.am). Developing Post Compact section under the MCA-Armenia website to include all the documents, reports and publications developed during the Post Compact period.
- Monitoring the Post Compact Program components through site visits.
- Developing Post Compact success stories or fact sheets, if possible.

- The M&E officer will work fulltime at FFPMC until March 2016, which is the date of the last Annual Summary Report to be submitted by the designated representative to MCC. All the changes in the Scope of Work and duration of services of the M&E Officer, if any, will be agreed between FFPMC and MCC.

Project Manager

- The Project Manager will be engaged at FFPMC for the whole duration of the MCA-Armenia Program.

6.2. MCA Management Information System for Monitoring and Evaluation

M&E related FFPMC activities include management, operation and maintenance of MCA-Armenia's Management Information System (MIS). The FFPMC IT specialist is in charge of all technical issues raised by MIS users – both public and registered. The company hired to develop the MIS, Synergy, is providing one year of technical support to FFPMC, which also includes support to the FFPMC system administrator. In addition, Synergy provided three-day training to the designated representative staff on how to use the system. The M&E officer is responsible for overall management of the MIS.

6.3. Review and Revision of the M&E Plan

All revisions to the plan will be mutually agreed upon by the FFPMC and the MCC. The key modifications made in the previous (March 2012) version of the Post Compact M&E plan are compiled and presented under Annex 3 (Annex 3. Post Compact M&E Plan Modification – March 2012).

The reviewed and approved Post Compact M&E Plan should be publicly available through the Post Compact section of the MCA-Armenia website.

7. M&E BUDGET

MCC is responsible for paying the independent evaluator for post compact Monitoring and Evaluation.

The designated representative, FFPMC, is responsible for funding the public presentations of the results of final evaluations.

8. OTHER

8.1. Miscellaneous Post-Compact Obligations

As required by Section 3.8(c) of the Compact (which survives the expiration of the Compact pursuant to Section 5.13), the Government, through FFPMC (or otherwise), will continue to permit any authorized MCC representative, the Inspector General, the US Government Accountability Office, any auditor responsible for an audit contemplated by the Compact or conducted in furtherance of the Compact, and any agents or representatives engaged by MCC or the Government to conduct any assessment, review or evaluation of the Compact Program, the opportunity to audit, review, evaluate or inspect activities funded by MCC Funding. Without limiting the foregoing, the Government, through FFPMC (or otherwise), further agrees to cooperate and coordinate with, and provide such documentation as may be requested from time to time by, MCC or any consultants or representatives working for MCC in connection with any of MCC's post-Compact monitoring and evaluation activities in connection with the Armenia Compact Program.

Annex 5 includes a diagram showing the different organizations involved in post-Compact M&E and their relationship. This diagram is modified in November 2012 to address all the changes that happened during the Post Compact implementation of on-going activities.

ANNEXES

Annex 1. Indicator Documentation Table: Post-Compact Indicators

Common Indicator	Indicator Level	Indicator Name	Definition	Unit of Measure	Dis-aggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Goal	Poverty rate in rural areas	Poverty rate in rural areas as measured by the National Statistical Service of Armenia	percentage	None	Integrated Living Conditions Survey (ILCS)	National Statistical Service of Armenia	once	2012
	Goal	Change in real income from agriculture in rural areas	Change in real income from sale of agricultural produce per household member measured as an index	Index, 2009 = 100	None	Integrated Living Conditions Survey (ILCS)	National Statistical Service of Armenia	once	2012
	Outcome	Government budgetary allocations for rehabilitation of road sections in the road lifeline network	State budget expenditure on rehabilitation of road sections in the road lifeline network	AMD in millions	None	State budget expenditure execution data	Ministry of Transport and Communication of Armenia	annual	

	Outcome	Government budgetary allocations for routine maintenance of the entire road network	State budget expenditures on routine maintenance of the entire road network	AMD in millions	None	State budget expenditure execution data	Ministry of Transport and Communication of Armenia	annual	
	Outcome	Government budgetary allocations for maintenance of irrigation system	State budget expenditures on maintenance of irrigation system	AMD in millions	None	State budget expenditure execution data	State Water Committee of Armenia	annual	
	Outcome	Additional land irrigated under Project	Annual increase in irrigated land in Project area	hectares	None	Tertiary Canal Survey (TCS)	Mathematica Policy Research	once	2014
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	None	Tertiary Canal Survey (TCS)	Mathematica Policy Research	once	2014

	Outcome	Annual energy savings under Project	Reduction in Kilowatt hours used	thousand KWh	None	WUA Admin Survey	WUA and WU Survey Consultant	twice	2012 and 2013
	Outcome	Share of respondents satisfied with irrigation services	Share of respondents indicating that they have received enough irrigation water on time	percentage	None	WU Survey	WUA And WU Survey Consultant	twice	2012 and 2013
	Outcome	Recovery of WUA operations and maintenance cost by water charges	Share of WUA water charges compared WUA annual operations and maintenance cost	percentage	None	WUA Admin Survey	WUA and WU Survey Consultant	annual	

	Outcome	Increased collection of irrigation service fee for the water used	Irrigation Service fee collection rate in 8 WUAs targeted by ISSA	percentage	None	WUA Admin Survey	WUA and WU Survey Consultant	annual	Source TBD for post 2012 data as WUA Admin surveys #3 & #4 cover only 2011/2012 data with delivery in 2012/2013. Survey #5 will cover data for 2013 and the report will be submitted in 2014.
AI-9	Output	Loan borrowers	The number of borrowers who access loans for on-farm, off-farm, and rural investment through MCC financial assistance	number	Male/Female	RFF/IFAD PIU Reports	Rural Finance Facility	annual	

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	Male/Female	RFF/IFAD PIU Reports	Rural Finance Facility	annual	
	Output	Number of loans disbursed	The number of approved loans that have been disbursed	number	None	RFF/IFAD PIU Reports	Rural Finance Facility	annual	
	Output	Number of fully repaid loans	The number of disbursed loans that have been fully repaid	number	None	RFF/IFAD PIU Reports	Rural Finance Facility	annual	
	Output	Number of performing loans	The number of outstanding loans with payments current within 60 days.	number	Male/Female	RFF/IFAD PIU Reports	Rural Finance Facility	annual	
	Output	Amount of performing loans	The amount outstanding of loans with payments current within 60 days.	US dollars	None	RFF/IFAD PIU Reports	Rural Finance Facility	annual	

Annex 2. Performance Tracking Table

Compact Goal Targets ⁴								
Objectives	Indicators	Units	Baseline	Year 4	Year 5	Year 6	Year 7	Year 8
				2010	2011	2012	2013	2014
Reduced rural poverty	Poverty rate in rural areas Baseline: 2008	percentage	22.9%	22.9%	22.8%	22.1%	21.6%	20.9%
Increased economic performance of the agriculture sector	Change in real income from agriculture in rural areas Baseline: 2009 = 100	Index	100	100	100	104	107	111
Rural Road Rehabilitation Targets								
Objectives	Indicator	Units	Baseline (2007)	Year 1	Year 2	Year 3	Year 4	Year 5
Outcomes								
Sustained maintenance of road network	Government budgetary allocations for rehabilitation of road sections in the road lifeline network	AMD in millions	n/a	1,010	3,150	3,310	NA	NA
Sustained maintenance of road network	Government budgetary allocations for routine maintenance of the entire road network	AMD in millions	n/a	5,020	5,990	6,290	NA	NA

⁴ The targets of the goal level indicators were revised in March 2010 with consideration of the changes in the scope of the program, the revised economic analyses and the subsequent changes in those benefit streams that underlay the Compact estimates.

Irrigated Agriculture Targets								
Objectives	Indicator	Units	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5
Improved quality of irrigation	Share of respondents satisfied with irrigation services ⁵	percentage	49 %	NA	NA	NA	NA	NA
Activity 1. Irrigation Infrastructure								
Outcomes								
Increased irrigated land	Additional land irrigated under Project	Hectares (cumulative)	0	0	0	0	500	1,767
Improved irrigation and increased irrigated land	Hectares under new or improved irrigation	Hectares	0	NA	NA	NA	NA	69,111 ⁶
Maintenance of irrigation systems	Government budgetary allocations for maintenance of irrigation system	AMD in millions	NA	1,408	1,500	1,510	1,500	1,500
Reduced energy costs	Annual energy savings under Project	thousand KWh (cumulative)	0	0	0	0	0	1,375
Activity 2. Water-to-Market								
Outcomes								
Improved WUA cost recovery	Recovery of WUA operations and maintenance cost by water charges	Percentage	36.7 ⁷	36.7%	38%	42%	53%	60%
Improved ISF Collection Rate for 8 targeted WUAs	Increased collection of Irrigation service Fee for the water used	Percentage	51% ⁸	NA	NA	51%	53%	55%

⁵ The baseline for this indicator is calculated based on the following question: "did you get enough irrigation water in time," included in the ISLS questionnaire. The baseline data are for 2007. This is a contextual indicator. The MCC and the designated representative hope to observe some increase in satisfaction without having targets set.

⁶ The target for this indicator is derived from the Irrigation Infrastructure ERRs revised during the Re-Scoping and includes the hectares that would benefit from improved irrigation under MCA/MCC funded Main Canals and Gravity Schemes, as well as pump stations that pump water for main canals.

⁷ The baseline for this indicator is 2007.

Irrigated Agriculture Targets								
Objectives	Indicator	Units	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5
Access to Credit Sub-Activity⁹								
Outputs								
Loan Borrowers (Male/Female)	The number of borrowers who access loans for on-farm, off-farm, and rural investment through MCC financial assistance	number (cumulative)						
Value of agricultural and rural loans (Male/Female)	The value of agricultural loans and rural loans disbursed for on-farm, off-farm, and rural investments	US dollars						
Number of loans disbursed	The number of approved loans that have been disbursed	number (cumulative)						
Number of fully repaid loans	The number of disbursed loans that have been fully repaid	number (cumulative)						
Number of performing loans	The number of outstanding loans with payments current within 60 days.	number (cumulative)						
Amount of performing loans	The amount outstanding of loans with payments current within 60 days.	US dollars						

⁸ The baseline for this indicator is 2008, i.e. the year when Institutional Strengthening Sub-Activity (ISSA) started its activities.

⁹ All the output indicators under the Access to Credit Sub-Activity were imported into the M&E Plan during the Post Compact stage; therefore they have no baseline and targets. Access to Credit Sub-Activity is referred as "Credit Program" in the Post Compact M&E Plan.

Annex 3. Post Compact M&E Plan Modifications

Modifications made in the March 2012 version of the Post Compact M&E Plan	
Submitted by:	MCA-Armenia Program designated representative, FFFPMC
Date:	November 2012
Country	Armenia
Modification 1.	The structure and content of Armenia Post Compact M&E Plan is modified
Justification	In accordance with the Guidance for Post Compact M&E Plans (September 2012) all countries that close after May 2012 are required to develop a Post Compact M&E Plan based on the requirements set in the guidance. Given that MCA-Armenia was closed on January 29, 2012 and, in fact, is the first MCC country that developed the Post Compact M&E plan (the plan was developed with MCC support in January 2012 and approved in March 2012), the Plan was structured differently with a shorter and diverse content. To comply with the clauses underlined in the Guidance for Post Compact M&E Plans the Armenia Compact designated representative decided to take an initiative and modify the March version of the Plan.
Modification 2.	New sections are added to the Plan
Justification	Compliant with the Guidance for Post Compact M&E Plans the following new sections are added in the document: Preamble, List of Acronyms, Compact and Objective Overview, Program Logic, Projected Economic Benefits, Program Beneficiaries, Data Quality Reviews, Implementation and Management of M&E, Responsibilities, MCA Management Information System for M&E, M&E Budget, Review and Revision of M&E Plan.
Modification 3.	The diagram showing different organizations involved in the Post-Compact M&E and their relationship is modified
Justification	During the Post Compact period it became obvious that the organizational chart developed by the MCA-Armenia PMG back in 2011 after the Armenia Compact was closed out needs to be revisited to address certain changes made in the scope of the programmatic and cross-cutting officers.
Modification 4.	New annexes are added to the Plan

Justification	The following annexes are added to the Plan: Annex 2 Performance Tracking Table, Annex 7 Program Beneficiary Numbers and Annex 3 Post Compact M&E Plan Modifications. Those annexes are included as they contain important and useful information as well as deemed necessary both by the FFPMC and NSS.
Modification 5.	Other sections of the Plan are modified
Justification	The following sections of the Post Compact M&E Plan are revised/modified to address all the changes that happened during the Post Compact period of the MCA-Armenia program: Monitoring Component, Evaluation Component, Standard Reporting Requirements, Annex 1. Indicator Documentation Table and Annex 3. Survey Activity Summary.

Annex 4. Survey Activity Summary

The four surveys highlighted below will be conducted under Mathematica’s contract after the Compact is over.

Survey Data Availability Summary				
	Survey Firm	Baseline	Interim	Final
Water-to-Market				
On-farm Water Management (OFWM) and High Value Agriculture (HVA) Training	AREG/Jen Consulting (AREG)	Farming Practices Survey (FPS) #1 completed in April 2008	FPS #2 completed in April 2009	FPS #3 completed in April 2011
Post-harvest, Processing, and Marketing (PPM)	AREG/Jen Consulting (AREG)			Enterprise Adoption Survey completed in March 2011
Credit		None	None	None
Institutional Strengthening (ISSA)	Avag Solutions Ltd	Water User Association Survey (WUA Survey) ¹⁰ #1 completed in March 2010	WUA Survey #2 completed in March 2011 and WUA Survey #3 to be completed in March 2012	WUA Survey #4 to be completed in March 2013 WUA Survey #5 to be completed in March 2014
Rural Road Rehabilitation				
Road infrastructure improvements completed by GoA or WB	Republic of Armenia National Statistics Service (NSS)	Integrated Living Conditions Survey (ILCS) 2007 and 2008	ILCS 2009	ILCS 2010 and 2011
Irrigation Infrastructure				
Pumping Stations, Gravity Schemes, Main Canals, Drainage	AREG/Jen Consulting (AREG)	Tertiary Canal Survey (TCS) #1 completed in April 2010 and WUA #1	No interim data collection planned	TCS #2 to be completed in April 2014 and WUA #4
Tertiary Canals		Same as above	No interim data collection planned	Same as above

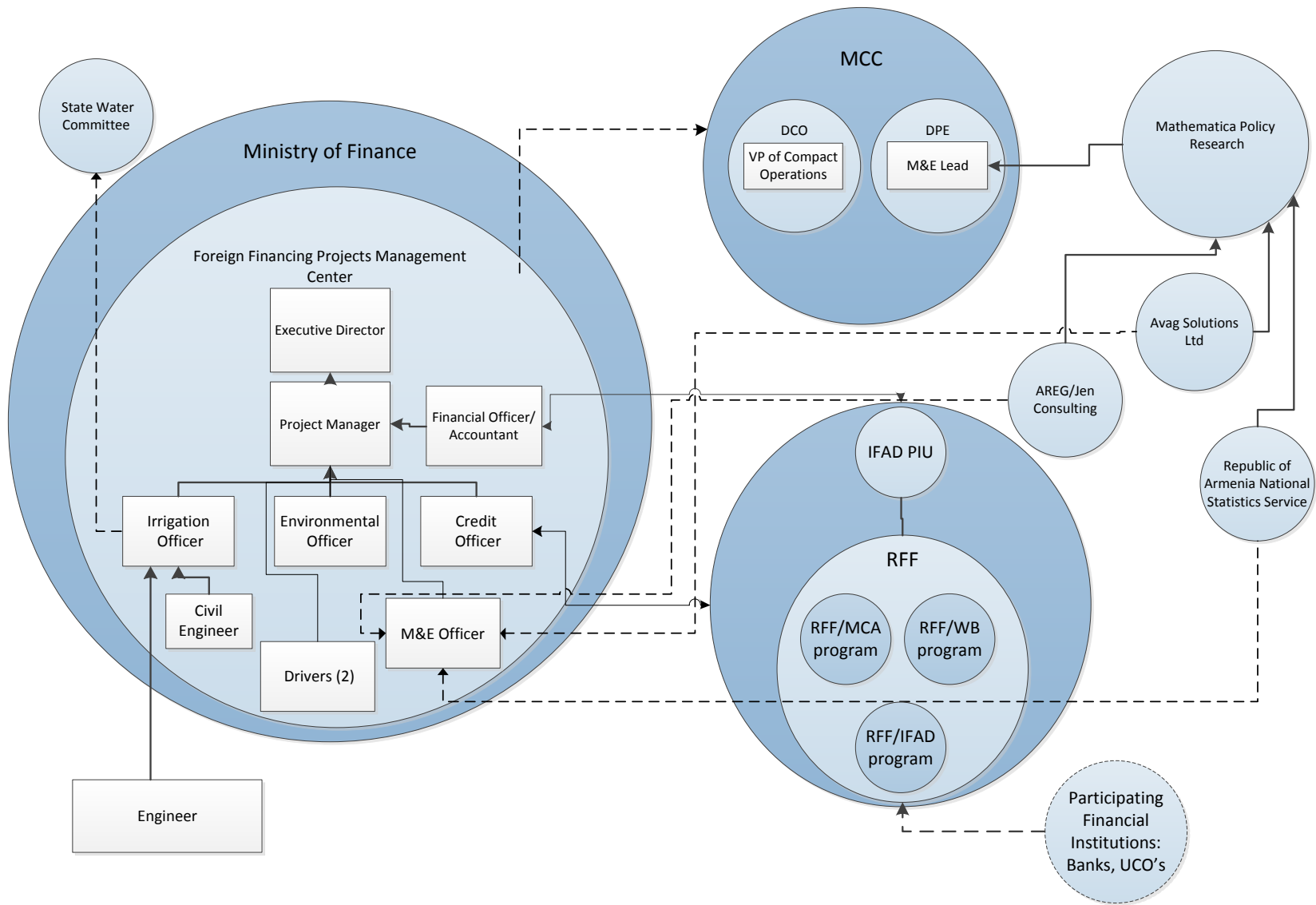
¹⁰ The WUA survey consists of two parts – a water user survey and a WUA administration survey. The two surveys are referenced together and called the “WUA Survey.”

In June 2012, it was decided to make a few changes to the Post Compact survey schedule.

(1) The final Tertiary Canal Survey was moved from covering the 2012 agricultural season to covering the 2013 agricultural season in order to allow more time for farmers to use the improved irrigation before conducting the evaluation.

(2) The WUA survey consists of two parts – a Water User survey and a Water User Association Administration survey. It was decided to discontinue the Water User survey as it was not being used for the final evaluation and was duplicative of information collected by the Tertiary Canal Survey. It was also decided to add a final WUA Admin survey covering the 2013 agricultural season.

Annex 5. Post-Compact Monitoring and Evaluation Organization



Annex 6. Rural Finance Facility Reporting Requirements

This is an excerpt from the Implementing Entity Agreement with RFF/IFAD PIU (or its successor), Annex V. Note that FFFPMC is not required to send the monthly summary loan activity report to MCC.

REPORTING REQUIREMENTS AND DELIVERABLES

The table below summarizes the deliverables under this Agreement. All deliverables are to be submitted to MCA-Armenia in both English and Armenian, in a format satisfactory to MCA-Armenia. In addition to the hard copies, RFF shall provide MCA-Armenia with an electronic copy of each deliverable in Microsoft WORD, financial sections of the report are to be submitted in Microsoft EXCEL as well as other documentation should be submitted in appropriate MS format.

Deliverables	Timing
Summary loan activity report (WTM credits) (M&E requirement)	On a monthly basis, by 10 th business day after month end
Quarterly activity report	On a quarterly basis, by 15 th business day after quarter end
Annual performance report	On annual basis, by 15 th business day after year end

Summary loan activity report (WTM credits) (M&E requirement): This report should include monthly and cumulative (inception-to-date) data from all credit providers on the following activity (WTM Credits only):

- Number and Amount of Loan Applications Received
- Number and Amount of Loan Applications Declined
- Number and Amount of Loan Applications Approved
- Number and Amount of Loans Disbursed
- Number and Amount of Performing Loans
- Number and Amount of fully repaid loans
- Total amount of loan repayments
- Number, Amount, and percentage of total WTM Credit Facility portfolio of Non-Performing Loans (60, 90, 180, or more days past due)
- Information regarding the monitoring carried out in the reporting month

Quarterly activity report: This report should contain the information including but not limited the following:

- Monthly data above in a quarterly comparison of the current fiscal year and cumulative (inception-to-date) format.
- Audit reports on loans audited and conclusions.

- Collection reports – summary of collection efforts for any loans 60 days or more past due.
- Report on performance indicators including “Number and amount of loans approved” and “Number of loan takers disaggregated by gender and age”.
- Status of compliance with agreed environmental mitigation measures.
- Total Amount of Loans Disbursed disaggregated by gender
- Loan purpose (greenhouses, irrigation equipment, etc.)
- Marz/region/ distribution for approved loans (if possible)
- For all indicators, reporting should be broken out to reflect pre- and post-compact loans

Annual performance report: This report should contain the information including but not limited the following:

- Quarterly data above in annualized format
- A written report to MCA-Armenia on RFF/IFAD PIU’s results in implementing the WTM Credit Facility, a summary of audit findings.

Annex 7. MCA-Armenia Program Beneficiaries

MCA-Armenia programmatic interventions (outputs) with their respective beneficiary numbers are listed below (Tables 1,2,3). The updated beneficiary numbers for the overall MCA-Armenia Compact is presented under Table 4.

Table 1: MCA-Armenia Rural Roads Rehabilitation Project¹¹			
	Compact	After Re-scoping January 2008	As of July 1, 2009
Road Sections Rehabilitated	943 kms	297 kms	24.4 kms
Number of beneficiaries	360,000 rural inhabitants	142,909 rural inhabitants	6,356 rural inhabitants
Number of beneficiary communities	260	84	12

Table 2: MCA-Armenia IA Project: Irrigation Infrastructure Activity			
	Compact	After Re-scoping in October 2008	As of September 29, 2011
Gravity Schemes (number)	18	7	5 ¹²
Pumping Stations (number)	68	17	17
Main Canals (kms)	198	34	41.8
Tertiary Canals (kms)	588	220	232.8
Drainage Systems (number)	13	13	13
Total Number of Beneficiaries ¹³	152,000	106,161	421,407
Number of beneficiary communities	362	286	298

Table 3: MCA-Armenia IA Project: Improving the Profitability of WUA member farmers Sub-Activity of Water-to-Market Activity

¹¹ In the press release dated June 20,2009, MCC Board of Directors announced hold on funding for Armenia to remain in force, and stated that “MCC will not resume funding for any further road construction and rehabilitation” in Armenia.

¹² The number of gravity systems was reduced from 7 to 5 after the official project re-scoping because of concerns of technical and economic feasibility.

	Compact	Revised after ERR revision in June 2009	As of September 29, 2011
Number of Farmers Trained in On Farm Water Management	60,000	45,000	45,639
Number of Farmers Trained in HVA	30,000	36,000	36,070
Number of Beneficiaries ¹⁴	38,350	28,847	28,847

Table 4: MCA-Armenia Compact Beneficiaries

	Number of Beneficiary Communities	Number of beneficiaries
Estimated number of MCA-Armenia Irrigated Agriculture Beneficiaries	298	421, 407
Estimated number of MCA-Armenia Water-to-Market Activity Beneficiaries	N/A	28,847
Estimated number of MCA-Armenia RRRP Beneficiaries after June 2009	12	6,356
<i>Estimated number of MCA-Armenia TOTAL Compact Beneficiaries as of July 2009 (after the MCC June 10 Board Decision)</i>	310	427,763

³ The WiM Activity beneficiaries are categorized under the "Targeted Projects" beneficiaries based on the new MCC Beneficiary Analysis Guidance. This basically means that only those farmers who according to the ERR estimates would adopt the practices taught during the trainings should be counted as beneficiaries.