

**MEMORANDUM OF UNDERSTANDING BETWEEN  
THE TECHNICAL SECRETARIAT OF THE PRESIDENCY OF THE GOVERNMENT  
OF EL SALVADOR AND THE MILLENNIUM CHALLENGE CORPORATION**

This Memorandum of Understanding ("*MOU*") is entered into this 9<sup>th</sup> day of January, 2013, by and between the Millennium Challenge Corporation ("*MCC*") and the Technical Secretariat of the Presidency (*Secretaría Técnica de la Presidencia* or "*STP*") of the Government of the Republic of El Salvador (the "*Government*"); MCC and STP, together, the "*Participants*").

**WHEREAS**, the Government and the United States of America, acting through MCC, entered into that certain Millennium Challenge Compact dated November 29, 2006 (the "*Compact*");

**WHEREAS**, the Compact expired on September 20, 2012;

**WHEREAS**, the Participants wish to cooperatively monitor the results and evaluate the impacts of the Compact on reducing poverty through economic growth in the Northern Zone of El Salvador; and

**WHEREAS**, MCC has engaged, and each of the Participants may in the future engage, one or more service providers (the "*Service Providers*") to collect, review and analyze the data resulting from the Compact.

**NOW, THEREFORE**, the Participants have reached the following understandings:

1. **Objective.** The objective of this MOU is to facilitate the continued monitoring of the results of the Compact and timely delivery of accurate evaluations of the Compact's impact on reducing poverty through economic growth in the Northern Zone of El Salvador.
2. **Cooperation.** STP and MCC express their intent to cooperate to fulfil the objective by undertaking the tasks and responsibilities set forth in the post-Compact monitoring and evaluation plan, attached hereto as Annex I.
3. **Communications.**
  - a. MCC and STP endeavour to communicate with each other to coordinate their efforts under this MOU. For purposes of this MOU, the Participants will be represented by the persons holding or acting in the following positions (the "*Representatives*");

For MCC: Vice President for Department of Compact Operations. As of the signing of this MOU the person holding this position is Mr. Patrick C. Fine.

For STP: Technical Secretary to the Presidency. As of the signing of this MOU the person holding this position is Dr. Alexander Ernesto Segovia Cáceres.

- b. The Representatives may each designate one or more officials who may represent the respective Participants under this MOU, other than for

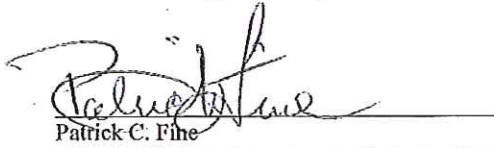
purposes of modification or termination of this MOU (which may only be undertaken by the Representatives). Such officials will function as the primary contact on all substantive issues under this MOU.

MCC designates the official holding the position of Managing Director M&E, Department of Policy and Evaluation. As of the signing of this MOU the person holding this position is Mr. Sixto Aquino

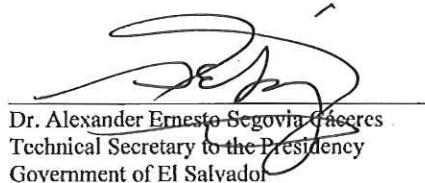
STP designates the official holding the position of Deputy Technical Secretary to the Presidency. As of the signing of this MOU the person holding this position is Ms. Leslie Quiñónez de García.

4. **Term and Termination.** This MOU is expected to continue for four (4) years from the date of signature by both MCC and STP and may be extended or modified in writing signed by both Representatives; provided, however, that for modifications to Annex 1, the officials identified in point 3.b above shall have the authority approve and sign such modifications. MCC or STP may terminate this MOU upon thirty (30) days written notice to the other Participant.
5. **No Financial or Legal Obligation.** Nothing contained in this MOU is intended to be construed as creating any financial obligation or commitment on the part of MCC, the United States Government, STP, or the El Salvador Government to provide funding or assistance in relation to the proposed activities contemplated hereunder or any other project or program in El Salvador. This MOU does not give rise to rights or obligations under international or domestic law.
6. Any dispute shall be settled amicably by mutual agreement between the Participants.

IN WITNESS WHEREOF, MCC and STP have caused this Memorandum of Understanding to be signed and issued as of the date first set forth above.



Patrick C. Fine  
Vice President for Department of Compact Operations  
Millennium Challenge Corporation



Dr. Alexander Ernesto Segovia Cáceres  
Technical Secretary to the Presidency  
Government of El Salvador

**ANNEX 1**

**POST-COMPACT MONITORING AND EVALUATION PLAN**  
**9 January 2013**

**Millennium Challenge Account – El Salvador**  
**Post Compact Monitoring and Evaluation Plan**  
**January 2013**



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## **1. PREAMBLE**

The Post Compact Monitoring and Evaluation Plan serves as a guide for monitoring Post Compact sustainability of Millennium Challenge Corporation (MCC) investments. 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.”

## 2. LIST OF ACRONYMS

<b>BMI</b>	<i>Multisectorial Investment Bank (name in Spanish)</i>
<b>DIGESTYC</b>	<i>General Directorate of Statistics and Census (name in Spanish)</i>
<b>EHPM</b>	<i>Multipurpose Household survey (name in Spanish)</i>
<b>FIDENORTE</b>	<i>Investment Fund for the Northern Zone (name in Spanish)</i>
<b>FOMILENIO</b>	<i>Millennium Challenge Account Fund- MCA name for El Salvador Compact</i>
<b>M&amp;E PLAN</b>	<i>Monitoring and Evaluation Plan</i>
<b>MCC</b>	<i>Millennium Challenge Corporation</i>
<b>MINED</b>	<i>Ministry of Education</i>
<b>MOP</b>	<i>Ministry of Public Works (Ministerio de Obras Publicas)</i>
<b>NTH</b>	<i>Northern Transnational Highway</i>
<b>PROGARA</b>	<i>Agriculture Guarantees Program (Programa de Garantías - Agropecuario)</i>
<b>SGR</b>	<i>Reciprocal Guarantees Society</i>
<b>FOVIAL</b>	<i>Road Maintenance Fund (Fondo de Mantenimiento Vial)</i>

### **3. COMPACT AND OBJECTIVE OVERVIEW**

#### **3.1 Introduction**

On November 29, 2006, the United States of America, acting through the Millennium Challenge Corporation, and the Government of El Salvador (GOES) signed a Compact. The 5-year Compact entered into force on September 20, 2007 and ended on September 20, 2012.

After the El Salvador Compact was closed out, in accordance with the Program Closure Plan (PCP) agreed between the GOES and MCC, the GOES designated the Deputy Technical Secretary within the Technical Secretariat of the Presidency as the designated representative to continue monitoring and evaluation of Compact investments after the 5-year Compact term; MCC identified the Managing Director for M&E, as the designated representative for this Post Compact M&E Plan.

This Post Compact M&E Plan serves the following functions:

- Gives details about Post Compact Monitoring. The designated representative is responsible for on-going monitoring of a small set of indicators and reporting to MCC on an annual basis.
- Provides information about Post Compact Evaluation. In addition to Post Compact monitoring, MCC will publish final independent evaluations after the Compact. GOES is responsible for reviewing and commenting on final evaluations and for their dissemination, including the organization of presentations of the findings of the final evaluations, and for their publishing on a GOES website.

#### **3.2 Program Logic**

The El Salvador Compact focused on the Northern Zone of El Salvador, a region that includes one-half of El Salvador's poorest municipalities, that has suffered most from the internal conflict during the 1980s, and whose sustainable development potential is underutilized.

The primary goal of the Compact was to advance economic growth and poverty reduction in the Northern Zone of El Salvador. More specifically, the three project-level objectives were to:

1. Increase human and physical capital of residents to take advantage of employment and business opportunities, for the Human Development Project
2. Increase production and employment in the Northern Zone, for the Productive Development Project
3. Reduce travel cost and time within the Northern Zone, with the rest of the country, and within the region, for the Connectivity Project.

**The Human Development Project** was designed to increase knowledge, skills and access to basic services and community infrastructure. The main activities and sub-activities of this project were:



- **Education and Training:** To increase education and skill levels of the poor in the Northern Zone by expanding the quality and access to vocational and technical education; develop informal skills in businesses areas through internships, on-the-job training and mentoring; and technical assistance to institutions and organizations involved in policy, planning and administration of education and training in the Northern Zone; and
- **Community Development:** To increase access to water and sanitation infrastructure to poor inhabitants to save money and time, and reduce diseases; extend electricity to rural households that will have financial savings and are expected to increase their productivity; and finance feasibility studies, technical assistance and construction of small strategic project such as feeder roads and drainage systems, that will reduce physical barriers to access to markets, employment, education and health care facilities, and will protect natural resources.

**The Productive Development Project** assisted with the development of profitable and sustainable productive business ventures, with a primary focus on poor individuals and organizations that benefit poor people. The main activities and sub-activities of this project were:

- **Production and Business Services:** pre-investment studies, technical assistance and training for the development and implementation of business plans of beneficiaries;
- **Investment Support:** investment capital to competitively selected individuals or organizations who are hindered by a lack of liquid assets and insufficient collateral;
- **Financial Services:** financial enhancements to support increased lending activity by financial institutions in the Northern Zone such as guarantee funds (PROGARA-Programa de Garantía Agropecuaria and SGR-Sociedad de Garantías Recíprocas) and agricultural insurance for vegetable farmers; and financial intermediary technical assistance.

**The Connectivity Project** comprised construction of the following project:

- The Northern Transnational Highway (NTH), a two lane paved road which will serve as a transport artery within the Northern Zone and will augment international connectivity through Honduras in the east; will connect with roads to southern El Salvador, to the new Pacific Ocean port at La Union in the eastern El Salvador, to the Caribbean ports of Puerto Barrios in Guatemala and Puerto Cortez in Honduras.



### 3.3 Projected Economic Benefits

Summaries of the economic rates of return (ERRs) of the three Projects of the El Salvador Compact are shown in the table below. Then a description of the ERRs estimated at close-out is provided.

<b>Economic Rate of Return Table</b>				
	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
<b>1. Human Development</b>				
Formal Education	6.5%	8/25/2006	13.4%	8/2/2012
Non-Formal Education	35.9%	8/25/2006	12.6%	8/2/2012
Rural Electrification	23.6%	8/25/2006	21.9%	8/2/2012
Water and Sanitation	13.8%	8/25/2006	5.4%	8/2/2012
Community Infrastructure	10.4%	8/25/2006	11.4%	9/25/2012
<b>2. Productive Development Project</b>				
Production and Business Services	12.6%	8/25/2006	24.7%	8/2/2012
Investment Support	n/a	8/25/2006	8.0%	8/2/2012
<b>3. Connectivity</b>				
	23.9%	8/25/2006	TBD	TBD

**Human Development Project:** The Education and Training Activity ERR was similar to that expected at Compact signing with a weighted average of the sub-activities having an ERR of 13%. The Formal Education sub-activity expanded technical and post-secondary schools, increasing the quality of the schools and the student capacity. The ERR of 13% is estimated assuming that the increased capacity of the schools will allow more students to reach a higher level of education and that their lifetime wages will be higher (estimates of wages for different levels of education were obtained from household surveys in the region of the project). The Closeout ERR for Formal education increased due to higher school attendance than originally assumed and lower MCC costs than expected. The other sub-activity, Non-Formal Education, provided short training courses to about 12,000 beneficiaries. Using income data from survey of trainees taken 6 months after training, we estimate the ERR to be 12%. The Closeout ERR is lower than baseline ERRs as the estimated impact on income per beneficiary was lower than expected.

Community Development Project: The Community Development Activity ERR is slightly lower than expected at compact signing, but at 15% still well above the hurdle rate. The Water and Sanitation sub-activity provided in-house water piping to 6,935 households and improved sanitation to 6,600 households. The ERR of 5% is estimated from surveys of beneficiaries -- benefits are primarily time and cost savings from not having to fetch water/buy truck water. The ERR dropped by 8.4 percentage points from the IM ERR, 4% points due to a much lower impact of disease incidence than expected in the original model, which assumed a zero incidence rate for households with piped water. The Community Infrastructure sub-activity constructed 39 kilometers of road and 20 bridges in the Northern Zone. Using the data in the feasibility studies for 32.5 km and all 20 bridges in the RED model we estimate an ERR for the roads of -8% and the ERR of bridges at 31%<sup>1</sup>, for a combined ERR of 11.4%. The low ERR for the roads results from the low traffic volume, an average of 25 vehicles per day. Benefits included in the ERR were time savings and vehicle cost savings from driving on improved roads as well as the time and vehicle cost savings from not having to drive around flooded bridges. The Rural Electricity sub-activity provided electricity connections to 34,950 households. The ERR of 22% is estimated using survey data of beneficiaries -- benefits are lower costs per kWh consumed and the benefits of consuming more electricity.

Productive Development Project: The Productive Development Business Services Activity ERR is much higher than expected at compact signing 25%<sup>2</sup> vs. 13%. This activity trained farmers, dairy farmers, and handicraft producers with new, more efficient techniques and provided them with equipment. Benefits are increased revenue for any individual who received training due to the activity and is expected to adopt at least on trained practice. The Investment Support Activity provided loans to 26 beneficiaries for a wide assortment of investment activities; using the cash flow projections in the business plans developed by independent consultants with beneficiaries and administrative costs we estimate the ERR is 8%.

Connectivity Project: The IM ERR was 24%, but included benefits from increases in land values. The ERR in the feasibility study in February 2009 was 14.7%. The most recent updated ERR in September 2011 is 23%. Benefits are time and vehicle cost savings from driving on improved roads. Final cost information that includes resettlement and design/supervision will not be available until October. Using this information, Roche (under contract for MCC Independent Engineer) will estimate a close out ERR available in 2013. The updated ERR will also adjust the road segments to reflect the actual segments constructed. M&E is considering when to conduct an ex post traffic survey and will likely wait until about 24 months after the end of the compact to allow time for traffic to respond. After such data is available, MCC should also update the ERR model.

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<sup>1</sup> We lack the destination-origin information of bridge users to know what their behavior would be in the absence of a bridge. We assume a time/cost savings equivalent to 30% of users traveling the alternative route

<sup>2</sup> This includes an ERR of 58% for dairy and handicrafts using information from the impact evaluation and an ERR of -4% for horticulture based on the baseline income and an assumption that the project met its goal of increasing baseline incomes by 15%. It does not include the value chains that comprised about 15% of the project cost.



### 3.4 Program Beneficiaries

The estimations of beneficiaries of each Compact Project are included in the table below.

<b>Project Program Beneficiaries</b>		
	Estimated Number of Beneficiaries	Estimated Increase in Household Income
<b>1. Human Development Project</b>		
Formal Technical Education	25,052	\$36,140,233
Non-Formal Skills Development	23,267	\$3,505,856
Water and Sanitation	33,516	\$9,770,660
Rural Electrification	160,770	\$46,279,282
Community Infrastructure	92,923	\$5,892,333
<b>2. Productive Development Project</b>	61,729	\$80,993,947
<b>3. Connectivity Project</b>	533,667 within 5 km	TBD
<b>Compact</b>	706,335	N/A

Beneficiaries are the household members of any individual who is expected to see income gains due to the compact (4.41 people per rural household except for 4.6 for rural electrification).

- Human Development Project - For education projects this is calculated as graduates who are expected to have improved employment.
- Human Capital - For the Water & Sanitation and Rural Electric projects beneficiaries are households receiving said connections. For the Community Infrastructure, beneficiaries are those in the community receiving the infrastructure.
- Productive Development Project - For PDP any individual who received training and is expected to adopt at least one practice from the training is treated as a beneficiary.
- Connectivity Project - For any road project any individual within 5 kilometers of the improved roads is treated as a beneficiary, accounting for population growth over the next 20 years.

The productive development project, water connection activity, and rural electric connection activity all overlapped with the two roads activities (Connectivity Project and Community Infrastructure). The total number of beneficiaries accounts for overlap.

## **4. MONITORING COMPONENT**

### **4.1 Summary of Monitoring Strategy**

The Post Compact M&E Plan identifies indicators to be monitored after the Compact close out.

All indicators with their definitions, data sources, and required disaggregation are listed in Annex 1. Baselines and targets for those indicators are included in Annex 2.

### **4.2 Data Quality Reviews**

The GOES will be responsible for ensuring the data quality of any data reported by the GOES during the Post Compact period by checking the accuracy and reliability of the data submitted by the responsible entities.

A third party independent data quality reviewer may be contracted by MCC to conduct Data Quality Reviews for indicators being reported to MCC post compact by the GOES, at MCC's discretion.

### **4.3 Standard Reporting Requirements**

GOES will be responsible for submitting annual reports to MCC. These reports should be submitted to MCC via email to the Vice President of the Department of Compact Operations at [VPOperations@mcc.gov](mailto:VPOperations@mcc.gov) with the subject line "El Salvador Post Compact Reporting" and the dates of report coverage.

The Annual Summary Report should be submitted on the following dates:

June 30, 2013  
March 31, 2014  
March 31, 2015  
March 31, 2016

The Annual Summary Report on Compact activities should be concise and include the following:

- A summary of any Post Compact activities undertaken by GOES. The summary should focus on sustainability of compact investments including any issues with operations and maintenance of infrastructure, if applicable.
- A summary of progress on any complementary activities undertaken by GOES or other donors.
- A Post Compact Indicator Tracking Table (ITT) that includes all of the indicators included in Annex 1 of the plan for the preceding calendar year. The Post Compact ITT will have the same format as the Compact ITT only with additional quarters added to it.

In addition to the Annual Summary Report, GOES is responsible for submitting the quarterly fiscal agent reports to MCC every quarter. Those reports should also be submitted to MCC via email to the Vice President of the Department of Compact Operations at [VPOperations@mcc.gov](mailto:VPOperations@mcc.gov) with the subject line “El Salvador Post Compact Reporting” and the dates of report coverage.

MCC may also request additional reports as deemed necessary by the MCC country team.

The Annual Summary Report will be sent to MCC for information by the Technical Secretariat of the Presidency. It should be made public by posting it on a GOES website. The report may also be posted on MCC’s website.

## 5. EVALUATION COMPONENT

### 5.1 Summary of Evaluation Strategy

Evaluation is an essential element of the 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, evaluations can improve program management and provide lessons for future program design and implementation.

Evaluation Plans are being implemented for the different projects, activities and sub-activities of the Compact; two companies have been hired by MCC to implement these evaluations. During the Compact, many interim evaluations were completed; however, most of the evaluations and much of the data collection will happen after the Compact. Therefore, during the post compact period, there are ongoing processes related to data collection, evaluator’s analysis, reports and the dissemination of results. All of the evaluations are described in the Specific Evaluation Plan section.

According to the Evaluation Plans, baseline and interim surveys were collected during the Compact, but after the Compact, MCC will continue to contract data collection through the Salvadoran Ministry of the Economy’s General Office of Statistics and Census (known as DIGESTYC for its initials in Spanish). The post compact evaluation surveys that have been contracted are shown in the table below.

Post Compact Survey Schedule	
Survey	Dates
Connectivity and Rural Electrification	Oct-2012/Jan-2013 and Oct-2013/Jan-2014
Water and Sanitation	Mar - Apr 2013
Investment Support (FIDENORTE)	May 2013



Non Formal Training	Feb - May 2013
Secondary Technical School Strengthening	Oct - Dec 2013
Scholarships for Secondary Technical School	Oct - Dec 2013
ITCHA/MEGATEC	Nov - Dec 2013

## 5.2 Specific Evaluation Plans

### *Summary of Specific Evaluation Plans*

The following table summarizes the specific evaluation plans.

Evaluation Name	Evaluation Type	Evaluator	Primary/ Secondary Methodology	Final Report Date
Production and Business Services Activity Interim Evaluation	Impact	Mathematica Policy Research	Randomized rollout	October 2012
Production and Business Services Activity Final Evaluation	Performance	Mathematica Policy Research	Qualitative & Pre-post	April 2013
Production and Business Services Activity, Handicrafts Value Chain, Final Evaluation	Impact	Mathematica Policy Research	Randomized control trial	December 2013
Investment Support Activity Evaluation	Performance	Mathematica Policy Research	Qualitative & Pre-post	June 2014
Financial Services Activity Evaluation	Performance	Mathematica Policy Research	TBD	TBD
Formal Education Sub-Activity, ITCHA/MEGATEC Evaluation	Performance	Mathematica Policy Research	Qualitative & Ex-post	May 2015
Formal Education Sub-Activity, Secondary School Evaluation	Impact	Mathematica Policy Research	Difference-in-Difference with matching	May 2015
Formal Education Sub-Activity, Scholarship Evaluation	Impact	Mathematica Policy Research	Randomized control trial	May 2015
Non-Formal Skills Development Sub-Activity Evaluation	Performance	Mathematica Policy Research	Qualitative & Pre-post	May 2015
Water and Sanitation Sub-Activity Evaluation	Impact	Social Impact	Difference-in-Difference with matching	April 2014
Rural Electrification Sub-Activity Evaluation	Impact	Social Impact	Randomized instrument / Difference-in-Difference with matching	January 2015
Community Infrastructure Sub-Activity Evaluation	Performance	TBD	TBD	TBD

Connectivity Project Evaluation	Impact	Social Impact	Continuous treatment	January 2015
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### **Production and Business Services Activity Interim Evaluation**

The Production and Business Services Activity (PBS) is the largest of three activities in the Productive Development Project. Its goal according to the MCC Compact was to “help poor farmers, organizations and micro-, small, and medium enterprises that benefit poor inhabitants of the Northern Zone successfully transition to higher-profit activities, generating new investment, expanding markets and sales, and creating new jobs in ways that stimulate sustainable economic growth and poverty reduction.”

The purpose of this evaluation was to determine the *interim* impact of the Production and Business Services Activity (PBS) which includes training, technical assistance and in-kind goods on producers in three value chains: dairy, handicrafts, and horticulture. The other value chains involved in the activity including fruit, forestry, and tourism were not included in this evaluation because of the longer-term nature of their benefits.

This evaluation was released to the public by MCC in October 2012 and the full report can be found on MCC’s website here: <http://www.mcc.gov/documents/reports/report-102012-evaluation-slv-production-and-biz-services.pdf>.

#### *Evaluation questions*

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

- What impact did the offer of PBS assistance have on intermediate outcomes, such as production levels, business practice adoption, technology adoption, and product diversification?
- What impact did the offer of PBS assistance have on employment creation and producers’ investment and income?
- What impact did the offer of PBS assistance have on household income?

#### *Evaluation Methodology Description*

The design for the *interim* impact evaluation of the PBS Activity is a randomized rollout design, in which some producers were offered PBS assistance several months before other producers were offered similar assistance. The goal of this design is to attain the highest level of rigor possible without significantly altering existing implementation plans. The evaluation is limited to three value chains: (1) handicrafts, (2) dairy, and (3) horticulture. Among all value chains in the PBS, these three chains were most amenable to random assignment, and were expected to yield impacts in the one-year interim timeline specified for the evaluation.

Implementation plans required that random assignment be done at the group level for the dairy and horticulture chains, and at the municipality level for the handicraft value chain. In all three value chains, groups (or municipalities in the case of handicrafts) were randomized into treatment and control. Treatment groups were offered PBS assistance in the first implementation phase (beginning in late 2009 for handicrafts and mid-2010 in the



case of the dairy and horticulture chains) and control groups in the dairy and horticulture chains were offered PBS assistance roughly one year after the treatment group.

#### *Data Sources*

The data sources for this analysis are the baseline and follow-up Productive Development Surveys (PDS), which were administered before and after the first implementation period. These surveys were developed by Mathematica and administered by the Salvadoran Ministry of the Economy's General Office of Statistics and Census (known as DIGESTYC for its initials in Spanish) to all producers in the study sample.

The surveys were collected according to the timeline below.

<b>PDP Survey Schedule</b>			
	<b>Dairy</b>	<b>Horticulture</b>	<b>Handicrafts</b>
Baseline Data Collection	May 2010	June 2010	October 2009
Follow-up Data Collection	June 2011	May 2011	November 2010

#### **Production and Business Services Activity Final Evaluation**

After receiving more information about implementation delays and lack of coordination between the evaluation and implementation, MCC and FOMILENIO decided to cancel the final quantitative surveys for the Production and Business Services Activity horticulture and dairy value chain impact evaluations and instead have MCC's evaluation contractor conduct a final performance evaluation for those chains.

#### *Evaluation questions*

- **How was the PBS Activity designed and why was it designed in this way?** What were the key objectives, activities, and outcomes? What was the target population? What key players and considerations were involved in the activity's design?
- **How was the activity implemented?** What were the primary implementation phases of the activity? What were the primary components of assistance to small producers and producer-owned enterprises, and how did these components change over the course of implementation? What were key facilitators and barriers to implementation? Did the activity meet its targets for the number of producers served? How did FOMILENIO and Chemonics perform as the project's supervisor and implementer, respectively?
- **Did the activity produce its desired results?** Did the activity meet pre-defined production, employment, and sales targets? Are producer-owned enterprises on a path to sustainability following assistance?

#### *Evaluation Methodology Description*

This evaluation relies on a mixed-methods approach, in which Mathematica staff collected and analyzed qualitative and quantitative data from a variety of sources, including

administrative data, programmatic reports, and interview data. In July 2012, Mathematica staff conducted interviews with FOMILENIO, Chemonics, and technical service provider staff, as well as members of FOMILENIO's board of directors, an official from the Ministry of Agriculture, representatives from Súper Selectos (a major grocery store chain in El Salvador), PBS participants, and representatives from FOMILENIO-supported enterprises.

#### *Data Sources*

The evaluation draws from several qualitative and quantitative sources, including program manuals, monitoring data, implementer reports, and in-person interviews with many stakeholders including key staff and PBS participants.

#### **Production and Business Services Activity, Handicrafts Value Chain, Final Evaluation**

The purpose of this evaluation is to determine the impact of the Production and Business Services Activity (PBS) which includes training, technical assistance and in-kind goods on producers in the *handicrafts* value chain. Assistance was provided to many value chains; however this evaluation looks specifically at handicrafts.

#### *Evaluation questions*

- What impact did the offer of PBS assistance to *handicrafts producers* have on intermediate outcomes, such as production levels, business practice adoption, technology adoption, and product diversification?
- What impact did the offer of PBS assistance to *handicrafts producers* have on employment creation and producers' investment and income?
- What impact did the offer of PBS assistance to *handicrafts producers* have on household income?

#### *Evaluation Methodology Description*

The design for the impact evaluation of the PBS Activity was a randomized rollout design, in which some producers were to be offered PBS assistance several months before other producers were offered similar assistance (three value chains were initially included in this evaluation – handicrafts, horticulture and dairy). Implementation plans required that random assignment be done at the municipality level for the handicraft value chain. Municipalities were randomized into treatment and control groups. Treatment groups were offered PBS assistance in the first implementation phase (beginning in late 2009 for handicrafts) and then the plan was to offer assistance to control groups roughly one year after the treatment group. However, in the case of handicrafts, the implementer decided not to work with the control group of handicrafts producers. Therefore, the evaluation is able to track the treatment group of farmers for longer than the other value chains and conduct a true randomized impact evaluation.

#### *Data Sources*

The data sources for this analysis are the baseline and follow-up Productive Development Surveys (PDS). These surveys were developed by Mathematica and administered by the



Salvadoran Ministry of the Economy's General Office of Statistics and Census (known as DIGESTYC for its initials in Spanish) to all producers in the study sample.

There are four rounds of the surveys planned and they will be collected according to the timeline below.

<b>PDP Handicrafts Survey Schedule</b>	
	<b>Handicrafts</b>
Baseline Data Collection	October 2009
1 <sup>st</sup> Follow-up Data Collection	November 2010
2 <sup>nd</sup> Follow-up Data Collection	September 2011
3 <sup>rd</sup> Follow-up Data Collection	August 2012

### **Investment Support Activity Evaluation**

According to the Compact, the goal of the Investment Support Activity (also called FIDENORTE) was to “make investment capital available to poor individuals and organizations that benefit poor inhabitants of the Northern Zone, who, due to insufficient collateral and lack of liquid assets, are not able to finance their investments.” Provided in the form of multi-year loans, the investment capital was intended to reduce poverty by enabling the creation of profitable and sustainable business activities that generate employment and significantly raise beneficiaries’ income. Loans granted under the Investment Support Activity were approved and formalized between 2009 and 2011, and these loans are not required to reach maturity until September 2016. The Investment Support Activity Evaluation is being conducted in two parts – an interim evaluation during implementation and a final evaluation after the compact ends.

#### *Evaluation questions*

The primary research questions for this evaluation include:

- What were FIDENORTE’s levels of demand, investment and costs?
- What are the characteristics of FIDENORTE applicants and beneficiaries?
- What were facilitators and barriers to efficient and effective implementation of lending?
- How did beneficiaries use FIDENORTE credit? What was the overall delinquency rate?
- What are the changes in investment, employment, income, and value chain integration following receipt of FIDENORTE credit?
- Was the program cost effective? (including what is the ex-post Economic Rate of Return)

#### *Evaluation Methodology Description*

The Investment Support Activity evaluation design is a performance evaluation being conducted in two parts. The interim evaluation methodology combined a desk review of project design and implementation documents, key informant interviews, and a comparison of five loan recipients to non-recipients. To facilitate comparisons between loan recipients and non-recipients, each recipient was paired to a non-recipient with similar productive activities, requested loan amount, projected internal rate of return (IRR), and application date.



### *Data Sources*

The interim evaluation draws from several qualitative and quantitative sources, including program manuals, monitoring data, implementer reports, and in-person interviews with key staff, as well as interviews with ten Investment Support loan applicants (five loan recipients and five non-recipients) and members of the Productive Development (PD) Investment Committee, which approved all loans under the activity. Mathematica staff conducted most interviews in El Salvador during May and July 2011.

The final evaluation will draw on the same sources as the interim evaluation as well as a survey of all approved loan applicants which will be conducted in May 2013.

### **Financial Services Activity Evaluation**

The evaluation of the third activity of the Productive Development Project, the Financial Services Activity, will be combined to the extent possible with the Investment Support Activity Evaluation.

### *Evaluation questions*

The primary research questions for this evaluation include:

- What change did the offer of financial services have on investment?
- What change did the offer of financial services have on household incomes?
- Did the offer of guarantees increase bank lending to new or existing customers (larger loan sizes, better terms)?
- Was the program cost effective? (including what is the ex-post Economic Rate of Return)

### *Evaluation Methodology Description*

The evaluation methodology is still being developed.

### *Data Sources*

Data sources have not been determined yet; however, no quantitative survey of guarantee recipients is planned.

### **Formal Education Sub-Activity, ITCHA/MEGATEC Evaluation**

This component of the Formal Education Sub-Activity included the strengthening of the Chalatenango Technical Institute (ITCHA for its initials in Spanish), an existing post-secondary institute in the Northern Zone, through conversion into a MEGATEC along with construction of new facilities, new equipment, curriculum development (new degree programs: civil engineering & alternative tourism), teacher training, and scholarships.

### *Evaluation questions*

The primary research questions for this evaluation include:

- To what degree did the activity meet its objectives?

- What has helped or hindered the activity's implementation?
- How was the activity actually implemented?
- What was the impact of the activity on student education outcomes?
- What was the impact of the activity on student labor market outcomes?
- Was the program cost effective? (including what is the ex-post Economic Rate of Return)

#### *Evaluation Methodology Description*

The evaluation of the improvements to ITCHA and its conversion into a MEGATEC is a case study using a mix of qualitative and quantitative information to assess the design, implementation, and likely impacts of the activity. Since ITCHA is one of a kind, there is no comparison group.

#### *Data Sources*

The interim evaluation draws from several qualitative and quantitative sources, including program manuals, monitoring data, MINED data, and in-person interviews with key staff, administrators, teachers, and students.

The final evaluation will draw on the same sources as the interim evaluation as well as a survey of all graduates one year after graduation, which will be conducted in November to December 2013.

#### **Formal Education Sub-Activity, Secondary School Evaluation**

The secondary school activity is designed to increase the quality and capacity of approximately 20 secondary technical schools to absorb and train a greater numbers of students and to expand access to more at-risk youth and young adults.

#### *Evaluation questions*

The primary research questions for this evaluation include:

- What is the impact of FOMILENIO's scholarships on recipients' education outcomes?
- What is the impact of FOMILENIO's scholarships on recipients' labor market outcomes?
- Was the program cost effective? (including what is the ex-post Economic Rate of Return)

Based on the results from administrative and survey data, the evaluators will measure the impact of school improvements on student enrollment, persistence, graduation, employment and wages.

#### *Evaluation Methodology Description*

A comparison group was developed by matching similar schools not included in the project to those that were included.

### *Data Sources*

Data for the impact evaluation will come from both administrative records kept by the Ministry of Education (MINED) and from an independent survey. MINED will provide annual data on enrollment and persistence. Data collectors will gather data for variables that MINED does not track, such as graduation, employment, wages, and post-secondary education. The survey will sample approximately 600 students from beneficiary and non-beneficiary schools. These students will be interviewed one year after the final year of schooling to establish the baseline for labor outcomes such as employment and wages. The baseline was done in Fall 2009 and a follow-up survey is scheduled for Fall 2013.

### **Formal Education Sub-Activity, Scholarship Evaluation**

The purpose of this evaluation is to determine whether or not scholarship recipients are better off than they would have been without receiving the scholarships.

#### *Evaluation questions*

The primary research questions for this evaluation include:

- What is the impact of FOMILENIO's scholarships on recipients' education outcomes?
- What is the impact of FOMILENIO's scholarships on recipients' labor market outcomes?
- Was the program cost effective? (including what is the ex-post Economic Rate of Return)

The main outcomes being analyzed are: enrollment, completion, employment and wages/income.

#### *Evaluation Methodology Description*

The most rigorous impact evaluation design available for determining the effectiveness of the scholarship activity randomly assigns scholarships among the pool of applicants who have met the program selection criteria (that is, eligible applicants). Random assignment is logistically feasible and ethical in cases of oversubscription—that is, when the number of eligible applicants exceeds the number of scholarships available. In December 2009, there were more applicants to the scholarship program in 2010 than scholarships available for some schools and educational programs. This oversubscription of scholarships allowed random assignment of scholarships among eligible applicants within each school and educational program that was oversubscribed. In total, there was oversubscription in 15 educational programs in 12 of the 17 schools selected for the scholarship program. As a result, randomization of scholarships was possible for the 15 schools and programs that were oversubscribed, which had a total of 1,160 eligible applicants.

### *Data Sources*

The key data sources will be the application form and a follow-up survey of both the scholarship recipients and control groups. The baseline was collected from the application form in 2009, the interim surveys were conducted in 2011 and 2012, and the final follow-up survey will be conducted from October to December of 2013.



## **Non-Formal Skills Development Sub-Activity Evaluation**

The Non-Formal Skills Development Sub-Activity funded non-formal skills training activities—namely short-term courses in common trades such as baking, bricklaying, and electrical installations—throughout the Northern Zone. The short-term goal of the non-formal skills program was to increase the education and skill levels of at-risk populations in the Northern Zone. The medium-term goals were to decrease economic barriers to labor force entry, while increasing personal income, labor market participation, and self-employment rates of vulnerable populations.

### *Evaluation questions*

The primary research questions for this evaluation include:

- What are the characteristics of non-formal training participants?
- What is the impact of non-formal training on labor market outcomes?
- What were facilitators and barriers to training completion and employment?
- Was the program cost effective? (including what is the ex-post Economic Rate of Return)

### *Evaluation Methodology Description*

To estimate the potential effect of the Non-Formal Skills Development Sub-Activity, the evaluation compares participants' labor market and economic outcomes before training courses to their outcomes after training courses.

### *Data Sources*

The primary data source for this evaluation is a survey of people who completed the non-formal training. The survey was conducted on a rolling basis during the last year of the compact and the final survey will be conducted in June 2013.

## **Water and Sanitation Sub-Activity Evaluation**

The water and sanitation services were designed to reduce poverty and increase household income by a) decreasing the cost and time to collect water, and b) reducing the incidence of water-borne diseases which reduces the costs of health services and the number of hours of work lost by water borne diseases.

### *Evaluation questions*

The primary research questions for this evaluation include:

- What is the impact of improved water and sanitation on the cost of water, water consumption, illness, time use, and household income?

### *Evaluation Methodology Description*

The evaluation methodology relies on matching the selected project communities with similar communities in the Northern Zone using data from the population census conducted in 2007. To estimate impact, the average change in income of those receiving

the services will be compared to the average change in income of those who were not programmed to receive the services.

#### *Data Sources*

The evaluation will use a household survey of approximately 3,168 households as well as tests of the quality of the water at the household level and at the source point. The current data collection plan anticipates that each household will be surveyed three times, 1) baseline in April 2011, 2) follow up in April 2012 and 3) final in April 2013.

#### **Rural Electrification Sub-Activity Evaluation**

The Rural Electrification Sub-Activity installed 1,435 km of new electric lines and connected over 33,270 households to the grid.

#### *Evaluation questions*

The primary research questions for this evaluation include:

- What is the impact of electrification on the cost of energy, energy consumption, time allocation, and household income?

#### *Evaluation Methodology Description*

Because the new electric lines will come from the existing power grid, an experimental design is not feasible for the overall impact evaluation. Therefore, the evaluators will use a non-experimental design taking advantage of the timeline of the rollout of the project combined with propensity score matching to identify treatment (households that receive the new electrical service) and control groups (households that do not receive new service). Using specialized household surveys for both the household head and his/her spouse with an intra-household time allocation module, the evaluators will estimate the differences in energy consumption, household income, and time use between the treatment and control groups. A difference-in-difference estimation method will control for changes in non-observable variables, and instrumental variables estimation will control for any remaining potential sources of selection bias.

For a subsample of towns and households from the full sample being evaluated we will select an additional control and treatment group. The treatment group will be randomly assigned vouchers of varying amounts that would help cover costs for the installation of the internal connection that the households will need to pay in order to access the electricity once the cable reaches their household. Vouchers have been assigned randomly to 400 households. The vouchers would not only encourage a sufficient level of demand for electricity access in the early stages of intervention, but would also provide for this subsample of households a basis for experimental evaluation of accessibility to electricity by serving as an instrumental variable for electricity access.

#### *Data Sources*

The impact evaluation will be based on a survey of approximately 1,532 total households in the departments of Chalatenango and San Miguel. These departments were selected because, according to program plans, they include the largest numbers of cantons that will



benefit from the electrification program. In addition, these districts include a number of cantons that will benefit from both the road improvement and the electrification projects, so data collection could be done at the same time for both evaluations.

The questionnaire includes two sections – one that will be answered by a male in the household (including household income and agricultural productivity) and will be interviewed by a male survey taker, and the second which will be answered by a female in the household (including household demographics and expenses) and interviewed by a female survey taker. The separate interviews are intended to get more accurate data on topics that are more familiar to certain people in the household. The current data collection plan anticipates that each household will be surveyed multiple times, 1) baseline in November 2008, 2) follow ups in November 2010, 2011 and 2012, and 3) final in November 2013.

### **Connectivity Project Evaluation**

#### *Evaluation questions*

The primary research questions for this evaluation include:

- What is the impact of road improvements on travel cost and time, land prices, access to public services and their impacts on health and education outcomes, and household income?
- What is the impact of road improvements on changes in labor allocation between farm and non-farm activities?
- What are the differentiated gender effects of road improvements?

#### *Evaluation Methodology Description*

The impact evaluation will combine propensity score matching (PSM), difference in differences (as it allows controlling for the change in non-observable variables), instrumental variables and regression discontinuity (to control for the remaining potential sources of selection bias) to measure the change in household incomes within the “area of influence” defined as the area within 30 minutes of access through existing means of communication to the NTH.

#### *Data Sources*

The evaluation will use household surveys and community surveys. The household survey will interview approximately 5,388 households that are located within 30 minutes of access to the NTH. The questionnaire includes two sections – one that will be answered by a male in the household (including household income and agricultural productivity) and will be interviewed by a male survey taker, and the second which will be answered by a female in the household (including household demographics and expenses) and interviewed by a female survey taker. The separate interviews are intended to get more accurate data on topics that are more familiar to certain people in the household. The community survey includes questions on community infrastructure and access key markets and social services. The current data collection plan anticipates that each household will be surveyed multiple times, 1) baseline in November 2008, 2) follow ups in November 2010, 2011 and 2012, and 3) final in November 2013.

## **6. IMPLEMENTATION AND MANAGEMENT OF M&E**

### **6.1 Responsibilities**

MCC and the GOES both have responsibilities under the Post Compact M&E Plan.

#### **Millennium Challenge Corporation**

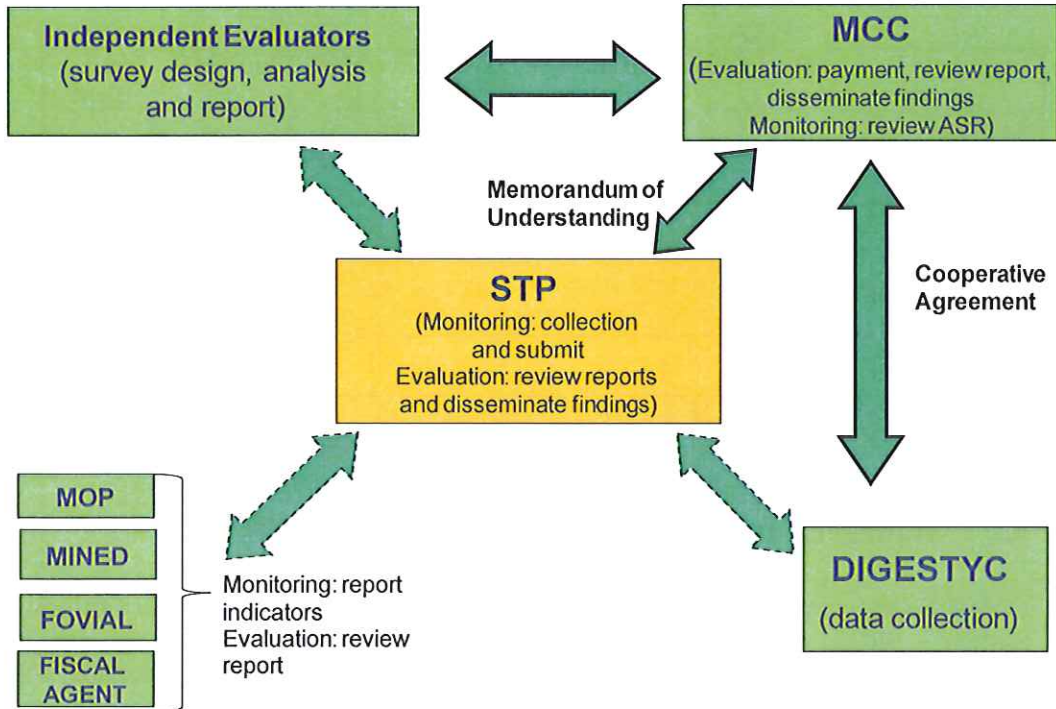
- Contracts and pays for the independent evaluators;
- Contracts and pays for data collection through a Cooperative Agreement with DIGESTYC; and.
- Contracts and pays for an independent consultant in El Salvador to monitor data collection and support Post Compact M&E efforts.

#### **Government of El Salvador through the Technical Secretariat of the Presidency**

- Designates main point of contact in this document to liaise with MCC M&E, per Section 3.1 Introduction
- Submits to MCC an Annual Summary Report on post compact activities which includes the collection of data from GOES agencies on post compact indicators
- Checks data quality of agreed to indicators under the charge of pertinent GOES agencies, ensuring that reported indicators have proper documentation;
- Reviews and provides an official response to each evaluation; helps to coordinate the review of evaluation reports by other GOES agencies as necessary;
- Disseminates results in El Salvador including organizing in-country presentations with stakeholders and posting evaluations on a GOES website; and
- Identifies opportunities to apply the learning from the evaluations to project design and implementation in El Salvador.

Figure 1 provides a scheme of relationships between MCC, STP, DIGESTYC and independent evaluators.

Figure 1. Post Compact Relations



#### Coordination of M&E Data Gathering

The gathering of post compact performance indicators – some output and outcome indicators – will be carried out by the former FOMILENIO Implementing Entities, the Post Compact Fiscal Agent and the Independent Evaluators.

Data collection for post compact indicators will be conducted by multiple in-country entities, including:

1. Human Development Project: The Ministry of Education and Independent Evaluators.
2. Productive Development Project: Fiscal Agent and Independent Evaluators.
3. Connectivity Project: The Ministry of Public Works (MOP), FOVIAL and Independent Evaluators.
4. Compact: DIGESTYC will be responsible for the Household Surveys.



El Salvador Post Compact Indicators							
	MCC	GOES					Total
	Evaluators	DIGESTYC	MINED	MOP	FOVIAL	Fiscal Agent	
<b>Compact</b>		2					2
<b>Human Development Project</b>	14		5				19
<b>Productive Development Project</b>	2					5	7
<b>Connectivity Project</b>	2			4	1		7
<b>Total</b>	18	2	5	4	1	5	35

## 6.2 Management Information Mechanism for M&E

FOMILENIO created a Beneficiaries Registry (Beneficiaries Registration Information System – SIREB in Spanish) which included identification of the beneficiaries of the Compact, characterized by gender, income level, age and geographical location. SIREB has been populated with information as follows:

- Human Development Project
  - Education and Training Activity, that includes Formal Education and Non-formal Training beneficiaries; and
  - Community Development Activity that include beneficiaries from Rural Electrification Sub-activity and the Water and Sanitation Sub-activity; and
  - Community Infrastructure beneficiaries were also included but only the direct beneficiaries of the projects (families), not the people in the surrounding areas/communities that would be benefited by the projects and are counted as estimated beneficiaries.
- Productive Development Project
- Connectivity Project.

The data base of SIREB has been given to MCC and the Technical Secretariat of the Presidency.

## 6.3 Review and Revision of the M&E Plan

The Post Compact Monitoring and Evaluation Plan may be modified or amended based on mutual agreement between the designated representative, the Technical Secretariat of the Presidency of the Government of El Salvador, and Millennium Challenge Corporation.

## **7. M&E BUDGET**

Post Compact, MCC expects to spend approximately \$2 million on data collection and analysis for the final evaluations.

GOES expects to spend approximately \$5,000 on evaluation dissemination for both interim and final evaluations.

Annex No 1 Indicator Documentation Table

El Salvador Annex I: 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
<b>Compact Goals</b>									
	Goal	Poverty rate in the Northern Zone	Percentage of households of the Northern Zone whose income falls below the poverty line as calculated by the General Directorate for Statistics and Census ("DIGESTYC")	Percentage		Household survey EHPM NZ	DIGESTYC	Annual	The last year of data available is from the EHPM ZN 2012. Data from 2012 will be available in 2013.
	Goal	Annual per capita income in the Northern Zone	Average annual per capita income in the Northern Zone as calculated by DIGESTYC	US Dollars		Household survey EHPM NZ	DIGESTYC	Annual	The last year of data available is from the EHPM ZN 2012. Data from 2012 will be available in 2013.
<b>Project 1: Human Development Project</b>									
<b>Activity 1: Community Development Activity</b>									
	Goal	Increase in income of water and sanitation beneficiaries	Percentage increase in income of households receiving water and sanitation investments	Percentage		Panel Survey	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.



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Annex I: 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
	Goal	Increase in income of electrification beneficiaries	Percentage increase in income of households who received connections to the electrical grid	Percentage		Panel Survey	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.
	Outcome	Cost of water	Average price of water per cubic meter paid by beneficiaries	US Dollars		Panel Survey	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.
WS-14	Outcome	Residential water consumption	The average water consumption in liters per person per day	Liters	Urban / Rural	Panel Survey	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.
	Outcome	Time collecting water (hours per week per household)	Hours per week per household spent collecting water by Project Activity households	Hours	Gender	Panel Survey	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly

El Salvador Annex I: Indicator Documentation Table									
Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
									to MCC upon submission of the final evaluation report.
	Outcome	Reduction in days of school or work missed as a result of water-borne diseases (days per year per person)	Reduction of the number of days of school or work missed per year per person as a result of intestinal parasitism, diarrhea or infectious gastroenteritis per beneficiaries	Days	Male/Female	Panel Survey	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.
	Outcome	Cost of electricity (per kilowatt-hour)	Price of electricity per kilowatt-hour for beneficiaries	US Dollars		Panel Survey	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.
	Outcome	Electricity consumption (kilowatt-hours per month)	Number of kilowatt-hours per month consumed on average by households connected to the electricity network by the Project Activity	Kwh		Panel Survey	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.

El Salvador Annex I: 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
<b>Activity 2: Education and Training</b>									
	Goal	Incremental income of graduates of the Chalatenango Center	Percentage of increase in yearly income earned by graduates of the Chalatenango Center	Percentage		Case study and existing surveys	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.
	Goal	Incremental income of graduates of middle technical schools	Percentage of increase in yearly income earned by graduates of middle technical schools	Percentage		Education tracer study	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.
	Goal	Incremental income of non-formal trained beneficiaries	Percentage of increase in yearly income earned by non-formal trained beneficiaries	Percentage		Non-formal training tracer study	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.



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Annex I: Indicator Documentation Table

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Outcome	Employment rate of graduates of the Chalatenango Center	Percentage of graduates of the Chalatenango Center (functioning as a MEGATEC institute) employed one year after graduation	Percentage		Education Tracer Study / School Administrative Records	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.
	Outcome	Employment rate of graduates of middle technical schools	Percentage of graduates of middle technical schools remodeled by the Project Activity, employed one year after graduation	Percentage		Education Tracer Study	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.
	Outcome	Employment of graduates of non-formal training programs	Change in hours worked by training program graduates one year after graduation converted into full-time equivalent (FTE) jobs using 8 hours per day and 250 days a year as an FTE. This indicator measures employment of graduates from non-formal training.	Number		Non-formal training tracer study	MCC Evaluator	Once	Survey to occur in 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.
	Outcome	Graduation rates of the Chalatenango Center	Percentage of graduates of the Chalatenango Center in relation to total enrollment in the first year	Percentage		School Administrative Records	MINED	Annual	

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Annex I: Indicator Documentation Table

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
			(2010).						
	Outcome	Graduation rates of middle technical schools	Percentage of graduates of the middle technical schools in relation to total enrollment in the first year (2010).	Percentage		School Administrative Records	MINED	Annual	
E-7	Outcome	Graduates from MCC-supported education activities	The number of students graduating from the highest grade (year) for that educational level in MCC-supported educational schooling programs	Number	Male/Female Primary/Secondary/Post-secondary	Administrative Records	MINED	Annual	
	Outcome	Students of the Chalatenango Center	Total number of students enrolled in 2012 in the Chalatenango Center (functioning as a MEGATEC institute) (not cumulative)	Number		School Administrative Records	MINED	Annual	
	Outcome	Students of middle technical schools	Total number of students enrolled in 2012 in the middle technical schools included in the Project Activity (not cumulative)	Number		School Administrative Records	MINED	Annual	
Project 2: Productive Development Project									

El Salvador Annex I: 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
	Goal	Increase in income of Productive Development beneficiaries	Average percentage increase in annual income of producers receiving Productive Development services. (Treatment On the Treated)	Percentage		Panel Survey	MCC Evaluator	Once	Survey to occur in 2011 and 2012; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.
	Goal	Increase in income of the target population for Productive Development services	Average percentage increase in annual income of the target population for Productive Development services (Intent to Treat)	Percentage		Panel Survey	MCC Evaluator	Once	Survey to occur in 2011 and 2012; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report.
	Output	Amount of funds collected from loan borrowers	Amount of recoveries of loans granted by FIDENORTE funds, including principal and interest	US Dollars		Fiscal Agent Report	Fiscal Agent	Quarterly	The Fiscal Agent Report will be submitted quarterly to MCC however this indicator will be reported annually for the purpose of the ITT submission via the Annual Summary Report.



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Annex I: Indicator Documentation Table

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
	Output	Repayment rate	Percentage recovery of capital appropriations FIDENORTE regarding payment plans approved, excluding prepayments	Percentage		Fiscal Agent Report	Fiscal Agent	Quarterly	The Fiscal Agent Report will be submitted quarterly to MCC however this indicator will be reported annually for the purpose of the ITT submission via the Annual Summary Report.
	Output	Amount transferred to Gloria de Kriete Foundation	Amount transferred from FIDENORTE to FGK (Gloria de Kriete Foundation)	US Dollars		Fiscal Agent Report	Fiscal Agent	Quarterly	The Fiscal Agent Report will be submitted quarterly to MCC however this indicator will be reported annually for the purpose of the ITT submission via the Annual Summary Report.
	Output	Amount transferred to Fondo de la Iniciativa para las Américas de El Salvador	Amount transferred from FIDENORTE to FIAES (Fondo de la Iniciativa para las Américas de El Salvador)	US Dollars		Fiscal Agent Report	Fiscal Agent	Quarterly	The Fiscal Agent Report will be submitted quarterly to MCC however this indicator will be

El Salvador Annex I: 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
									reported annually for the purpose of the ITT submission via the Annual Summary Report.
	Output	Amount of funds leveraged from FGK and FIAES	Counterparty Amount contributed from FIAES and FGK.	US Dollars		Fiscal Agent Report	Fiscal Agent	Quarterly	The Fiscal Agent Report will be submitted quarterly to MCC however this indicator will be reported annually for the purpose of the ITT submission via the Annual Summary Report.
<b>Project 3: Connectivity Project</b>									
	Goal	Increase in income of households near the Northern Transnational Highway	Increase in income of households within 2km of the Northern Transnational Highway	Percentage		Panel Survey	MCC Evaluator	Once	Survey to occur in 2012 and 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report. The initial indicator

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Annex I: 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
									was designed to measure 2km on either side of the road. Then MCC changed its beneficiary guidance to include 5km on either side of the road. Because data was not available to change the targets to 5km, the indicator was left with 2km.
	Goal	Land prices along the Northern Transnational Highway (per m2)	Average price of land 2km on either side of the Northern Transnational Highway (weighted average of all road sections to be opened or improved), per m2	US Dollars		Panel Survey	MCC Evaluator	Once	Survey to occur in 2012 and 2013; Evaluator to report on this indicator directly to MCC upon submission of the final evaluation report. The initial indicator was designed to measure 2km on either side of the road. Then MCC



El Salvador Annex I: 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
									changed its beneficiary guidance to include 5km on either side of the road. Because data was not available to change the targets to 5km, the indicator was left with 2km.
	Outcome	Travel time from Guatemala to Honduras through the Northern Zone	Number of hours required to travel from Guatemala to Honduras through the Northern Zone; accounting for project re-scoping, this indicator only includes passage over the borders using existing roads.	Hours		Report	MOP	Once	MOP to undertake traffic study; date TBD.
	Outcome	Vehicle operating costs on the Northern Transnational Highway	Cost per vehicle (pick-up truck) per km of combustibles, lubricants, tires, depreciation, maintenance and repair for travel on the Northern Transnational Highway	US Dollars		HDM-4 analysis performed by MOP and confirmed by feasibility study. Baseline	MOP	Once	MOP to undertake traffic study; date TBD.

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Annex I: Indicator Documentation Table

Common Indicator Code	Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting	Additional Information
						estimated by MOP			
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	Primary/ Secondary/ Tertiary	Traffic study (baseline confirmed by feasibility study)	MOP	Once	MOP to undertake traffic study; date TBD.
R-9	Outcome	Roughness	The measure of the roughness of the road surface, in meters of height per kilometer of distance traveled.	M/Km	Primary/ Secondary/ Tertiary	Report	MOP	Once	This indicator is the weighted average of all the NTH Section Road roughness indexes; MCC evaluator to report on this indicator.
	Outcome	Road maintenance expenditures	Expenditures on road maintenance from the budgeted fund for the entire Northern Transnational Highway	Percentage		Report	FOVIAL	Annual	FOVIAL will report on actual expenditure amount from the budgeted fund for road maintenance





Annex No 2 Indicator Baselines and Targets

El Salvador					
Annex II: Table of Indicator Baselines and Targets					
Indicator Level	Indicator Name	Unit of Measure	Indicator Classification	Baseline (year)	Target
<b>Compact Goals</b>					
Goal	Poverty rate in the Northern Zone	Percentage	level	53 (2004)	46
Goal	Annual per capita income in the Northern Zone	US Dollars	level	720 (2004)	808
<b>Project 1: Human Development Project</b>					
<b>Activity 1: Community Development Activity</b>					
Goal	Increase in income of water and sanitation beneficiaries	Percentage	level	0 (2004)	15
Goal	Increase in income of electrification beneficiaries	Percentage	level	0 (2004)	13
Outcome	Cost of water	US Dollars	level	1.68 (2007)	0.43
Outcome	Residential water consumption	Liters	level	69.42 (2007)	177.1

El Salvador					
Annex II: Table of Indicator Baselines and Targets					
Indicator Level	Indicator Name	Unit of Measure	Indicator Classification	Baseline (year)	Target
Outcome	Time collecting water (hours per week per household)	Hours	level	4.58 (2007)	0
Outcome	Reduction in days of school or work missed as a result of water-borne diseases (days per year per person)	Days	level	0 (2007)	-39
Outcome	Cost of electricity (per kilowatt-hour)	US Dollars	level	4.84 (2007)	0.16
Outcome	Electricity consumption (kilowatt-hours per month)	Kwh	level	2 (2007)	82
<b>Activity 2: Education and Training</b>					
Goal	Incremental income of graduates of the Chalatenango Center	Percentage	level	0 (2007)	40
Goal	Incremental income of graduates of middle technical schools	Percentage	level	0 (2007)	64
Goal	Incremental income of non-formal trained beneficiaries	Percentage	level	0 (2007)	35

El Salvador					
Annex II: Table of Indicator Baselines and Targets					
Indicator Level	Indicator Name	Unit of Measure	Indicator Classification	Baseline (year)	Target
Outcome	Employment rate of graduates of the Chalatenango Center	Percentage	level	70 (2007)	70
Outcome	Employment rate of graduates of middle technical schools	Percentage	level	66 (2007)	66
Outcome	Employment of graduates of training programs	Number	cumulative	0 (2007)	1,875
Outcome	Graduation rates of the Chalatenango Center	Percentage	level	73 (2007)	73
Outcome	Graduation rates of middle technical schools	Percentage	level	71 (2007)	71
Outcome	Graduates from MCC-supported education activities	Number	cumulative	0 (2007)	6,795
Outcome	Students of the Chalatenango Center	Number	level	264 (2007)	540
Outcome	Students of middle technical schools	Number	level	7,600 (2007)	9,413



El Salvador					
Annex II: Table of Indicator Baselines and Targets					
Indicator Level	Indicator Name	Unit of Measure	Indicator Classification	Baseline (year)	Target
Project 2: Productive Development Project					
Goal	Increase in income of Productive Development beneficiaries	Percentage	level	0 (2004)	15
Goal	Increase in income of the target population for Productive Development services	Percentage	level	0	
Output	Amount of funds collected from loan borrowers	US Dollars	cumulative	0	
Output	Repayment rate	Percentage	level	0	
Output	Amount transferred to Gloria de Kriete Foundation	US Dollars	cumulative	0	
Output	Amount transferred to Fondo de la Iniciativa para las Américas de El	Number	cumulative	0	

El Salvador					
Annex II: Table of Indicator Baselines and Targets					
Indicator Level	Indicator Name	Unit of Measure	Indicator Classification	Baseline (year)	Target
	Salvador				
Output	Amount of funds leveraged from FGK and FIAES	US Dollars	cumulative	0	
<b>Project 3: Connectivity Project</b>					
Goal	Increase in income of households near the Northern Transnational Highway	Percentage	level	0 (2006)	6
Goal	Land prices along the Northern Transnational Highway	US Dollars	level	3.22 (2006)	3.40
Outcome	Travel time from Guatemala to Honduras through the Northern Zone	Hours	level	11.72 (2006)	5.7
Outcome	Vehicle operating costs on the Northern Transnational Highway	US Dollars	level	0.49 (2006)	0.37
Outcome	Average annual daily traffic	Number	level	270 (2006)	962

El Salvador					
Annex II: Table of Indicator Baselines and Targets					
Indicator Level	Indicator Name	Unit of Measure	Indicator Classification	Baseline (year)	Target
Outcome	Roughness	M/Km	level	11.5 (2006)	2.8
Outcome	Road maintenance expenditures	Percentage	level		



## Annex No 3 Modifications to the M&E Plan

**Assumptions of the Original Compact Economic Analysis**

The logical framework of El Salvador Compact is based on specific assumptions about the linkages between Project Activities and the goal of increasing economic growth and poverty reduction. The economic rates of return are based on these assumptions.

The success of the Compact is fully related to achievements of each Project Activity, and projected outcomes are based on assumptions. These assumptions for each Project Activity are presented following.

<b>Compact Goals</b>
<ul style="list-style-type: none"> <li>▪ The increase in annual per capita income of residents in the Northern Zone in year 5 without Compact Program is 2.2% (compound 2.0% of economic growth less 1.7% of population growth); and with Compact Program is 19.1% (6.0% of connectivity project plus 13.1% on average of remaining projects). For year 10, the increase with and without Compact Program are 3.7% and 27.3% respectively.</li> <li>▪ The income elasticity used to calculate the poverty rate with and without Compact Program was 1.07, which corresponds to the national level GDP elasticity to poverty rate during 1991-2004.</li> <li>▪ The average annual per capita income of residents in the Northern Zone for baseline is US\$720 according with the Households Survey of 2004.</li> </ul>
<b>Human Development Project</b>
<b>Outcome 1. Improved Technical Skills of Salvadorans</b>
<ul style="list-style-type: none"> <li>▪ The promotion rate of the technological institute of Chalatenango is 78% and 72% for 20 middle technical schools.</li> <li>▪ 70% of graduates of Chalatenango MEGATEC (ITCHA 2005) and 50% of 20 middle technical schools (Household Survey 2004) obtain employment in the field of study one year after graduation.</li> <li>▪ The increase of yearly income for the graduates of Chalatenango MEGATEC is 37% compared to income of the graduates of 12<sup>th</sup> grade according to Mincer Equation; and 42% for the graduates of middle technical schools compared to income of graduates of 9<sup>th</sup> grade.</li> <li>▪ 8% of new enrolled to non-formal education drop out before finishing their studies.</li> <li>▪ 19.6% of graduates of non-formal education obtain a formal job and 8% will be self-employment after training.</li> <li>▪ The increase in yearly income for those who obtain a formal job after labor training is 225% and for self-employment is 150%</li> <li>▪ The monthly income before labor training is US\$ 60.0, for 10 to 12 years of study is US\$267.9, and for 13 or more years of study is US\$506.9.</li> </ul>
<b>Outcome 2. Improved Access to Water and Basic Sanitation</b>
<ul style="list-style-type: none"> <li>▪ The annual incidence rate of water-borne diseases is 148.6% of inhabitants without piped water at the national level. 38% of people that receive a medical consultation will go to the hospital for 4.6 days.</li> <li>▪ The cost of a consultation for morbidity is US\$ 6.14 for primary attention health centers and US\$15.11 for departmental hospitals.</li> <li>▪ 59.1% of the sick are of working age (15 to 64 years old) and 23.7% are of student age (5 to 14 years old). According to the Household Survey of 2004 their daily</li> </ul>

average income is US\$ 2.73.

- 68.7% of households without piped water collect water from rivers and 31.3% buy it from a truck.
- Households spend 30 hours per week (equivalent to 13.6% of productive time according to the BASIS survey elaborated by FUSADES) carrying water from rivers or they spend US\$3.3 a month to buy 3.3 m<sup>3</sup> of water from trucks.
- The annual opportunity cost of time is US\$720.0, assuming a 44 hours work week.
- This project will provide residential water connections to 100% of households that buy water from trucks and 87.5% to households that carry water from rivers; the remaining 12.5% will obtain water from a public faucet.
- The average consumption of water paid for by a household will increase from 3 m<sup>3</sup> per month to 18 m<sup>3</sup> per month after the introduction of the residential connection.
- The price of water will decline from 3.3 US\$/m<sup>3</sup> before the project to 0.43 US\$/m<sup>3</sup> at 2005 constant prices.

### **Outcome 3. Improved Access to Electricity**

- Households without electricity spend money on candles, batteries for lamps, and kerosene to obtain alternative energy to light houses.
- This project will provide residential electricity connections to 46,336 households and insulated solar systems to 952 households.
- The average consumption of electricity by household will increase from 3.1 equivalent kwh per month to 10.9 after installation of insulated solar systems or 48 after the introduction of residential electricity connections.
- The price of electrical energy will decline from 2.57 US\$/equivalent kwh before the project to 0.69 US\$/kwh for insulated solar systems or 0.20 US\$/kwh for residential electricity connections, both at 2005 constant prices.

### **Outcome 4. Improved Access to Schools and Health Centers**

- The opportunity cost of time for beneficiaries of community infrastructure is US\$720 per year or US\$ 0.19 per hour.
- The project will reduce the time of access to schools and health centers by 18 minutes or 30%.

### **Productive Development Project**

#### **Outcome 5. Increased Private Investment in Productive Chains**

- Small and poor farmers of the Northern Zone are engaged in low-productivity and low-quality production.
- MCC funds will support pre-investment studies, technical assistance for the development of and implementation of business plans, partial investment capital (to finance physical infrastructure, equipment, seeds and plants, irrigation systems, etc.), guarantees, and agricultural insurance to increase the incomes of small and poor farmers of the Northern Zone.
- The project is intended to help the region jump-start investment, in productive chains with competitive advantage like forestry, fruits, vegetables, dairy products and meat, artisan products, and geo-tourism.
- The opportunity cost for small farmers of the Northern Zone is annual income of US\$720.
- The information sources of prices, yields, costs and technology of production of wood, fruits, vegetables, dairy products and meat are MAG, FRUTALES, CAMAGRO, FIAGRO, FINTRAC and BMI.
- The products and services provided by this project will use a demand driven approach.



## Connectivity Project

### Outcome 6. Improved the Road Network

- The project will intervene 290 kilometers to secondary road standard on the Northern Transnational Highway, and 240 kilometers to modified tertiary road standard on Network of Connecting Roads.
- The annual average daily traffic (AADT) will increase from 379 to 436 vehicles per day on the Northern Transnational Highway; and from 204 to 226 vehicles per day on Network of Connecting Roads.
- The source of the 2005 baseline of AADT is the SIGESVIES (Sistema de Gestion Vial de El Salvador) of the Ministry of Public Works. The projected annual rate of growth is 1.69% for paved roads and 1.41% for non paved roads during 2006-2010; and 1.45% and 0.94% for the same roads during 2011-2029.
- The road interventions will reduce the average international road roughness index (IRI) of the Northern Transnational Highway from 10.2 to 2.7; and the IRI of the Network of Connecting Road from 12.1 to 2.7.