Millennium Challenge Account – Tanzania

Post Compact Monitoring and Evaluation Plan
January 2014

Table of Contents

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 MCC 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."

LIST OF ACRONYMS

CCD	Compact Closure Date
CED	Compact End Date
DQR	Data Quality Review
EDI	Economic Development Initiative
ERR	Economic Rate of Return
GCD	Government Closure Date
GDP	Gross Domestic Product
GoT	Government of Tanzania (United Republic of Tanzania)
IE	Implementing Entity
IGA	Income Generating Activity
ITT	Indicator Tracking Table
KV	Kilo Volts
M&E	Monitoring and Evaluation
MCA-T	Millennium Challenge Account - Tanzania
MCC	Millennium Challenge Corporation
MoF	Ministry of Finance
MOIC	Ministry of Infrastructure and Communications
MPR	Mathematica Policy Research
PED	Poverty Eradication Division
T&D	Transmission and Distribution
TAA	Tanzania Airport Authority
TANESCO	Tanzania Electricity Supply Company
TANROADS	Tanzania Roads

1. COMPACT AND OBJECTIVE OVERVIEW

Introduction

The Government of the United States of America acting through the Millennium Challenge Corporation (MCC) and the Government of Tanzania (GoT) entered into a Millennium Challenge Compact in the amount of 698 million USD for Millennium Challenge Account-Tanzania (MCA-T) to help facilitate poverty reduction through economic growth in Tanzania. The Compact was implemented over a five (5) year period starting on September 17th, 2008 and ending on September 17th, 2013.

After the Tanzania Compact was closed out, in accordance with the Program Closure Plan (PCP) agreed between the GoT and MCC, the GoT designated the Poverty Eradication Directorate within the ministry of Finance as the designated representative to continue the monitoring and evaluation of Compact investments after the 5-year Compact term. By Compact End Date (CED), however, some activities of the Tanzania Compact were continuing and, therefore, the GoT and MCC agreed on a contingency plan for MCA-T to exist under GoT funding for another six months after Compact Closure Date (CCD); i.e. up to June 30, 2014. This period has been named the Government Closure Date (GCD). In addition, impact evaluation post-intervention data collection for the water, T&D and road construction projects will be implemented at least 12 months after completion of the respective projects. This is to ensure that enough time has elapsed since the completion of project works for benefits to start accruing in the target population.

Based on the foregoing, M&E will continue after closeout until 2016 in order to track Compact activities that may go beyond the closure date and to assess the impact of the projects on the target populations. A post-Compact M&E Plan has been developed by MCA-T and MCC to outline the M&E tasks that will take place after CCD. This is a streamlined version of the Compact M&E Plan, and will require quarterly, semi-annual or annual reporting of the ITT and narrative to MCC (see table 1).

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

- Gives details about Post-Compact Monitoring; i.e. tracking results of activities that may be implemented beyond CED. The MoF, Poverty Eradication Directorate (MoF-PED) is responsible for on-going monitoring of a small set of indicators and reporting to MCC. It should be noted that the designated representative will work alongside the MCA-T M&E directorate until the CCD and through to the GCD. After GCD, the (MoF-PED) will take over full management of Post Compact M&E, in coordination with the MCC M&E Lead for the Tanzania Compact.

- Provides information about Post Compact Evaluation. In addition to Post Compact monitoring, MCC will publish final independent evaluation reports after the Compact. GoT is responsible for reviewing and commenting on final evaluations and for results dissemination, including the organization of presentations of the findings of the final evaluations, and for their publishing on a GoT website.

2. PROGRAM LOGIC[1]

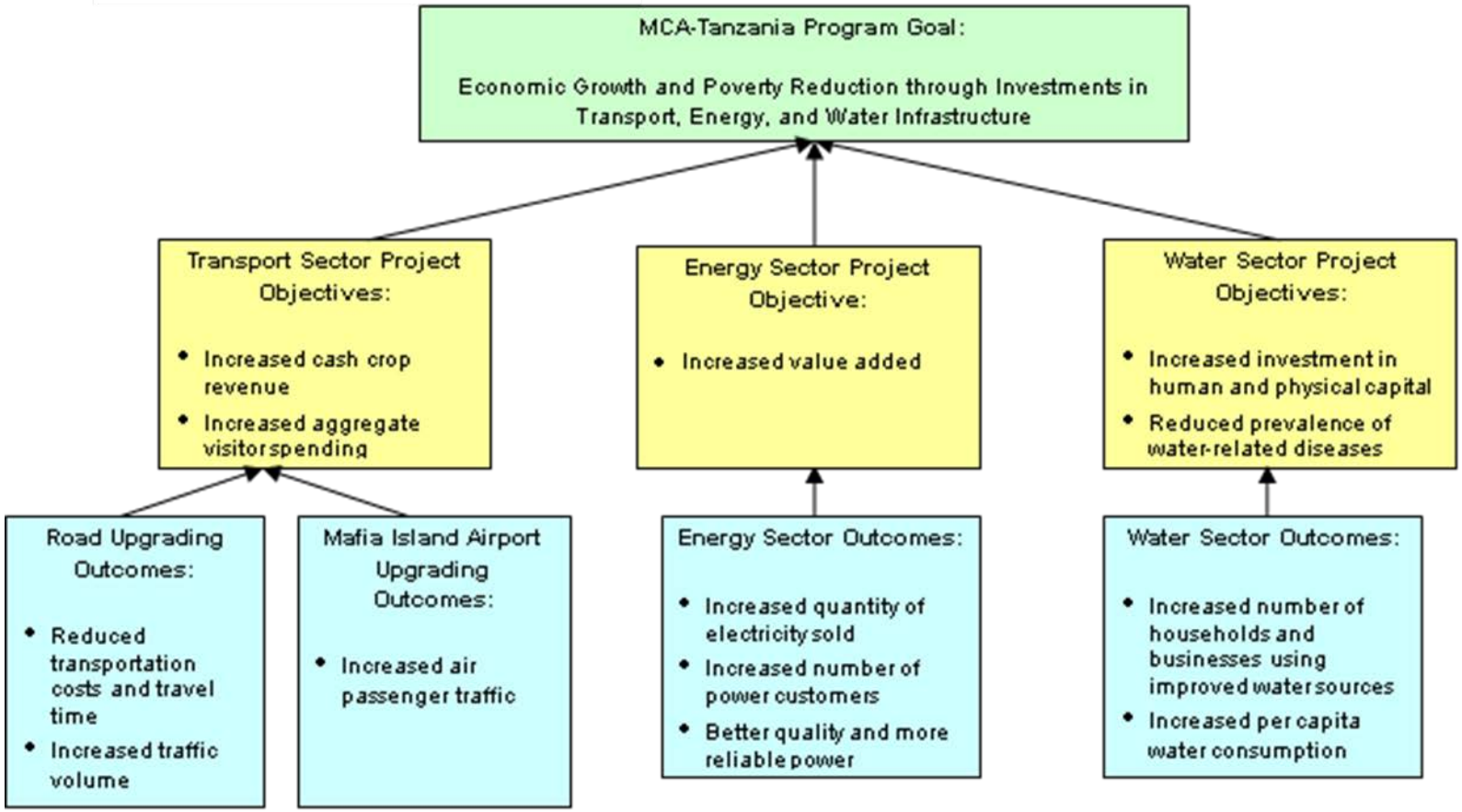
The Compact Goal of the Tanzania Compact is to advance poverty reduction through economic growth in Tanzania through strategic investments in transportation, energy and water infrastructure. The compact logic is illustrated below.

Tanzania, comprised of the Mainland and Zanzibar, is located in East Africa bordering the Indian Ocean and eight nations.[2] Following independence from British colonial rule in 1961, Mainland Tanzania established a democratic government and merged with Zanzibar in 1964 to form the URT. In the 1990s, the policies of the GoT began to shift to market liberalization and reform. This trend has continued and strengthened over the last several years and Tanzania has achieved a high degree of macroeconomic stability. Although a drought in 2006 slowed economic growth, Tanzania continues to be one of Africa's high performers, with real annual GDP growth projected at 7.2% in 2008.[3]

In spite of this macroeconomic stability and 6.4% annual growth, nearly 36% of the Mainland population[4] and 49% of the Zanzibar population[5] live below the national poverty line. In 2007, three key constraints to economic growth and private investment were identified during the Compact due diligence: (i) an inadequate transportation network, (ii) an insufficient and unreliable supply of energy, and (iii) a shortage of potable water. The MCC Compact is designed specifically to address each of these constraints. More detailed Compact information is available on the MCC website – http://www.mcc.gov/pages/countries/program/tanzania-compact.

[1] The Tanzania Compact logic and Specific Project Logics for all the Tanzania Compact are in annex II and III respectively
[2] Tanzania's border countries include Kenya, Uganda, Rwanda, Burundi, Democratic Republic of Congo, Zambia, Malawi, and Mozambique.
[3] Country Report August 2007, The Economist Intelligence Unit. www.eiu.com
[4] Poverty and Human Development Report 2005,GoT Research & Analysis Working Group.
[5] 2004/2005 Household Budget Survey - Zanzibar, GoZ, Office of Chief Government Statistician September 2006.

The Tanzania Compact Logic



2.1.Projected Economic Benefits

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

Project	2007 Base Case ERR (Hurdle = 12.8%)	2007 Estimated Range of ERR	2013 ERR Estimates
Tanga – Horohoro	15%	12-17%	TBD
Tunduma – Sumbawanga	20%	17-23%	TBD
Mtwara Corridor	15%	12-16%	TBD
Pemba Roads	12%	8-15%	TBD
Mafia Island Airport	17%	15-20%	TBD
Tanga T&D	42%	15-58%	TBD
Dodoma T&D	16%	-10-32%	TBD
Morogoro T&D	24%	-5-41%	TBD
Iringa T&D	52%	25-69%	TBD
Mwanza T&D	31%	4-45%	TBD
Mbeya T&D	53%	10-80%	TBD
Zanzibar Interconnector	21%	10-31%	TBD
Kigoma Solar	N/A	N/A	TBD
Dar Lower Ruvu	28%	23-31%	TBD
Morogoro Water	6%	0-8%	TBD

2.1.1. Transport Project

The Transport Project objectives are to (i) increase cash crop revenue through access to improved Mainland trunk and Pemba rural roads and (ii) increase aggregate tourist spending through upgrades to the Mafia Island Airport.

Transport Activities

The activities financed under the Transport Project include:

- **Mainland Trunk Roads**: Upgrading of up to 435 kilometers of trunk roads to bitumen pavement standards for the following road segments: Tanga – Horohoro, Tunduma – Sumbawanga, and Namtumbo – Songea and Peramiho – Mbinga (on Mtwara Corridor);
- **Zanzibar Rural Roads**: Upgrading of up to 35 kilometers of rural roads on Pemba Island
- **Road Maintenance**: funding to improve maintenance management efficiency; and
- **Mafia Island Airport**: Upgrading 1.6 kilometers of Mafia Island Airport.

2.1.1.1. Mainland Trunk Roads, Zanzibar Rural Roads and Road Maintenance

Through the Mainland and Pemba Transport Activities, MCC will finance design, construction and supervision activities for five main road activities. In addition, MCC will finance capacity building and technical assistance activities for the implementing entities, including supply of equipment. The outputs associated with these inputs include 470 kilometers of upgraded roads, improved policy related to road maintenance and budget for road maintenance activities, and temporary employment through construction contracts.

The outcomes expected to be realized through implementing the Roads Project include: an increase in savings in Vehicle Operating Costs as measured by the International Roughness Index; and increase in time savings and Average Daily Traffic (ADT). In addition, the project will monitor trends in Road Traffic Fatalities.

The Road Maintenance Activity, budgeted at approximately $694,000, will provide technical assistance and equipment to TANROADS and Zanzibar Ministry of Infrastructure and Communication (MOIC) to improve the institutions' capacity in road maintenance planning and management. This will include the provision of equipment for measuring road strength and roughness and the establishment of Roads Maintenance Management System software to store data on road assessments. It will also consist of training on maintenance planning and HDM-4 analysis and continued capacity building for MOIC conducted by TANROADS.

The outcomes expected to be realized through the Road Maintenance Activity are: (1) improved capacity within TANROADS to plan and implement asphalt pavement strengthening and overlay projects in a cost effective manner, and (2) improved capacity within MOIC and the Zanzibar Roads Fund Board to effectively plan, fund, and implement road maintenance activities on the Zanzibar road network.

For the ERR analysis of the Roads Projects, MCC estimated two main benefit streams:

1. Increase in economic activity and investment. Improved, all-year access to markets is expected to lead to an increase in revenue from cash crop production. Total cash crop revenue for the "without project scenario" was assumed to be total current cash crop revenue times an adjustment factor (ratio of length of each road to length of total regional trunk road network) times a productivity growth rate of 4% per year. Total cash crop revenue for the "with project scenario" was assumed to be that of the "without project scenario" times a one-time 25% jump in revenue times a 3% annual growth rate times a uniform adjustment factor of 50%. This translates to an expected increase in cash crop revenue between 6-16% over 2007 estimates. Given that the roads may also trigger additional economic activities, either through households living near the roads investing in income generating activities (IGA) or through increase in the number of stand-alone businesses, the project will also monitor these indicators for economic activities.

2. Improved human capital accumulation through improved health and productivity**.** The roads project is also assumed to improve access to health services. This is expected to result

in fewer sick days per year, and conversely, more time spent on productive activities. These benefits are estimated to affect the percentage of the population in the labor force (80%) which is within the zone of influence of the road (43% for mainland roads and 80% for rural roads). For the ERR analysis, these benefits were monetized using an annual increase in estimated adult rural wage due to improved health (rural roads were assumed to lead to a higher benefit in this regard than trunk roads). Estimated adult wage in rural area was calculated by multiplying the regional GDP per capita by 50% (to estimate the share of GDP attributable to wages and scale it to a rural setting).

2.1.1.2. Mafia Island Airport Upgrade

Through the Transport Activities, MCC will also finance design, construction and supervision activities for upgrades to the Mafia Island Airport, focused primarily on upgrading and extending the runway. In addition, MCC will finance capacity building and technical assistance activities for the implementing entity, including supply of equipment and training sessions. The outputs associated with these inputs include an extended, paved runway, and temporary employment through construction contracts.

The ERR analysis for the Mafia Island Airport project assumes that resurfacing the airport's runway and improving other airport facilities will allow for easier and cheaper access to the island, resulting in increased tourist and business travel to and from the mainland. This is expected to translate into more dollars spent in the local economy for tourism-related businesses. In 2008, approximately 8526 passengers arrived at the airport, including a mix of both business and leisure travel. The number of visitors to Mafia Island is estimated to increase by 10% post upgrade and then experience an annual growth rate of 6%. Without the upgrade, there is no expected post-project spike in visitor growth rate and the general annual growth in number of visitors is estimated at 4%, the local growth rate of GDP for Mafia Island. As of 2007, travelers stayed an average of three nights and spent approximately US$100 per night. The increase in visitor nights on Mafia Island is expected to increase annual visitor spending by more than US$900,000 five years after the rehabilitation and upgrade of the airport.

TRANSPORT SECTOR PROJECT LOGIC
Mainland and Pemba Roads

PROCESS		OUTPUTS		OUTCOMES		OBJECTIVES		COMPACT GOAL	
Activities	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**
Finance design activities	**Value of design contract ($)***	Improvements in roads (upgrading)	**Schedule of Performance Ratio (ratio)**	Increase in savings in Vehicle Operating Costs (VOC)	International Roughness Index (m/km)*	Increase in time savings	Average time to market from home (min)	Poverty Reduction and Economic Growth	Average annual household income per capita ($)
	Value disbursed on design contract ($)*		**Percentage of base completed (%)**				Average time to medical facilities from home (min)		
	Certificate for Environmental Impact Assessment (EIA) issued (#)		**Percentage of surfacing completed (%)**						
	RAP approved (#)		**Total km of roads completed (taken over) (km)***						
Finance construction activities	**Value of construction contract ($)***			Increase in traffic volume	Average annual daily traffic (#)*	Increase in investment and economic activities	Average annual cash crop revenue per household ($)		
	Value disbursed for construction contract ($)*						Percentage of households with IGA (%)		
	KM of road under contract (km)*						Number of stand-alone businesses (#)		
Establish partnerships	Wildlife Management Area MoU signed between MCA-T and USAID (Date)	Increased technical and administrative capacity to improve sustainability of road quality	Percent of total maintenance budget spent (%)						
Provide capacity building and technical support	**Value of in-kind equipment for IEs ($)**	Increased temporary employment	**Total number of people temporarily employed/contracted by contractors (#)***	Improved road safety	**Annual road traffic fatalities (#)***	Improve human capital accumulation	Average hours worked in the last week (hrs)		
							Percentage of school children who missed any in the last 4 weeks (%)		

TRANSPORT SECTOR PROJECT LOGIC
Mafia Island Airport

PROCESS		OUTPUTS		OUTCOMES		OBJECTIVES		COMPACT GOAL	
Activities	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**
Finance design and supervision activities	**Value of design and supervision contract ($)***	Improvement in airport	**Percentage of runway surfacing complete (%)**	Increase in travel	Total annual passenger arrivals - dry season (#)	Increase in investment and economic activities	Annual aggregate visitor spending - dry season ($)	Poverty Reduction and Economic Growth	Average annual household income per capita ($)
	Value disbursed on design and supervision contract ($)*						Annual aggregate visitor spending - wet season ($)		
	Certificate for Environmental Impact Assessment (EIA) issued (#)								
Finance construction activities	**Value of construction contract ($)***	Increased temporary employment	**Total number of people temporarily employed/contracted by contractors (#)***		Total annual passenger arrivals - wet season (#)		Percentage of households with IGA (%)		
	Value disbursed for construction contract ($)*						Number of stand-alone businesses (#)		
Provide capacity building and technical support	**Value of in-kind equipment for IEs ($)**								

2.1.2. Energy Project

The Energy Project objectives are: (1) to increase value added to businesses, as measured through increases in business revenue, wages and reductions in non-electricity energy expenditures; and (2) to improve human capital accumulation as measured through improved health and education indicators.

Energy Activities

The activities financed under the Energy Project include:

- **Distribution Systems Rehabilitation and Extension:** rehabilitating existing distribution infrastructure (including new transformers and switchgear for an estimated 22 substations), and extending distribution line to underserved areas in Mwanza, Tanga, Morogoro, Iringa, Dodoma, and Mbeya regions. The Kigoma region was added following the cancellation of the Malagarasi Hydropower project.
- **Zanzibar Cable Interconnector:** laying of an approximately 40 km long, 132kV, 100MW capacity submarine electric transmission cable from the mainland to Unguja Island, Zanzibar; and
- **Kigoma Solar:** the design, supply, delivery, installation, testing, commissioning, and handing-over of fully operational solar PV systems for selected secondary schools, health facilities, markets, and fishing communities for night fishing. In addition, a commercially-oriented solar program is expected to increase the number of households and businesses purchasing PV systems and using solar power in the Kigoma region.

Note: A previous activity, the Malagarasi Hydropower and Kigoma Distribution project, was canceled after due diligence found that the project posed high environmental risks. In place of this activity, a feasibility study on the hydropower project was conducted, the Kigoma Solar activity was developed for implementation, and Kigoma region was added to the Distribution activity.

2.1.2.1. Mainland Distribution Systems, Rehabilitation and Extension

Through the Energy Activities, MCC will finance the design, construction and supervision activities for transmission and distribution (T&D) investments in seven regions. In addition, MCC will finance capacity building and technical assistance activities for the implementing entities, including supply of equipment and training sessions for implementing entity. The outputs associated with these inputs include over 1,300 kilometers of 33/11 KV lines constructed, 1,779 kilometers of LV lines constructed, increase in the grid and primary substation capacity, improved policy-related financial sustainability of the utilities, temporary employment through construction contracts, as well as training sessions for implementing entities.

The outcomes expected to be realized from the T&D Project include: an increase in the number of domestic, commercial and industrial customers; improvements in the quality of service delivered

as measured by reductions in duration and frequency of power outages[6]; increases in the quantity of electricity sold, and reductions in the consumption of other energy sources, such as kerosene and diesel.

For the ERR analysis of the T&D activity, MCC estimates several different benefit streams:

1. Increased investment and economic activity. The provision of additional supplies of energy should increase investment and economic activity in the targeted regions. The basis for the analysis here is Calderon and Serven, (2005), and we will monitor changes in business revenue, total annual wages and total business expenditures on energy and protective equipment.

2. Power quality improvements reducing costs associated with protective equipment and damages

3. Accumulation in human capital from improvement in health status. The main social benefits arise from improvements in education and health. According to the World Bank, Indoor Air Pollution (IAP) is a major risk factor, accounting for 4 percent of the global burden of disease measured by disability adjusted life years (DALYs) lost. It is caused by the use of low-cost, widely available traditional energy sources such as coal and bio-mass (wood, dung, and crop residues) for cooking and home heating. Use of solid fuels, biomass or coal causes respiratory and other illnesses. It also has implications for household safety (burns and disfiguration, fire), allocation and use of the time of household members, especially women, and local ecology (hygiene, fire hazards, ambient air pollution, etc.)[7].

4. Accumulation in human capital from increase in schooling. It is anticipated that children enrolled in school will be able to study longer as electricity provides lighting.

It is unclear if these benefits are more likely to accrue as a result of direct household connection or spillover effects from community-level access to electricity. The impact evaluation for the energy T&D project will attempt to address these questions. In addition, although the investment is not intended to directly affect technical and non-technical losses, this will be monitored under the project, as this is a link between the outputs produced (increase in electricity distribution and substation capacity), the expected improvements in outcomes (improve quality of service and increase electricity consumption), and the benefits expected to accrue at the population level. If technical and non-technical losses remain high, the amount and quality of electricity reaching the population will face continued constraints.

2.1.2.2. Zanzibar Cable Interconnector

[6] Due to the fact that data on the number of customers affected per outage is not collected by the implementing entity, the computation of SAIFI and SAIDI (frequency and duration per customer) is not possible.

[7] Reference World Bank Indoor Air Pollution site: http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONANDPOPULATION/EXTPHAAG/0,,contentMDK:20758028~menuPK:1445786~pagePK:64229817~piPK:64229743~theSitePK:672263,00.html#Why.

Through the Energy Activities, MCC will finance the design, construction and supervision activities for laying a 40km cable from mainland to Zanzibar's Unguja Island. In addition, MCC will finance capacity building and technical assistance activities for the implementing entities, including supply of equipment and training sessions. The outputs associated with these inputs include 65 kilometers of 132 kV lines constructed (submarine cable and T&D lines), increase in the transmission and distribution substation capacity, improved policy-related financial sustainability of the utilities, temporary employment through construction contracts, as well as training sessions for implementing entities.

The outcomes expected to be realized from the Zanzibar Project include: an increase in the number of domestic, commercial and industrial customers; improvements in the quality of service delivered as measured by reductions in duration and frequency of power outages; increases in the quantity of electricity sold and reductions in the consumption of other energy sources, such as kerosene and diesel.

The ERR analysis of the Zanzibar Interconnector is very similar to the T&D analysis. MCC estimates three different benefit streams:

1. Increased investment and economic activity -The provision of additional supplies of energy should increase investment and economic activity in the affected regions. The basis for the analysis here is Calderon and Serven (2005), and we will monitor changes in business revenue, total annual wages and total business expenditures on energy and protective equipment.

2. Power quality improvements reducing costs associated with protective equipment and damages

3. Accumulation in human capital through increase in education and improvement in health status. There are also potential social and environmental benefits arising from providing more electricity in addition to the economic benefits. The main social benefits arise from improvements in education and health, including health benefits related to avoiding emissions from diesel and kerosene use. These social benefits are primarily associated with smaller domestic customers, where the replacement energy is non-electric and there is a closer link to health and education. It is unclear if these benefits are more likely to accrue as a result of direct household connection or spillover effects from community level access to electricity. The impact evaluation for the Mainland T&D project will help to address these questions.

In addition, although the investment is not intended to directly affect technical and non-technical losses, this will be monitored under the project, as this is a direct link between the outputs produced and the expected improvements in outcomes and objective indicators.

The evaluation focuses primarily on the hotel industry on Unguja Island as this is the largest industry and the one expected to maximize benefits from improvements in access and quality of electricity. However, the monitoring activities will look at outcomes for the Unguja Island as a whole.

2.1.2.3. Kigoma Solar

Through the Energy Activities, MCC will finance the design, construction and supervision activities for installing solar systems in secondary schools, health facilities, markets and fishing communities. In addition, MCC will finance capacity building and technical assistance activities, specifically training sessions for end users of the solar energy installations. The outputs associated with these inputs include the number and capacity of systems installed, as measured by kilowatts per hours, as well as hours of training sessions for households.

The outcomes expected to be realized from the Kigoma Solar Project include: an increase in the number of customers served by solar power installations; improvements in the quality of electricity service delivered as measured by duration of power availability; increases in the quantity of solar electricity sold, reductions in non-solar electricity consumption, and reductions in the consumption of other energy sources, such as kerosene and diesel.

Similar to the main Energy projects, the Kigoma Solar project is also intended to increase economic activity and investment, and improve human capital accumulation in order to contribute to poverty reduction and economic growth.

Since the Kigoma Solar Activity was developed mid-Compact as a replacement for the canceled Malagarasi Hydropower and Kigoma Distribution project, its ERR analysis does not yet exist, but is expected close to the Compact End Date[8].

[8] MCC Economist to calculate ERR using data from Kigoma Solar Evaluation

ENERGY SECTOR PROJECT LOGIC

Mainland Transmission and Distribution

PROCESS		OUTPUTS		OUTCOMES		OBJECTIVES		COMPACT GOAL	
Activities	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**
Finance feasibility activities	RAP approved (#)	Increase electricity distribution and substation capacity	**Total kilometers of 33 and 11 KV constructed (km)**	Improve electricity service coverage	**Number of current domestic power customers (household) (#)**	Increase investment and economic activities	Average annual business revenue ($)	Poverty Reduction and Economic Growth	Average annual household income per capita ($)
	Certificate for Environmental Impact Assessment (EIA) issued (Date)		**Total kilometers of LV lines constructed (km)**		**Number of current commercial power customers (#)**		Average annual wages ($)		
	Environmental and Social Management Plan approved (Date)		**Total transmission and distribution substation capacity (MVA)**		**Number of current industrial power customers (#)**		Average annual expenditure on energy ($)		
Finance design and supervision activities	**Value of feasibility, preliminary design and supervision contracts ($)**								
	Value disbursed of feasibility, preliminary design and supervision contract ($)								
Finance construction activities	**Value of design and build construction contract ($)**	Improve financial sustainability	**Cost Recovery Ratio (ratio)**	Improve quality of service	**Technical and non-technical losses (%)**	Improve human capital accumulation	Percentage of population with indoor air pollution related illness (%)		
	Value disbursed of design and build construction contract ($)		**Collection Efficiency (%)**		**SAIDI proxy - average duration of blackouts (hrs)**				
Provide capacity building and technical support	**Value of in-kind equipment ($)**	Increased temporary employment	**Total number of people temporarily employed/contracted by contractors (#)**		**SAIFI proxy - average frequency of blackouts (#)**				
					Average availability of power per day (hrs)		Average hours spent studying last week for all children enrolled in school (hours)		
		Increase in technical and administrative capacity	**Total hours of training delivered to implementing entities (hrs)**	Increase electricity consumption	**Total quantity of electricity sold (MWh/year)**				
					Average annual quantity of other energy sources (kerosene, diesel) consumed (varies)				

Bolded text refers to Indicator Tracking Table (ITT) Indicators which will be reported on a *quarterly* basis. All other indicators will be reported on as data is available.

ENERGY SECTOR PROJECT LOGIC
Zanzibar Cable

PROCESS		OUTPUTS		OUTCOMES		OBJECTIVES		COMPACT GOAL	
Activities	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**
Finance feasibility activities	RAP approved (#)	Increase electricity distribution and substation capacity	**Total km of 132 KV constructed (km)**	Improve electricity service coverage	**Number of current domestic power customers (household) (#)**	Increase investment and economic activities	Average annual business revenue ($)	Poverty Reduction and Economic Growth	Average annual household income per capita ($)
	Certificate for Environmental Impact Assessment (EIA) issued (Date)				**Number of current commercial power customers (#)**		Average annual wages ($)		
	Environmental and Social Management Plan approved (Date)		**Total transmission and distribution substation capacity (MVA)**		**Number of current industrial power customers (#)**		Average annual expenditure on energy ($)		
Finance design and supervision activities	**Value of feasibility, preliminary design and supervision contracts ($)**								
	Value disbursed of feasibility, preliminary design and supervision contract ($)								
Finance construction activities	**Value of design and build construction contract ($)**	Improve financial sustainability	**Cost Recovery Ratio (ratio)**	Improve quality of service	**Technical and non-technical losses (%)**	Improve human capital accumulation	Average number of employees per hotel (#)		
	Value disbursed of design and build construction contract ($)		**Collection Efficiency (%)**		**SAIDI proxy - average duration of blackouts (hrs)**				
Provide capacity building and technical support	**Value of in-kind equipment ($)**	Increased temporary employment	**Total number of people temporarily employed/contracted by contractors (#)**		**SAIFI proxy - average frequency of blackouts (#)**				
					Average availability of power per day (hrs)				
		Increase in technical and administrative capacity	**Total hours of training delivered to implementing entities (hrs)**	Increase electricity consumption	**Total quantity of electricity sold (MWh/year)**				
					Average annual quantity of other energy sources (kerosene, diesel) consumed (varies)				

Bolded text refers to Indicator Tracking Table (ITT) Indicators which will be reported on a *quarterly* basis. All other indicators will be reported on as data is available.

ENERGY SECTOR PROJECT LOGIC
Kigoma Solar

PROCESS		OUTPUTS		OUTCOMES		OBJECTIVES		COMPACT GOAL	
Activities	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**
Finance feasibility, design activities	**Value of feasibility contracts ($)**	Increase access to electricity	**Total capacity of systems installed (kWp)**	Improve electricity service coverage	**Number of PV systems sold and installed at household**	Increase investment and economic activities	Average annual business revenue ($)	Poverty Reduction and Economic Growth	Average annual household income per capita ($)
	Value disbursed of feasibility contracts ($)		**Number of PV systems installed (#)**		**Daily solar power consumption**		Average annual wages ($)		
Finance construction (implementation) activities	**Value of construction contracts ($)**	Increase in technical and administrative capacity	**Total hours of training delivered to end users (#)**	Improve quality of service	Average availability of power in the last 24 hours	Improve human capital accumulation	Average annual expenditure on energy ($)		
	Value disbursed of construction contract ($)			Increase electricity consumption	Average annual quantity of other energy sources (batteries, kerosene, diesel) consumed (varies)		Schools with afterhours study programs (#)		
							Availability of vaccines (#)		

Bolded text refers to Indicator Tracking Table (ITT) Indicators which will be reported on a *quarterly* basis. All other indicators will be reported on as data is available.

2.1.3. Water Project

The Water Project objective is to increase investment in human and physical capital and reduce prevalence of water-related diseases.

Water Activities

The activities financed under the Water Project include:

- **Lower Ruvu Plant Expansion**: expanding the capacity of the Lower Ruvu water treatment plant serving the Dar es Salaam area, from about 180 million liters per day (MLD) to approximately 270 MLD;
- **Morogoro Water Supply**: improving water supply in Morogoro through rebuilding the non-functioning Mambogo water treatment plant, rehabilitating the Mafiga water treatment plant, and improving water transfer in the existing distribution network. The overall interventions will increase the production of treated water from the baseline 23 million liters of untreated or partially treated water per day to 33 million liters of treated water per day (19 MLD to 27 MLD at Mafiga and 4 to 6 MLD from Mambogo). Note that the Mambogo system had been supplying 4 MLD of untreated water.

2.1.3.1. Lower Ruvu and Morogoro Water Supply

Through the Water Activities, MCC will finance the design, construction and supervision activities for expanding water treatment plants in order to increase the volume of treated water produced. In addition, MCC will finance the capacity building and technical assistance activities, specifically targeting the utilities' billing and collections activities. The anticipated outputs associated with these inputs include increasing the volume of water produced, improved financial sustainability of the utility companies, and increase in temporary employment under construction activities.

The outcomes expected to be realized from the Water Activities include: an increase in the number of domestic and non-domestic customers, as well as a decrease in the ratio of non-active customers to total customers. Non-active customers are defined as customers who are currently connected to the line and willing to pay for water, but currently not receiving water. With the increase in water volume produced, the Activity will try to increase the water service area to reach customers who are already connected to the line. Although the Activity will not finance direct connections, it is also possible that more people will connect if the supply area is larger and supply is more reliable. In addition, the Activity is expected to produce improvements in the quality of service delivered as measured by average hours of service and the quality of water as measured by Nephelometric Turbidity Units (NTU), Coliform Microbial Density (per 100 milliliters), and Free Chlorine Residual. Although the Lower Ruvu Activity does not include a water quality improvement component, the Morogoro Activity does include improving the water treatment at source. Even though Lower Ruvu project does not invest directly in improving water quality, the investment will result in a higher quantity of *treated* water provided to Dar es Salaam, which supports the important link between the increase water supply and expected improvements in health status

described below. Finally, the Activity is expected to increase the volume of water consumed both by commercial, non-commercial (schools, hospitals) and residential users.

For the ERR analysis of the Water Project, MCC identifies four benefit streams:

1. Decrease in prevalence of water-related illness. The investment is expected to increase the volume of clean water supplied, thereby reducing the prevalence of water-related diseases, such as cholera.

2. Improved human capital accumulation. As household members become healthier and see reductions in morbidity, we expect to see increase in labor market participation and schooling as individuals are healthier and spend less time taking care of sick relatives.

3. Increased household investment. Reductions in mortality lead households to increase investment in physical capital.

4. Increased business investment and economic activity. Businesses have more access to reliable water, which implies that they can make better investment decisions.

WATER SECTOR PROJECT LOGIC

Lower Ruvu Plant Expansion and Morogoro Water Supply

PROCESS		OUTPUTS		OUTCOMES		SHORT-TERM OBJECTIVES		MEDIUM-TERM OBJECTIVES		COMPACT GOAL	
Activities	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**	**Result**	**Indicators**
Finance feasibility, design activities	**Value of feasibility/design contract ($)***	Improve treatment plants	**Schedule of Performance Ratio (ratio)**	Improve water service coverage	**Number of non-domestic customers (#)***	Decrease incidence of water-borne related morbidity	Percentage of population with diarrhea in the last 2 weeks (%)	Decrease in mortality	National level <5 mortality rate (per 1000 births)	Poverty Reduction and Economic Growth	Average annual household income per capita ($)
	Value of feasibility/design contract disbursed ($)*	Increase water production	**Volume of water produced (liters/capita/day)***		**Number of domestic customers (#)***				National level Adult mortality rate (per 1000)		
	Certificate for Environmental Impact Assessment (EIA) issued (Date)	Reduce water losses	**Non-revenue water (%)***		**Percentage of non-active customers to total customers (%)**						
Finance construction activities	**Value of construction contract ($)***	Improve financial sustainability	**Operating Cost Coverage (ratio)***		Percentage of households with access to improved water supply (%)	Improve human capital accumulation	Average hours worked last week (hours)	Increase investment and economic activities	Average current value of household assets per capita ($)		
	Value of construction contract disbursed ($)*			Improve quality of service	**Continuity of service (hours/day)***		Percentage of school children who missed any in the last 4 weeks (%)				
				Improve quality of water	**Nephelometric turbidity units (NTU)**						
					Coliform Microbial Density (per 100 milliliters)						
					Free Chlorine Residual (FRC)						
		Increase temporary employment	**Total number of people temporarily employed/contracted by MCA-IEs (#)***	Increase water consumption	**Volume of commercial water consumption (cubic meters per month)***		Average time spent fetching water from home in last week (min)		Average Net Business Income (Profit) ($)		
					Volume of residential water consumption (liters/capita/day)*						

2.2.Program Beneficiaries

The estimated total number of beneficiaries for the Compact covers 2008-2027 and is the sum of beneficiaries of each of the activities, except in the case where there are two activities in the same region. Therefore, total beneficiaries exclude energy beneficiaries in Tanga, Morogoro and Mbeya to avoid possible double-counting with the Transport and Water projects in these areas.

TABLE 4: TOTAL BENEFICIARIES

Activity	Estimated number of Beneficiaries by 2027[9]
Tanga-Horohoro	397,946
Tunduma-Sumbawanga	587,360
Mtwara Corridor	456,007
Pemba Rural Roads	109,421
Mafia Island Airport	73,819
Tanga T&D	194,087
Dodoma T&D	127,356
Morogoro T&D	191,585
Iringa T&D	115,453
Mwanza T&D	274,959
Mbeya T&D	180,222
Zanzibar Interconnector	400,313
Kigoma Solar	N/A
Dar Lower Ruvu	2,585,897
Morogoro Water	215,959
Total	5,425,000

- The anticipated beneficiaries of the Transport Project were identified in feasibility reports as the population of the towns through which the roads would pass, as well as the population of Mafia Island.

- Beneficiaries for the energy sector are estimated as the sum of existing and new customers by 2027. Customers include residential and industrial and commercial connections. Given the re-scoping and removal of the Malagarasi Hydropower project and addition of the Kigoma Solar project, the final beneficiary numbers will not be known until an estimate of the number of beneficiaries under the Kigoma Solar project is available.

- Beneficiaries are estimated as the sum of existing and new customers by 2027. Customers include residential and industrial and commercial connections.

[9] Timothy to adjust if required

3. MONITORING COMPONENT

3.1. 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. The post-Compact indicators will be reported on by MoF-PED and the various Evaluators. The responsible party for each indicator is noted in Annex I. Indicators for which the responsible party is noted as "Evaluator" will be the responsibility of the independent evaluator hired by MCC and will be reported on in the final reports for each evaluation. All other indicators will be reported on by MoF-PED in the post-Compact Indicator Tracking Table (ITT). The ITT indicators are clearly noted in Annex I under the Frequency of Reporting column. The frequency of reporting for ITT indicators will follow the reporting schedule in Table 1 below, unless otherwise noted.

3.2. Data Quality Reviews

The MoF-PED, will be responsible for ensuring the data quality of any data reported by the IEs 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 GoT, at MCC's discretion.

3.3. Standard Reporting Requirements

The MoF-PED will be responsible for submitting periodic ITTs with an accompanying summary report to MCC. These reports should be submitted to MCC via email to the designated MCC M&E Counterpart with the subject line "Tanzania Post-Compact Reporting" and the dates of report coverage.

The periodic reports will contain the ITT and a narrative describing the performance of indicators for the reported quarter. The frequency of reporting is summarized in Table 1 below:

Table 1: Reporting Schedule

Reporting Quarter	Report Due Date	Responsible Party
Q21(Oct – Dec 2013)	Feb 15, 2014	MCA-T & MoF-PED
Q22 (Jan – Mar 2014)	May 15, 2014	MCA-T & MoF-PED
Q23 (Apr – Jun 2014)	Aug 15, 2014	MoF-PED
Q24 & 25 (Jul – Dec 2014)	Feb 15, 2015	MoF-PED
2015	Feb 15, 2016	MoF-PED
2016	Feb 15, 2017	MoF-PED

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

- A summary of any Post Compact activities undertaken by GoT. 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 GoT or other donors.
- A Post Compact Indicator Tracking Table (ITT) that includes all of the indicators included in Annex I of the plan for the preceding reporting period (see schedule)that are not the responsibility of the Evaluator. The Post Compact ITT will have the same format as the Compact ITT.
- Graphs plotting the trends in indicators since Q1 of the Compact and accompanying analysis of the trends

MoF is requested to collect semi-annual customer connections reports from TANESCO that are current as of December 2013, June 2014, and December 2014. More detail is provided in Section 4.2.2.2 (T&D Evaluation) and the data template is provided in Annex IV. MCC may also request additional reports as deemed necessary by the MCC country team.

4. EVALUATION COMPONENT

4.1. 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.

4.2. Performance and Impact Evaluations

In order to determine the extent to which the Tanzania Compact has contributed to economic growth and poverty reduction, performance and impact evaluations of sub-activities will be carried out by independent evaluators.

A **Performance Evaluation** is a study that starts with descriptive questions, such as: what were the objectives of a particular project or program, what was achieved; how was it implemented; how was it perceived and valued; whether expected results are occurring and are sustainable; and other questions that are pertinent to program design, management and operational decision making. MCC's performance evaluations also address questions of program impact and cost-effectiveness. However, a performance evaluation typically lacks the ability to estimate the causal impacts on outcomes that are attributable to the sub-project.

An **Impact Evaluation** is a study that measures the changes in income and/or other aspects of well-being that are *attributable* to a defined intervention. Impact evaluations require a credible and rigorously defined counterfactual, which estimates what would have happened to the beneficiaries absent the project. Estimated impacts, when weighed with total related costs, provide an assessment of the intervention's cost-effectiveness.

MCA-T balances the expected accountability and learning benefits with the evaluation costs to determine what type of evaluation approach is appropriate. Impact evaluations are performed when their costs are warranted by the expected accountability and learning. MCA-T will follow any MCC specific guidelines and standards for the selection, preparation, review and dissemination of performance and impact evaluations.

Each of the three Compact Projects, as well as the Gender Integration Program training, is being evaluated. Figure 1 provides a summary of all the MCA-T performance and impact evaluations planned as of May 2013.

Details regarding the specific program evaluations are provided below.

Figure 1: Summary of Tanzania Compact Evaluation Activities

Evaluations by Sector	EVALUATOR	METHODOLOGY					BASELINE			FOLLOW-UP	IMPACT
		Classification	Design	Method(s)	Population	Sample Size	Survey Firm	Data Collection Dates	Report	Data collection Dates	Report
Transport											
(i) Mainland Trunk Roads	EDI (baseline); NORC (since 2012)	Performance	HDM-IV	Quantitative; Qualitative	Baseline: Community	200 sub-villages	EDI	Mar-May 2009	Nov-09	TBD	TBD
(ii) Pemba Roads		Impact	PSM-DID	Quantitative; Qualitative	Baseline: Community; Household	80 villages		Jun-Aug 2009		TBD	TBD
(iii) Mafia Island	Individual Consultant (Abel Busalama)	Performance	Before/after	Quantitative; Qualitative	Hotel Managers; Hotel Guests; Arriving Passengers; Village Leaders; FGDs; Individuals	16; 473; 770; 21; 3 male, 3 female; 60	Individual Consultant (Abel Busalama)	Feb-Jun 2012	Dec-12	2015	2015
Energy											
(i) Zanzibar Cable and T&D	MPR	Performance	Before/after	Quantitative; Qualitative	Hotels	30 hotels	MPR	Jun-Aug 2010	Mar-11	2014	2015
(ii) Mainland T&D		Impact	PSM-DID	Quantitative; Qualitative	Tanga enterprise; Household	356 sub-villages	NRECA	August-November 2011	Dec-12	2015	2016
(iii) Mainland Customer Connection Financing Scheme (CCFS)		Impact (part of Mainland T&D Evaluation)	RCT	Quantitative; Qualitative	Household	28 Communities (from T&D Baseline sample)	NRECA	August-November 2011	Dec-12	2015	2016

(iv) Kigoma Solar	Individual Consultant (Abel Busalama)	Performance	Before/after	Qualitative	Village markets; Village market businesses; Schools; Health centers; Dispensaries; Beach Management Units; Fishermen; SACCOS; HH; Businesses; FGDs	10; 10; 14; 10; 18; 6; 12; 4; 24; 24; 8	Individual Consultant (Abel Busalama)	May - August 2013	Sep-13	2015	2016
Water											
(i) Lower Ruvu and Morogoro	Social Impact	Impact	PSM-DID	Quantitative; Qualitative	Community; Households	628; 5,000	EDI	April - October 2013	Dec-13	2015	2016
Cross-Cutting											
Skill Based Groups and Gender Focal Point (SBG-GIP) Study	Individual Consultant (Stella Manda)	Performance	Before/after	Quantitative; Qualitative	GFPs; SBGs; SBG Leaders; SBG Members	21; 43; 41; 157	Individual Consultant (Stella Manda)	April - June 2013	TBD	N/A	N/A

4.2.1. Transport Sector Project

4.2.1.1. Mainland Trunk Roads and Pemba Rural Roads

Below is a brief summary of the evaluation strategy for the Mainland and Pemba Roads Project.

Research Questions. The impact evaluation of the Mainland and Pemba Roads Projects will seek to answer the following research questions:

- Do the roads upgrading and rehabilitation reduce transport costs and travel times to markets and health facilities?
- Does a reduction in transport costs and travel times lead to increased access to and utilization of markets and economic activity in towns/villages near a road? Does it lead to increased household cash crop revenue?
- Does the reduction in transport costs and travel times lead to increased health care utilization and reductions in days sick? Do household members increase their productivity either in household or labor activities as a result?
- Was the Project cost effective, analyzed through re-estimated economic rates of return, comparisons to original estimates, and assessment of differences?

In addressing the key questions above, the evaluation will also address:

- Differences in impact of the program, by gender, age, and income, when practicable.
- Unintended results of the program (positive and negative);
- Lessons learned applicable to other similar Projects

Original Evaluation Design: Given the possibility of estimating a counterfactual during the design phase in 2008, the MCA-T invested in an *impact evaluation* of the Mainland and Pemba Roads Project; A final design report was submitted and an Impact evaluation was recommended for both the mainland trunk roads and Pemba rural roads.

Originally, EDI proposed a combination of propensity score matching and difference-in-differences regression to evaluate the impact of the rehabilitation of the roads on the socioeconomic development of the communities along the roads. Combining propensity score matching and difference in differences regression can be used to reduce biases that can undermine the validity of non-experimental causal studies.

The general idea was to match the communities along the roads scheduled for upgrades (the treatment communities) with other communities that had similar characteristics but would not benefit from the road upgrades (the comparison communities). On the Mainland, similar control roads that would not be upgraded were identified and communities along those roads were matched to the sample communities along the treatment roads. On Pemba, no viable control roads could be identified, and therefore treatment communities were matched to comparison communities in the same part of the island that were farther away from the project roads. Matching should typically result in two comparable groups of communities: one group that is situated along the roads and will receive the benefits of road upgrades, and another group that will not. EDI collected pre-treatment data in 2009 and expected to collect post-treatment data in 2014. If the difference between the post-treatment and pre-treatment

value of an outcome variable were different for the treatment group than for the comparison group, this difference could have been attributed to the road upgrades (since both groups were similar before treatment thanks to matching, then differences between the two would most likely be a result of the treatment).

Results of Baseline Data Collection. The baseline analysis demonstrated that treatment and comparison communities for the Mainland sample were comparable in terms of welfare indicators (literacy, poverty headcount, land size), access to key infrastructure (markets, roads and schools), and road quality. Notable differences between the treatment and comparison *vitongoji* (sub-units of villages) were the traffic volume on their roads (higher for the treatment roads) and the time it took to travel to the District Capital using public transport (higher for the comparison *vitongoji*). Using propensity score matching to get a balanced and comparable sample of treatment and comparison *vitongoji*, the final sample consisted of 100 treatment and 99 comparison *vitongoji* (one comparison *vitongoji* had to be dropped due to its unique nature).

For the Pemba sample, treatment villages seemed better-off, as evidenced by higher literacy rates, higher consumption expenditures and a lower incidence of poverty (poverty headcount of 20.8% in treatment villages vs. 36.8% in comparison villages). More treatment villages had a daily market and people from the treatment villages had less distance to walk to reach a bus stop. Propensity Score Matching resulted in a balanced sample of 38 treatment and 26 comparison villages.

Risks to Evaluation Design. As of December 2011, the MCA-T completed its first initial Data Quality Review, led by IDEA International. The DQR flagged the following risks and, when possible, suggested ways to improve the Mainland and Pemba roads impact evaluation design:

- *Counterfactual*. The comparison road in the Tanga region is not suitable as a counterfactual. Tanga – Horohoro is a Trunk road, while the comparison road is the Mabokweni – Bombomtoni that is perpendicular and does not have the same potential for growth as it does not lead to the Kenya border. In addition, Mabokweni village is losing benefits as a consequence of a redesign of the treated road, which is now 800 m farther away. This also raises concerns about the validity of other selected counterfactual roads and communities.
- *Survey Design*. There is a need to review the surveys and ensure linkage between data collection and data required for the M&E plan. The EDI baseline questionnaire considers only the 3 main cash crops. There were also inconsistencies in the questionnaire for the reference period used for crops sales, with some questions asking for the last year and others the last harvest. In addition, there are no questions in the survey questionnaire on prices and quantities of cash crops sold which limits the estimate to self-reported total revenue per crop. The follow-up questionnaire should be adjusted for the last survey round to estimate total cash crop production and selling price in order to increase accuracy.
- *Qualitative Data*. The use of qualitative data collection tools during the final survey round, i.e., adding qualitative questions on the perception in improvements in socio-economic conditions of households due to the roads project, could provide complementary information useful to the evaluation of the project.

With these limitations, MCA-T reclassified the evaluation as a *performance evaluation* following the 2011 DQR, which indicated that roads that were identified as the control were

no longer viable comparisons. In 2012, MCC contracted NORC to redesign the evaluation, with an attempt to identify a feasible quasi-experimental impact evaluation methodology and to use the EDI data as a baseline to the extent possible.

NORC visited both treatment and control roads and communities associated with the Tunduma-Sumbawanga, Mtwara Corridor, and Pemba roads during their study design trip in February 2013 and found that comparison communities were experiencing benefits related to the treatment road upgrades. These findings clearly indicated that the original EDI evaluation design would not be feasible.

Revised Evaluation Design:
Given that communities along the upgraded roads are already experiencing benefits prior to the final completion of the roads (another finding of NORC's field visit) it is not possible to collect new baseline data that would mitigate some of the weaknesses identified in the EDI baseline. The baseline household surveys for Mainland and Pemba roads were different, with the latter being more comprehensive, therefore different evaluation strategies have been developed for the two roads activities.

Mainland Trunk Roads: The EDI baseline household survey did not include some of the key outcomes of interest for an impact evaluation, therefore NORC explored alternative options for modeling roads benefits. The revised evaluation plan is to conduct a new HDM-4 analysis of the mainland roads based on current traffic counts and road conditions. This analysis is expected to be conducted by MCC between 2014 and 2015. The Mainland Trunk Roads evaluation is now classified as a Performance Evaluation.

Pemba Rural Roads: NORC has proposed a continuous treatment design to evaluate the Pemba rural roads; this is an Impact Evaluation. The detailed evaluation design is under development. Evidence from other roads studies indicates that benefits take longer to accrue from rural roads projects, therefore the timing of follow-up data collection is still under discussion. The Pemba roads are expected to be completed in early 2014 and the timing of follow-up data collection will also depend on the final completion date. MCC is interested in tracking traffic volume on the rural roads in order to ascertain the ideal time for data collection.

4.2.1.2. Road Traffic County Survey (RTCS) (Mainland Roads)

The main activity of the RTCS is to measure the average daily traffic count on the upgraded project roads. The data obtained through this survey will be used to estimate values of some of the indicators to measure the expected outcomes of the MCC investments in the Mainland Trunk Roads activity. It was implemented between end of -May and end of September 16, 2013.

The broad objective of the RTCS is to establish the current values of indicators related to road use, costs and travel time on the roads funded by the MCC; i.e. easy access to markets, schools and health facilities; reduction of travel time and cost, and vehicle maintenance costs. The RTCS aims at answering the following questions:

i. What is the current volume of traffic on the roads that have been or are in the process of being constructed / rehabilitated?

ii. What types of vehicles (using international classification standards), are mostly using the constructed / rehabilitated roads?
iii. What is the current on travel time and road user cost between strategic points on the roads included in the project?
iv. What are current vehicle maintenance costs for vehicles that are regularly driven on these roads?
v. What is the level of small enterprise that has developed along the roads since works began: number and type of enterprises?

The specific objectives of the RTCS, therefore, are:

i. Estimate the Average Annual daily traffic (AADT) on each of the new roads under MCA-T transport sector covered in this study;
ii. Assess the types of vehicles that use the roads rehabilitated / constructed using MCC funding
iii. Estimate the travel time and road user cost between the two ends of each road and between selected strategic locations linked to the new roads;
iv. Estimate the average monthly maintenance costs for different categories of vehicles that regularly travel on the roads constructed / rehabilitated using MCC funding.
v. Estimate the number and type of small enterprises along the roads.

The RTCS covers three Mainland Trunk Roads: Tanga-Horohoro, Namtumbo-Songea, and Peramiho-Mbinga. Tunduma-Sumbawanga and the Pemba rural roads were still under construction at the time of the survey. The survey includes the enumeration of vehicles, recording of registration numbers, and interviewing of randomly selected drivers and passengers traveling from both directions of the road at two selected locations on each of the roads. It also includes an enterprise survey of small enterprises along the roads.

4.2.1.3. Road Maintenance Activity

The Road Maintenance activity provides equipment and technical assistance to TANROADS (Mainland) and MOIC (Zanzibar) for the purpose of improving roads maintenance capabilities at the two institutions. The overall impact of the various components of this Activity will be assessed by proxy, by monitoring yearly spending of the planned annual road maintenance budget even after the Compact closes. This draws on the assumption that the technical assistance and equipment will lead to more accurate planning and implementation of maintenance activities. The Mainland and Pemba roads follow-up study conducted by NORC may also involve a qualitative study of how well TANROADS and MOIC are utilizing the maintenance equipment and training; however, this will be decided in the final evaluation design. Given that this Activity was finalized late in the Compact, its evaluation could not be incorporated into the Mainland and Pemba Roads baseline study (2009).

4.2.1.4. Mafia Island Airport Upgrade

Research Questions.The performance evaluation of the Mafia Island Airport Upgrade project seeks to answer the following research questions:

i. Has the Mafia Island Airport Upgrade Project contributed to easier, more efficient, and safer access to Mafia Island?
ii. Has the Mafia Island Airport Upgrade project contributed to an increase in (i) tourism and/or (ii) business travel?
iii. Has the Mafia Island Airport Upgrade project contributed to an increase in visitor spending on the island?
iv. Has the Mafia Island Airport Upgrade project contributed to an increase in economic and investment activities on the island? (hotel, wildlife refuge, food industry, etc.)
v. Was the Project cost effective, analyzed through re-estimated economic rates of return, comparisons to original estimates, and assessment of differences

In addressing the key questions above, the evaluation will also address:
i. Differences in impact of the program, by gender, age, and income, when practicable.
ii. Unintended results of the program (positive and negative);
iii. Lessons learned applicable to other similar Projects

Evaluation Design. Given that a counterfactual could not be established for the runway upgrade, an experimental/quasi experimental design to evaluate the impact of the project was not possible and therefore a performance evaluation strategy was adopted. MCA-T procured an individual consultant (Abel Busalama) to lead the evaluation of the Mafia Island Airport Upgrade activity. The Mafia Island evaluation included a small primary data collection effort, consisting of: Hotel Manager Survey, Hotel Guest Survey, Passenger Exit Survey, Village Leader Survey, Male Focus Group Interviews, Female Focus Group Interviews, and Individual Interviews. It also relied on secondary data sources.

Risks to Evaluation Design. Given that this is a performance evaluation, the evaluator will maximize the learning from the primary data collection, but there is minimal risk to the evaluation design.

Next Steps. The endline survey for the Mafia Island Airport Upgrade evaluation is expected in between February and June of 2015, to match the timing of the baseline data collection and allow for at least a one-year exposure period. Final results are expected in late 2015.

4.2.2. Energy Sector Project

The March 2011 Impact Evaluation Design Report for the Mainland T&D and Zanzibar Cable Activity prepared by the MCC evaluator, Mathematica Policy Research, Inc. (MPR), can be found here:
http://www.mcc.gov/pages/countries/impact/impact-evaluation-for-tanzanias-electricity-distribution-systems-rehabilita/tanzania-compact

4.2.2.1. Zanzibar Cable

The Zanzibar Cable Interconnector project consists primarily of laying a new submarine power cable between the mainland and Zanzibar and constructing additional transmission and distribution lines on either side.

Research Questions. The main research question for the Zanzibar Cable evaluation is: *What are the impacts of building a new electricity cable between Zanzibar and the mainland?*

The evaluation will focus on the impacts of the intervention on the following outcomes of interest:

- Business utilization/take-up (%)
- Power availability (hrs)
- Total expenditure on electricity ($)
- Total annual business revenue ($)
- Total annual wages ($)
- Total annual expenditure on energy ($)

The evaluation will also measure whether or not the Project was cost effective, analyzed through re-estimated economic rates of return, comparisons to original estimates, and assessment of differences.

In addressing the key questions above, the evaluation will also address:

- Differences in impact of the program, by gender, age, and income, when practicable.
- Unintended results of the program (positive and negative);
- Lessons learned applicable to other similar Projects

Evaluation Design. MCA-T has invested in a *performance evaluation* of the Zanzibar Cable Activity. Given that the project intervention was likely to impact power customers across Unguja Island in the same time period, the probability of identifying a feasible comparison group was low. Consequently, MPR used a pre-post design to analyze the monthly administrative data from the indicator tracking table (ITT) that ZECO submits monthly to MCA-T on electricity use, reliability, and quality for all of Unguja before and after the laying of the cable. To obtain the most precise estimates possible, MPR will use all months of the ITT data that are available when estimating impacts on use, reliability, and quality, except for data during the blackout months when power outages that lasted more than one day. Since there were only two blackouts in Zanzibar caused by the cable in recent decades, MPR does not expect to have enough statistical power to say anything conclusive about the likelihood that the cable reduces the incidence of blackouts. MPR cannot make the link between the cable and customer-level outages given sample size and conditions of the distribution network. MPR will ask for opinions from engineers about the likely impact of the cable on the possibility of future blackouts and include a summary of those opinions in evaluation reports.

MPR will also conduct a case study of the hotel industry in Unguja Island. The hotel case study will consist of two components. First, a pre-post evaluation design to estimate the impacts of the cable activity on key outcomes such as electricity use, reliability, and quality. Baseline data on these outcomes have already been collected from 30 hotels on Unguja Island. MPR will collect data on these same outcomes from the same hotels one year after placement of the cable, allowing for a pre-post comparison of the outcomes of the hotels affected by the cable activity. To focus the study on the hotels likely to have the largest impact on the economy of Zanzibar, the 30 hotels were randomly selected from among the 45 largest hotels on Unguja Island.

The second component of the hotel study is a description of what hotels reported about the impacts of the two recent blackouts on their business activities. Together these components will help develop a richer understanding of the impacts of the cable activity.

The pre-post design cannot definitively estimate causal impacts of the cable activity because it cannot distinguish between changes in the outcome measures that are attributable to the cable and those that may be attributable to other simultaneous interventions or time trends. Changes that might occur simultaneously with the installation of the new cable include changes in investment in industries on Unguja Island, changes in demand for the products and services originating on the island, both of which could impact electricity use, or changes in the amount of electricity provided to Zanzibar from the mainland. To estimate impacts using the pre-post method, MPR will estimate an equation similar to those for the difference in differences (for the T&D activity), but without a comparison group.

MPR will also explore controlling for any time trends in use, reliability, and quality that appear before the introduction of the cable, using various functional forms such as a linear control variable for time or various quadratics (time squared and time cubed). If data are available on the degree to which the mainland limited electricity availability to Zanzibar through rationing then MPR will control for that as well.

Risks to Evaluation Design. Given that this is a performance evaluation, MPR will maximize the learning from the primary data collection, but there is minimal risk to the evaluation design.

Next Steps: An Interim Report analyzing administrative data from ZECO is expected in July 2013. Endline data collection is expected to take place in Zanzibar between June and August 2014, allowing for an exposure period of over 1 year. It will include the various evaluation components described in the Evaluation Design above. Final results are expected in early 2015.

4.2.2.2. Mainland Transmission and Distribution (T&D)

Research Questions. Under the T&D impact evaluation, MPR has proposed two research questions:

(i) *What are the impacts of the MCC energy sector interventions in the T&D areas of mainland Tanzania?*

(ii) *What mechanism is more effective in increasing household connection rates?*

The main evaluation will measure impacts on the following key outcome indicators:

- Household-level
  - Household utilization/take-up (%)
  - Power availability (hrs)
  - Total expenditure on electricity ($)
  - Quantity of other energy consumption (kg)
  - Household members who had either respiratory or vision problems (%)
  - Hours spent studying last week (#)
  - Total household consumption ($)
- Business-level

    - Business utilization/take-up (%)
    - Power availability (hrs)
    - Total expenditure on electricity ($)
    - Total annual business revenue ($)
    - Total annual wages ($)
    - Total annual expenditure on energy ($)
- Community level activities (schools, health facilities)

The evaluation will also measure whether or not the Project was cost effective, analyzed through re-estimated economic rates of return, comparisons to original estimates, and assessment of differences.

In addressing the key questions above, the evaluation will also address:

- Differences in impact of the program, by gender, age, and income, when practicable.
- Unintended results of the program (positive and negative);
- Lessons learned applicable to other similar Projects

The results of this evaluation are of primary interest for MCC in order to assess the impact of the investment.

However, available evidence on impacts of electrification in the literature suggested a need to assess the evaluation design and research questions. A summary of the literature is below:

- There is very limited evidence about the impacts of rural electrification on poverty, education, health, and the environment (Bernard 2010, Bernard and Torero 2009, IEG 2008). However, the available evidence on rural electrification might have weaker relevance for the peri-urban areas in Tanzania where many of the MCC funded T&D lines are being built.
- Connection rates to electricity remain low in many African countries, even for households in communities that are connected; this is particularly prevalent among poorer rural households. See, for example, ESMAP 2007 (Senegal), Jacobson 2007 (Kenya); Ketlogetswe, Mothudy and Mothibi 2007 (Botswana), Heltberg 2003 (South Africa and Ghana), and IEG (2008).
- A handful of rigorous evaluations suggest that rural electricity reduces expenditures on lighting (in Ethiopia; Bernard and Torero, 2009), increases home production and female employment via more efficient home production (in South Africa; Dinkelman 2011), and increases farm income through irrigation (in Vietnam; Khandker et al. 2009).
- Available evidence also suggests that benefits accrue to households primarily through having been connected to electricity. While there is some evidence of benefits through increased economic activity and improved health and educational services at the community level, the benefits are smaller or less clear relative to the benefits that directly accrue to the household (Bernard and Torero 2009, Dinkelman 2011, IEG 2008).

During early discussions related to the T&D evaluation design, there was a concern that the financial barrier (est. $300 connection fee at time of discussions to connecting to the electricity lines once built would prevent many households from connecting, especially the poor. The average per capita annual income of the poorest 60% of households in 2010 was

only $780 (PPP-purchasing power parity; $300 at market prices[10]) This concern was addressed by TANESCO on January 1, 2013, when they lowered the customer connection fee to USD 200 for urban customers and USD 110 for rural customers. These amounts include V.A.T.

Prior to this reduction, however, plans were developed for the Customer Connection Financing Scheme (CCFS), through which MCA-T and TANESCO are jointly providing subsidized connection fees of about USD 24 to approximately 5,800 households and 200 government-owned public institutions in 28 randomly selected pilot communities in the T&D regions. The primary motivation for this subsidy pilot was to ensure that customers connect to the new lines so that the intended project benefits can actually be realized. In addition, encouraging customer connections would provide the impact evaluation the treatment sample size necessary to gain a more complete understanding of the potential long-run benefits of the line extension work. The CCFS was kicked-off in the first wave of communities in Dodoma, Mwanza, and Tanga in February 2013, and was followed by a second wave of communities in Kigoma, Morogoro, Mbeya, and Iringa. Camco has been hired to implement the CCFS, involving awareness campaigns about the benefits of switching to electricity and the logistics of applying for connections, in collaboration with TANESCO.

Results from the first wave of the CCFS indicated that actual demand would not meet expected demand and therefore all the connections materials purchased for the scheme would not be used by the pilot communities; early results from the second wave supported this. In November 2013, it was agreed by MCA-T, MCC, and TANESCO that any materials remaining at the end of the CCFS would be used by TANESCO to connect customers at the normal fee in the 196 T&D study communities. By focusing the use of materials in the study communities, there would be a higher chance of sample households connecting to the lines. TANESCO also agreed to provide semi-annual updates on the number of connections to Compact-built and other lines in the T&D intervention and comparison communities. The template for this reporting is included as an Annex IV and the data will be collected from TANESCO by MoF-PED.

Baseline Data Collection. From August-November 2011, MPR and the survey firm, NRECA, managed household and enterprise data collection for the T&D study. Note that only the 6 original Mainland T&D regions were covered in the baseline, so Kigoma was not included. For the baseline household survey, households were randomly selected from each intervention and comparison community. Survey-eligible households were considered those households which were not connected to an existing line and 30 meters or more from existing lines. This was done because because it was expected that the line extensions would not affect their connection decisions.

In the household survey, MPR asked each household about any enterprises it owns. While some enterprises were identified in the household survey in some communities, aggregation of the data across all households in the sample (about 10,000) should produce information on a reasonably large number of businesses. In addition, when comparing the baseline and follow-up survey results, it will be possible to determine any increase in business activity.

[10] Sources: World Bank Indicators Databank ; and CIA Fact Book.

For the enterprise survey, MPR used similar sampling methods to those for the household survey. The enterprise survey will complement the household survey by providing more detailed information on larger businesses. However, to keep this part of the study cost-effective, it was limited to a case study of only a small number of businesses in the Tanga region.

The baseline reports of these surveys were completed in December 2012 and are available at MCC and MCA-T.

Risks to Evaluation Design. The key risks identified as of December 2011 to the main T&D evaluation are summarized below:

Table 1: Summary of T&D Evaluation Risks and Risk Mitigation Strategies

Risk	Mitigation Strategy
T&D evaluation	
Take-up of electricity will be low, particularly for poor households, given barriers to connection (high cost, cultural barriers)	The CCFS will help to mitigate the risk that no impacts are found simply because of low connection rates.
At baseline, 17% of comparison communities (31 communities) were planned to be electrified by 2012 with funding from MCC (7 communities), REA, TANESCO, AfDB, and SIDA. This is a threat for the T&D evaluation as it alters the counterfactual.	This will be monitored during the evaluation and implementation phase. Depending on the scale of the problem, crossover adjustments applied in the impact analysis can mitigate this threat by providing estimates of the impacts for communities that would not get lines without the MCC interventions. As of December 2011, MPR did not feel that this risk was substantial enough to warrant any mid-course corrections on the T&D evaluation, including sample sizes for the intervention and comparison.

Next Steps. A qualitative study investigating the factors that affect household and businesses' decisions to connect to electricity lines will be conducted in early 2014 along with an interim quantitative analysis of administrative data on connections. Endline data collection should occur between August and November 2015, allowing for an exposure period of over 1 year for all communities, with final results expected by mid-2016. The Endline study will include Kigoma region.

4.2.2.3. Kigoma Solar

As of March 2013, the Kigoma Solar project is in advanced stages of implementation. This activity involves installing solar modules and other electric systems in 45 schools, 130 health facilities, 45 markets, 60 fishing boats, and marketing household solar systems for commercial purchase, all in the Kigoma region of Tanzania. Given the high level of coverage of the program in the two targeted districts and the associated challenge of identifying an appropriate counterfactual, a *performance evaluation* was chosen for this project.

In March 2013, MCA-T contracted a consultant (Abel Busalama) to conduct a *performance evaluation* of the activity.

Research Questions. The evaluation of the Kigoma Solar Project will seek to answer the following questions:

i. How well was the program implemented? (include analysis of Project scope, timing, costs, and public perceptions)
ii. What type of challenges were encountered during implementations?
iii. How well has the solar energy approach addressed the energy needs of the beneficiary population?
iv. What are the outcomes of the program on solar energy access use and costs as well as productivity income etc.?
v. How sustainable are the outcomes?
vi. What lessons can be learned from the experience of the program?
vii. Was the project successful in catalyzing investments in the energy sector in Kigoma? If not what conditions will needs to be in place for the pilot to encourage additional investments

In addition to the above, the evaluation design and subsequent data gathering activities will address the following key research questions on outcome, objectives and Compact Goal:

i. Has the Kigoma Solar Project contributed to an improvement in electricity service coverage across different customer types?
ii. Has the Kigoma Solar Project contributed to an improvement in the quality of electricity available, across different customer types?
iii. Has the Kigoma Solar Project contributed to an increase in consumption of electricity, across different customer types?
iv. Has the Kigoma Solar Project contributed to an increase in investment in economic activities across different customer types?
v. Has the Kigoma Solar Project contributed to an improvement in human capital accumulation across different customer types?
vi. Has the Kigoma Solar Project contributed to a reduction in poverty across different customer types, as measured by household income per capital?

The evaluation will also contribute to measuring whether or not the Project was cost effective, analyzed through re-estimated economic rates of return, comparisons to original estimates, and assessment of differences

Evaluation Design. The performance evaluation will rely significantly on primary data collection using qualitative and quantitative surveys conducted with PV system end users (e.g. schools, health centers, market sellers, fishermen, and households). The study will mainly employ a before-and-after comparison for analysis, however, will try to identify similar comparison groups that did not receive PV installations, where possible. Baseline data collection will take place after installations have already taken place and will therefore rely on recall data to establish a pre-intervention baseline.

Risks to Evaluation Design. Given that the evaluation is starting after project implementation, there is a risk that the evaluator will not be able to establish accurate baseline levels of indicators of interest. The evaluator will rely on recall data from survey respondents; however, this is vulnerable to errors and bias.

Next Steps. Baseline data collection took place from June to July 2013 and the report was delivered in October 2013. Endline data collection will take place in 2015 to allow for at least a 1-year exposure period and may be combined with the Kigoma T&D data collection effort that will be taking place that same year in order to minimize data collection costs. Final results are expected in late 2015 or early 2016.

4.2.3. Water Sector Project

The Water Sector Project consists primarily of increasing the production capacity of the Lower Ruvu water treatment plant and both increasing production capacity and improving water quality at two water treatment plants in Morogoro. Social Impact (SI) was contracted to lead the *impact evaluation* activities for this project.

4.2.3.1. Lower Ruvu and Morogoro

Research Questions. The evaluation of the Water Sector Project will seek to answer the following questions:

i. Does the MCC investment lead to better quality and more reliable water at the population level?
ii. Does access to better quality, more reliable water lead to increased household income through (i) lower prices paid for water as sources of water change, (ii) less time spent getting water so more time can be spent elsewhere, and (iii) fewer days spent ill or caring for ill family members and away from production?
iii. Does access to better quality, more reliable water lead to better health outcomes, in particular, a reduction of diarrhea among children under 5 years and of water-related disease?
iv. Was the Project cost-effective, analyzed through re-estimated economic rates of return, comparisons to original estimates, and assessment of differences?

In addressing the key questions above, the evaluation should also address:

i. Differences in impact of the program, by gender, age, and income, when practicable.
ii. Unintended results of the program (positive and negative);
iii. Lessons learned applicable to other similar Projects.

Evaluation Design. In 2012, SI presented a design for the Water sector *impact evaluation*, which uses a rigorous, quasi-experimental methodology combining a difference-in-differences (DD) approach with generalized propensity score matching (GPSM), also called continuous propensity score matching. Generalized propensity score matching is an extension of traditional propensity score matching (PSM) techniques, and facilitates the evaluation of continuous rather than binary treatment. For example, since the Water intervention is expected to result in an across-the-board increase in water availability for urban populations in Dar es Salaam and Morogoro, it is more appropriate to measure the differential impact of the project on households with differing levels of access, rather than no access vs. access. The evaluation will consist of household surveys, water quality testing, and qualitative surveys with key informants. In March 2013, MCA-T contracted EDI to conduct the baseline survey data collection for water sector. The firm started data collection

in Morogoro in April 2013 and the baseline survey for both Morogoro and Lower Ruvu continued from May to August 2013.

Risks to Evaluation Design. The main risk to the Water evaluation stems from the changing project completion timeline, particularly in the case of the Lower Ruvu project. In order for the Lower Ruvu upgrades to be put into effect, the GoT must finish building a new transmission main that will carry water from the plant to Dar es Salaam. This work is expected to be completed by February 2014, however it is possible that it may be delayed until mid-2014 or even into 2015. This poses challenges for timing the Lower Ruvu baseline data collection, as we want to collect data as close to start of the intervention as possible, in order to capture the most accurate baseline and to mitigate the risk of respondent attrition between baseline and follow-up surveys. MCA-T is working closely with the Water Sector to monitor progress in both Morogoro and Lower Ruvu and adjust data collection timelines accordingly, where possible.

Next Steps. The baseline report is expected by February 2014. The timing of endline data collection will depend on when the projects are completed. Morogoro data collection is expected between April and August 2015, to allow at least a 1-year exposure period. Lower Ruvu data collection will be delayed until at least 1 year after the transmission main has been completed and the increased water flow from the project has gone into effect. If the transmission main construction is delayed beyond June 2014, an additional short baseline survey may be required in Lower Ruvu, shortly before the new completion date, to get updated information on water access and health indicators. This is because certain indicators of interest may have changed between the original baseline data collection time period and the start of the actual intervention, which could bias impact estimates.

4.2.4. Gender Integration Program

The purpose of the Gender Integration Program (GIP) is to ensure that MCA-T-funded interventions in the infrastructure sector facilitate unbiased access to opportunities and benefits awarded to women, men, female and male youths, the disabled, and other stakeholders. Through this program, training was conducted with skill-based groups (SBGs) located in project areas, that were expected to benefit from MCA-T infrastructure projects. This training was intended to improve the skills of SBGs and prepare them to take advantage of MCA-T project benefits. The focus was to enhance the capability of the group leaders, particularly to impart leadership skills, entrepreneurship skills, proper group funds management skills, and hygiene and sanitation education. In November 2012, MCA-T contracted an individual consultant (Stella Manda) to conduct a *performance evaluation* of the GIP training.

Research Questions. There are two components to the study: (1) Evaluating the implementation and impact of the GIP training, and (2) Understanding the benefits that SBGs expect to experience as a result of Compact projects. The associated research questions include:

i. What are the perceptions and recommendations of the GFPs and the SBG leaders of the GIP and the GIP training?
ii. How did the GIP and the GIP training at the different levels and for different exposure periods contribute to improvements (achievements) in SBG skills (as groups, leaders and individuals)?

iii. What are the main characteristics of the GFPs, SBGs, SBG Leaders and SBG Members?
iv. What is the current level of services available to the SBGs and their male and female members with respect to MCA-T investments?
v. What impacts do the SBG leaders (both trained and non-trained) anticipate will result from the MCA-T investment (Transport, Energy, Water)?
vi. How can SBG members maximize the benefits from the investment? What challenges do they think they will face in order to maximize benefits?

Evaluation Design. The SBG *performance evaluation* is designed to be a mostly qualitative study of the effectiveness of the GIP trainings and the expectation of benefits from the MCA-T projects among targeted SBG members. It will rely on SBG member perceptions of the GIP training to assess the program's impact and document expectations of project benefits. The study will involve focus group discussions and key informant interviews with SBG members, district Gender Focal Points, and other local stakeholders. The qualitative data about project benefits and expectations gathered through this study will complement the ongoing sector-specific evaluations. The study will utilize just one round of data collection, since the GIP trainings have already been implemented and since separate evaluations of the projects themselves are already taking place.

Risks to Evaluation Design. Given that there is no baseline for the SBGs prior to the GIP training, it will be difficult to accurately assess the effectiveness of the training. However, since this is a performance evaluation focusing on qualitative information, it is already understood that the magnitudes of impact will not be estimated. Instead, the study will provide a rich set of qualitative data that will provide insight into how beneficiaries view both the trainings and the anticipated utility of the MCA-T projects. As such, there is minimal risk to the evaluation design.

Next Steps. Data collection took place between April and June 2013. The final report is pending.

5. IMPLEMENTATION AND MANAGEMENT OF M&E

5.1. Responsibilities

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

Millennium Challenge Corporation responsibilities:
MCC will finance and oversee all Compact I evaluations. This includes contracting and supervising independent evaluators and data collection firms and providing technical input to all evaluation work. MCC will also facilitate communication between evaluators and data collectors and MoF-PED

Government of Tanzania through the Poverty Eradication Directorate of the Ministry of Finance (MoF) responsibilities:

M&E Focal Point
The GoT designated the Poverty Eradication Directorate within the MoF as the representative to continue the monitoring and evaluation of Compact I investments after the 5-year Compact term. Since MCA-T will continue through June 30, 2014 to oversee ongoing works, MCA-T and MoF-PED will share post-Compact M&E responsibilities until June 2014 and MoF-PED will take over thereafter.

- Serve as point of contact for any questions from MCC, Implementing Entities (IEs), Evaluators, or other parties regarding M&E of the Tanzania I Compact.

Technical Guidance

- Provide technical input on post-Compact M&E work, particularly from the local Tanzanian perspective.

Reporting

- Submit to MCC the ITT and Summary Report in accordance with the reporting schedule. This will require periodic collection of data from the former implementing entities of Compact I. A memorandum of understanding (MoU) between MoF and former IEs will be drafted and signed by CCD to facilitate access to the Tanzania Compact information by MoF and MCC whenever required.

Data Quality Assurance

- Check and verify all data received from IEs for consistency, completeness, accuracy, and validity.
- Collect material evidence for the data reported, which may require field visits to the IEs.

Data Collection for Evaluations

- Review survey instruments and, where possible, coordinate reviews by former MCA-T staff and IEs
- Facilitate survey firm approvals or letters of introduction with local authorities
- Assist MCC and evaluators to resolve issues that arise in the field.

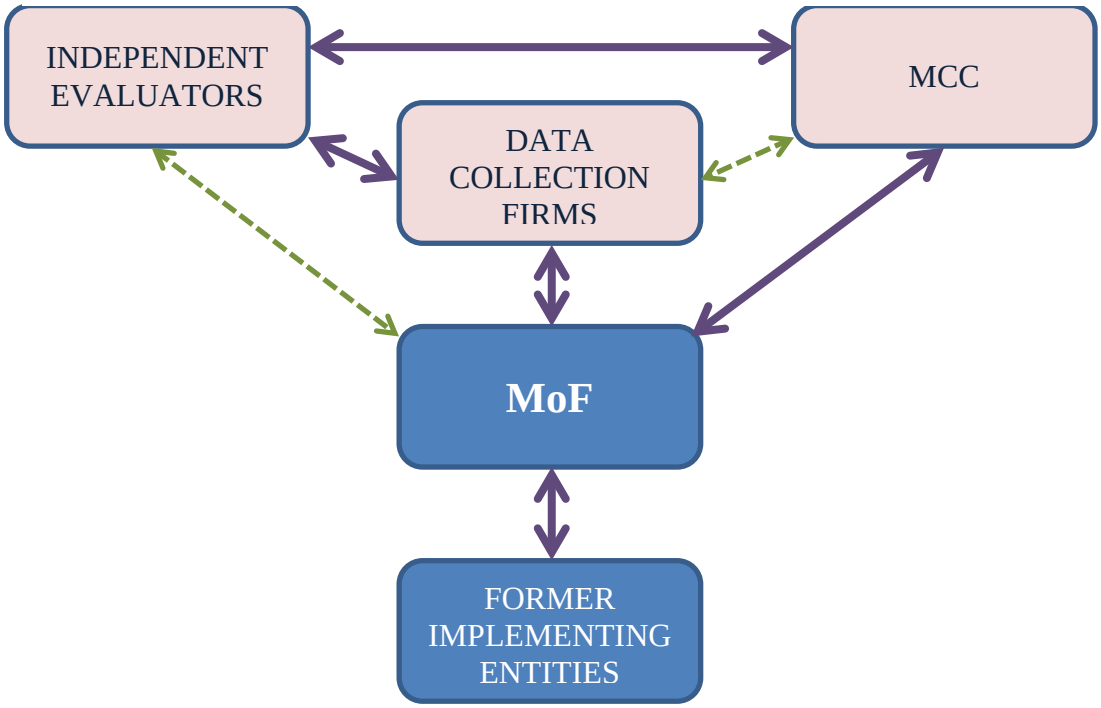
Evaluation Results Dissemination

- Coordinate review of final evaluation reports by former MCA-T staff and IEs
- Organize in-country presentations or workshops with evaluators and stakeholders for evaluation results dissemination
- Provide an official GoT response to each final evaluation report, based on stakeholder feedback. This will be attached as an annex to the final evaluation report.

- Disseminate results in Tanzania, including posting evaluations on a MoF website
- Identify opportunities to apply the learning from the evaluations to project design and implementation in Tanzania.

Figure 2 provides a scheme of relationships between MCC, MoF, IEs, Data Collection Firms and independent evaluators.

Figure 2: Post Compact Institutional Inter-linkages



5.2.Coordination and Gathering of M&E Data

The overall coordination of data on post-compact monitoring indicators will be the responsibility of the MoF PED.

The gathering of data on post-compact performance indicators – some output and outcome indicators – will be carried out by the former MCA-T Implementing Entities, consulting data collection firms and the Independent Evaluators. As noted in Section 3.1, MoF-PED will only be responsible for collecting the post-Compact ITT indicators designated in Annex I and the connections data from TANESCO (Annex IV).

Data for the post-Compact ITT indicators will be recorded by the implementing entities, including:

1. Energy Projects: TANESCO
2. Transport Sector Projects: TANROADS, MoIC (Zanzibar) and TAA
3. Water Sector Projects: DAWASA/DAWASCO and MORUWASA

The specific responsible parties for each indicator are noted in Annex I. Indicators not included in the ITT will be reported on in the final evaluation reports.

5.3. 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 Poverty Eradication Directorate, MoF Tanzania, and Millennium Challenge Corporation. Any changes to indicators must be documented in Annex III of the M&E Plan.

6. M&E BUDGET

The balance of the Tanzania Compact M&E budget of approximately USD 3.4 million will be used to collect end-line data for the evaluations. Basing on expenses incurred for the baseline data collection, this budget may be insufficient. MCC will secure additional funding to supplement this budget.

As indicate above, the MoF PED will coordinate and cover costs for Post Compact M&E activities including results dissemination workshops with stakeholders in Dar es Salaam.