

Millennium Development Authority (MiDA)

Monitoring and Evaluation Plan

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1. Introduction

In August 2006, the Government of Ghana signed a 5-year \$547 million Compact with the Millennium Challenge Corporation (MCC) of the United States of America aimed at reducing poverty through economic growth led by agricultural transformation. This program is being implemented by the Millennium Development Authority (MiDA), a government corporation established by the Parliament of Ghana to serve as the accountable agent for the implementation of the Compact. For more details on MiDA and the Compact, see <http://www.mida.gov.gh>.

Compact goal will be pursued through two program objectives: (a) increase the production and productivity of high-value cash and food crops; and (b) enhance the competitiveness of high-value cash and food crops in local and international markets. Achievement of these objectives will be through three projects in the areas of agriculture, transportation and rural development in 23 districts in the Northern Agriculture Zone (Northern Region), the Afram Basin Zone (Ashanti and Eastern Regions), and the Southern Horticultural Belt (South-East Coastal Plains). It is anticipated that 230,000 individuals will benefit directly from Compact interventions and that an additional 1,000,000 will benefit indirectly.

A focus on results is at the heart of the MCC Business Model. As a result, Monitoring and Evaluation (M&E) was an important component of program design and will be incorporated into all facets of the program cycle through close-out. The M&E Plan is a key management tool for MiDA in implementing a results-based program.

The purpose of the M&E Plan is to:

- Describe in detail how MiDA will *monitor* the various components of the Ghana Compact to determine whether MiDA is achieving intended results.
- Describe in detail how MiDA will *evaluate* the larger impacts of the Ghana Compact.
- Highlight the M&E requirements that MiDA must meet in order to receive disbursements.
- Guide program implementation and management, so that stakeholders understand what results are expected, by when the results should be achieved, and who is responsible for achieving and reporting them.
- Provide a framework that will alert stakeholders to performance problems so that adjustments can be made as needed.

The M&E Plan is considered a binding document, and failure to comply with its stipulations could result in the suspension of disbursements. It may be modified or amended as necessary only with the approval of MCC and only so long as it remains consistent with the requirements of the Compact and other relevant Supplemental Agreements. Terms used but not defined herein shall have the meaning given to them in the Compact.

2. Program Summary

Program Logic

The overall goal of the Ghana Program is to “reduce poverty through economic growth led by agricultural transformation”. To achieve this goal the Program will pursue two objectives: (a) Increase production and productivity of high value cash and food crops in the intervention zones in Ghana, and (b) Enhance the competitiveness of high value cash and food crops in local and international markets. These objectives will be achieved through a set of investments in agriculture, transportation and rural development. Progress at each level of the logical hierarchy will be monitored using Performance Indicators. Fig. 1 illustrates the program logic. Impact of the overall program and of specific project components will be determined through rigorous evaluations.

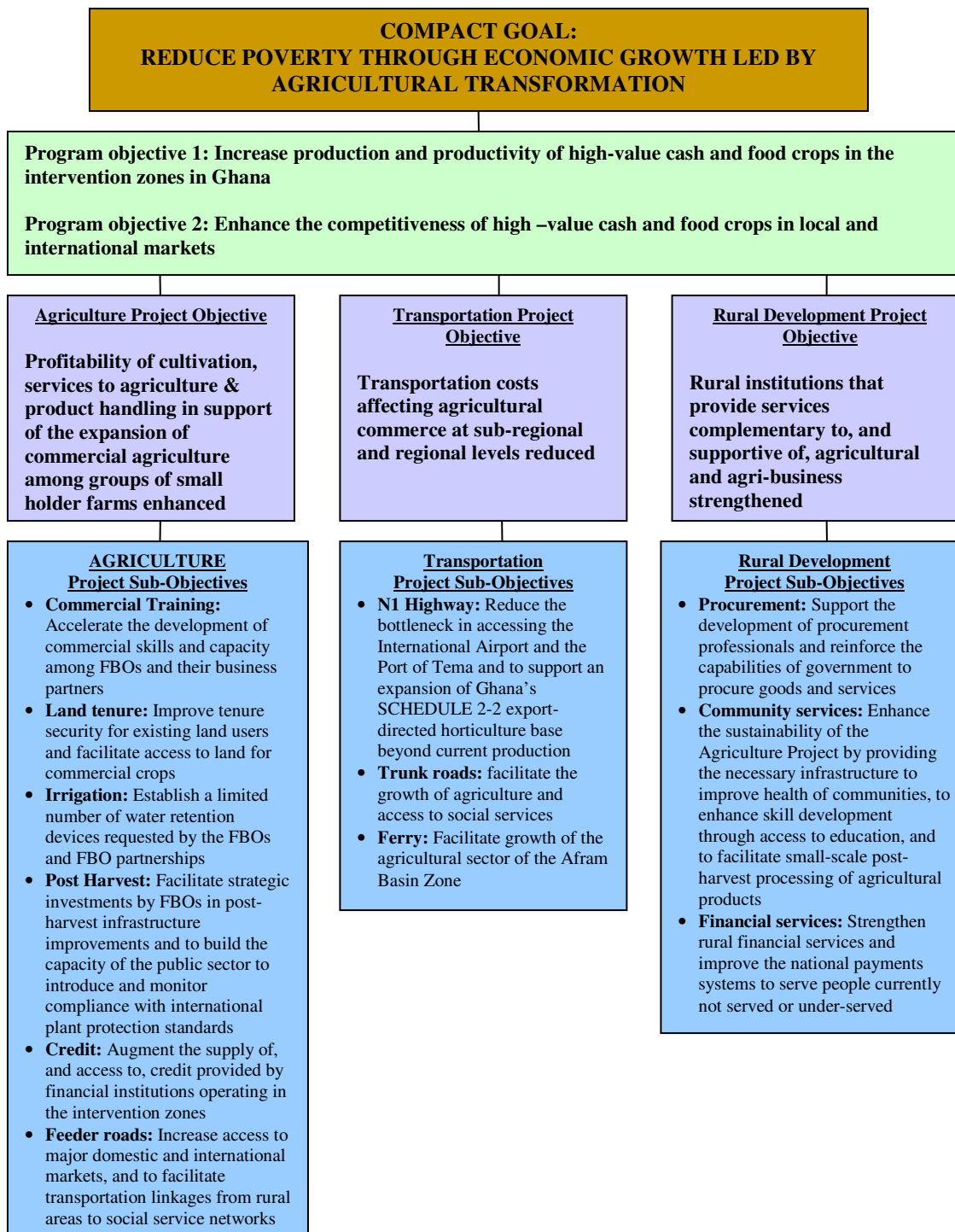


Fig 1: Ghana Program Logic

Economic Rates of Return (ERR) and Beneficiaries

Activities deemed eligible for MCC funding were selected based on Economic Rate of Return (ERR). Generally, the ERR is the net benefits to all members of society, as a percentage of cost, taking into account externalities and other market imperfections. In the particular case of the Ghana Compact, the ERR was estimated using incremental benefits and costs associated with the activities. An activity or project with a higher ERR value than other available options would provide a much better chance of growth. All the activities in the Compact were selected based on their respective expected incremental benefits. The ERR is useful in serving as a guide in decision-making on where to invest. However, the actual ERR that an activity or project generates at the end will often differ from the estimated value.

With the Agriculture Project, the expected incremental benefit is with respect to farm profitability and imputed savings on vehicle operating costs and time. Increased farm profitability is expected to be realized from higher crop yields, higher farm gate prices for cash crops, lower farm gate prices for inputs, and expanded cropped areas. Savings in vehicle operating costs and time are expected from improved road access and reduction in head loading as a mode of transportation respectively.

The costs associated with each activity are the incremental costs in farm investment and farm operations; and investment and oversight costs of FBO training. In addition, investment and Compact-period operational costs of services to facilitate acquisition of land; and investment costs of expanding credit offices, training and oversight costs associated with developing services in rural areas, were included in aggregated ERR estimation. The costs associated with improved road access are the investment costs, and annual and periodic maintenance costs.

Table 1 shows, for the overall Program, the ERR under different scenarios and the various assumptions underlying each scenario in relation to the attrition rate of the FBO participants, increase in farm incomes and the impact of feeder roads on farm incomes. The overall Program is expected to yield a 20% economic rate of return in a base case. The analysis also anticipates a 27% return in a high return case and a 12% return in a low return case.

Table 1: Overall Program ERR under different scenarios

Scenario	Assumptions	Economic Rate of Return (per annum)
High return case	Farmer-based organization (FBO) farmers double the size of cultivation and achieve higher marketing performance	27%
Base case	Farmers realize basic technical improvements and marketing advantages of FBO membership	20%
Low return case	50% decrease in agricultural incremental net benefits, 50% decrease in feeder and trunk road benefits, 50% decrease in N1 Highway benefits	12%

The Program is anticipated to help directly alleviate the poverty of over 230,000 Ghanaians, and to enhance the livelihoods and welfare of over 1,000,000. Table 2 shows the ERR for each project and activity, and beneficiary estimates. The total project ERR are calculated as a weighted average of the activities.

Table 2: ERR¹ and Beneficiary Estimates for Projects and Activities

Activity	ERR	Beneficiaries
Project 1: Development of Agriculture Productivity and Value-Added		
Farmer and Enterprise Training in Commercial Agriculture, and Irrigation Development	29	229,500
FBO Training Net Credit Office Costs and Land Tenure	22	229,500
Post harvest handling (SHB only)	15	5000-5500
Improvement of Feeder Roads	18	425,000
Total Agriculture Including Feeder Roads and Post Harvest Handling	21	425,000 – 654,000
Project 2: Transportation Infrastructure Development		
Improvement of the Afram Plains Basin Trunk Roads and Other Paved Feeder Roads	17	100 000
Improvement of the Adawso to Ekye Amanfrom Ferry	15	100 000
Improvement of the Tetteh Quarshie Interchange to Mallam Junction section of the N1 Highway	36	>500 000
Total Infrastructure Project	32	> 700,000
Project 3: Rural Services Development (Rural Development Project)		
Support for Community Services	10	Expected to benefit several tens of thousands of households
Strengthening of Public Sector Procurement Capacity		Those affected by government efficiency
Strengthening of Rural Financial Services		Potentially all rural banking customers
Total	10	

Key Risks and Mitigants

The following is an update to the key risks and associated mitigants which were identified during the Compact development and mobilization process. These risks and mitigants are going to be monitored when implementation begins. These risks and mitigants will be monitored through annual reviews and other updates. The first review/update will be done when Implementing Entities are on board.

Operational risks and mitigants

- A slow pace of identifying and attracting farmers and entrepreneurs to form FBOs may make it difficult to meet the targeted number of beneficiaries of the Agriculture Project. The early results will be closely monitored and necessary changes made to build on innovative and successful approaches to extension and training.
- Weaker than anticipated market demand for staple food and horticulture crops would hamper meeting economic growth indicators for target beneficiaries. MiDA will monitor the demand trends to determine the probability or severity of this particular risk and take the necessary action.
- Slower uptake of credit facilities by the banks targeted and slower development of the innovative approaches designed to supply seasonal credit to smallholder farmers and FBOs through untested delivery vehicles, such as banks working through input suppliers, would retard the expected growth. By building credit capabilities first and adjusting financial incentives, demand from participating banks and other intermediaries should be well managed. Early identification of input suppliers with well-defined supply channels at the community level will help accelerate the process of seasonal credit to the farmers.
- The occurrence of natural disasters like floods, storms and other occurrences like bushfires are issues that cannot be over emphasized in Ghana. These occurrences can affect expected crop

¹ The period of analysis for all projects and activities is 24 years.

production levels, erode investments made, and worsen the livelihoods of several farmer households. Undertaking proactive emergency response planning would help minimize the impact of such occurrences on beneficiaries and the program as a whole. Proper water management supported by MiDA, in places known to be susceptible to flooding, can also mitigate this risk.

- High expectations of poor beneficiaries and other stakeholders may result in speeding up of implementation in ways that give rise to a variety of operational risks. To mitigate this risk, an expectation management strategy is being adopted by MiDA's Communication and Outreach team to roll out messages concurrently with preparatory work prior to implementation.
- Continued fragmentation of land sector agencies, Land Laws, and the lack of a legal framework to regulate activities of land service providers may pose a hindrance to the growth and expansion of FBO farms. The expectation is that the One-Stop-Shop by the Land Administration Project (LAP) to deal with land registration and related matters, and the creation of an efficient Land Market Information Database (Land Banks), will be operational by the time MiDA will be processing farm lands for FBOs. However, there is a risk that there could be delays. As a member of the Land Sector Technical Committee, MiDA Land Activity Manager will serve as a catalyst to speed up reforms by highlighting the concerns of MiDA for policy making decisions to be taken.

Economic risk and mitigant

- Full feasibility studies, including final economic and environmental analyses, of feeder and trunk roads will be complete only after signing of the Compact and may result in rescaling of the rehabilitation of feeder roads. Any such rescaling will be made as necessary.

Environmental and social risk and mitigant

- SEAs, EAs and Project-specific EIAs will identify immitigable adverse impacts, particularly within environmentally sensitive locations in the Afram Basin Intervention Zone and specific districts in Eastern and Volta regions. Immitigable impacts will preclude execution of identified investments, potentially at a zonal or sub-zonal scale. Additionally, the historically uneven pattern of environmental commitment and compliance demonstrated by the Government, the limited experience with World Bank-compliant RAPs and a lack of institutional capacity for effective monitoring and enforcement pose risks for the successful implementation of the Program.
- Disputes over resettlement, land allocation, and/or compensation may occur, with potential implications on tribal relations. Appropriate oversight, community consultation, and civil society engagement should mitigate these risks.
- Most construction activities involve itinerant workers who have been associated with the spread of HIV/AIDS in Ghana. MiDA at this stage is not sure of the HIV/AIDS awareness level of these communities along the roads as well as those of the construction workers. If awareness is low, and there are no mitigating measures MiDA construction activities could be associated with an increase in HIV infection rates. MiDA will act proactively to address this potential risk. For each Intervention Zone, the Environmental and Social Oversight Consultant (ESOC) will develop an HIV Awareness Plan that recognizes the linkages between the HIV/AIDS epidemic and development and is consistent with Ghanaian national HIV/AIDS Policy. The Plan will be developed in consultation with MiDA, the Ghana AIDS Commission, and NGOs working in this area and others as appropriate. Included at a minimum will be an HIV/AIDS Situation Analysis in each Intervention Zone, institutional and regulatory issues in Ghana and at the local level, discussion of risk factors, effects of HIV/AIDS on local social services delivery organizations and systems, potential negative impacts on the Projects, proposed mitigation, need for capacity building, and sample language for terms of reference for Consultants working on each Project and Activity that requires HIV Awareness.

3. Performance Monitoring

Program performance will be tracked on a regular and on-going basis using Performance Indicators. This regular analysis will enable MiDA and MCC to evaluate progress and make decisions (e.g., adjusting programming, conducting further analysis) that are necessary to ensure timely achievement of the Compact objectives and goal. This section of the M&E Plan builds upon Annex III of the Compact and provides a more detailed plan for implementing a performance monitoring system.

Indicators

Performance at the Compact goal, program objective and project levels will be measured using performance indicators. The Performance Monitoring Plan in Annex I of this document provides a list of the indicators that will be used, with data sources, entities responsible for data collection, data collection method, measurement unit and frequency of data collection. Detailed information on each indicator will be documented in Performance Indicator Reference Sheets (PIRS) that are currently under development. A template of the PIRS is attached to this M&E Plan in Annex V. Updates to the reference sheets will be made as project implementers and/or entities responsible for data collection come on board starting in Compact Q3 and on an ongoing basis thereafter as needed. The Indicator Reference Sheets serve as a repository for key information related to each indicator such as its precise definition, justification for and usefulness of the measure, unit of measure, documentation of data quality issues and actions, disaggregation, sources of data, data collection methodology and background information related to baseline values and targets.

In addition MiDA will monitor Output and Process Indicators to track the delivery of key goods, services and works. Selection of such indicators will be driven by sector teams, who have responsibility for managing the activities. The specific indicators to be tracked and the frequency of reporting will be included in implementer terms of reference and finalized with project implementers before implementation begins. These will be documented in Activity Monitoring Plans by Implementing Entities. The MiDA M&E team will provide oversight and guidance as needed in the development of such plans. Key activity level measures from the Activity Monitoring Plans will be selected for inclusion in the MiDA M&E Plan and for reporting to MCC.

Finally, MiDA will monitor environmental sustainability as a contextual element of the overall Program. Contextual elements and associated metrics will be selected jointly with Implementing Entities, MiDA managers and MCC sector experts, and added to this M&E Plan after the submission of the Strategic Environmental Assessment (SEA) report.

Baselines and Targets

The baselines and targets for Compact indicators are reproduced as Annex II of this document. This Annex will be expanded into a Performance Indicator Tracking Table (PITT) when all required data is made available. Generally indicator targets were derived from the economic analysis justifying Compact investments. Targets will be reviewed and validated before implementation begins and as Implementing Entities come on board.

Background information related to baseline data and targets will be documented in the Performance Indicator Reference Sheets.

Data Disaggregation

Data disaggregation in most cases is imperative for a more intuitive analysis of data. Disaggregating data makes data relevant across the concerns of multiple stakeholder groups. In particular, disaggregating data, under the Ghana Compact will make data more relevant to Project Managers and Implementing Entities in tracking performance of various program components on specific beneficiary groups.

Wherever applicable, MiDA will endeavor to disaggregate all data collected. Indicators for tracking performance of all the projects will be disaggregated by gender, age, income, intervention zone, and/or district as appropriate. Specific disaggregation variables for each of the indicators will be detailed in the PIRs.

Data from the GLSS5+, the FBO and other surveys will be disaggregated and analyzed according to the description above. The Beneficiary Analysis will further expand these to give a more qualitative picture of program impact on different categories of beneficiaries.

Reports

MiDA is responsible for a package of five regular reports submitted on a quarterly basis to MCC. Among these the Quarterly Progress Report (QPR) and one of its annexes, the Indicator Tracking Table, contains monitoring information.

The **Quarterly Progress Report (QPR)** consists of a management discussion and analysis, prepared by each Project Manager and the M&E Director. It focuses on, a) progress in overall program implementation, b) progress in project-level and M&E-specific activity implementation, c) salient program management and governance issues, d) implementation impediments and mitigation measures. The PITT will be prepared quarterly by the M&E Directorate and attached to each quarterly progress report. In reporting quarterly on these indicators, significant deviations of plus or minus ten percent ($\pm 10\%$) from the targets will require a brief explanation prepared by the responsible Project Manager. To ensure that the most current data are reported each quarter, MiDA will work with project implementers to align timing of implementers' data collection and submission with MiDA's quarterly reporting.

After the end of each US Fiscal Year (i.e., September 30th), an **Annual Supplementary Report** to the QPR is to be submitted to MCC to cover the period from October 1 of the preceding year to September 30 of the current year. This report provides a comprehensive overview of progress toward achieving Compact goals and objectives, on the consultative process, donor coordination, counterpart contributions, lessons learned, best practices information and relevant anecdotes/success stories. The draft report is due at MCC 30 days after the end of the fiscal year. The QPRs and Annual Supplementary Reports will be publicly available on the MiDA website.

Data Quality

To ensure the integrity of results reported on its activities, MiDA will implement an Agency-wide Data Quality Strategy that is consistent with rigorous performance management. The Data Quality Strategy outlines the roles and responsibilities of various Stakeholders in the data collection, processing and analysis and is documented here as Annex VI. The Data Quality Strategy also provides systematic guidance on how data quality will be ensured and highlights best practices for establishing efficient filing systems in preparation for program audits.

Linking Disbursements to Performance

Consistent with the results-based approach to managing the MiDA Program, disbursement of funds has been linked to performance as defined by a subset of the indicator targets contained in this document. The indicators and level of performance tied to financial disbursements can be found in Schedule 4 of the Disbursement Agreement between MCC and MiDA, and are reproduced in [Annex III](#) of this document.

4. Program Assessment and Evaluation

Mechanisms to facilitate learning from Program interventions are critical elements of a results based management system. MiDA will accomplish this through impact evaluations and performance assessments of project results.

Impact Evaluations

One of the key features of MCC's and MiDA's approach to development is the commitment to conducting rigorous impact evaluations, which employ methodologies that determine whether results can be attributed to Program interventions. In addition, evaluation findings can improve Program management and provide lessons for future Program implementation.

MiDA will engage Independent Evaluators to conduct interim and final evaluations, which are to be coordinated with complementary contracts using Compact Funds.

The Program will be principally evaluated on the extent to which the interventions contribute to the Compact Goal, which is to reduce poverty through economic growth led by agricultural transformation. The Impact Evaluation will use rigorous statistical tools and program design techniques (such as randomly selecting beneficiaries and comparison groups) to attempt to parse out impacts of the MiDA Program versus effects of other interventions, macroeconomic conditions, and even enterprise and personal ingenuity. By constructing comparison groups, the Impact Evaluation will be able to simulate with-and-without-MiDA Program scenarios. The Impact Evaluation will primarily be based on data from the Ghana Living Standards Survey 5+ (GLSS5+).

In addition the Evaluators will utilize results of Surveys carried out by other Contractors, such as Farmer-Based Organization (FBO) and Market Surveys (related to roads investments). Further details on Compact Evaluation are contained in [Annex IV](#) of this document.

Two major types of Evaluations will be conducted during the period of the Compact as follows:

- Interim Evaluation (formative evaluation) will assess progress in meeting the Compact goals, objectives and outcomes. They will provide early lessons learned and identify significant discrepancies between expected results and actual achievements, including an analysis of the reasons for discrepancies. The overall methodology to be used in the evaluation will be decided upon between MiDA and the entity responsible for conducting the evaluation.
- The Final Evaluation (summative evaluation) will assess whether Compact goals and objectives were met, factors accounting for success or failure and the lessons learned.

Impact Evaluation will answer, at a minimum, the questions below.

- Was the Program effective in meeting its goal of reducing poverty?
- Can beneficiary well-being be attributed to MiDA projects?
- What are the reasons behind the success or failure in achieving goals, objectives and targets?
- What were the unintended results of the Program (positive and negative)?
- What are the lessons learned that could be applicable to similar projects?

Additional questions may be added or questions may change as Projects develop.

Performance Assessment

MiDA will carry out performance assessments on a regular basis to systematically analyze monitoring data, identify areas where follow-up is required and highlight successes.

Preceding the preparation and submission of the QPR, a Quarterly Review Session will be held at the zonal level, with facilitation from the Zonal M&E Managers. Quarterly Review Meetings will discuss and ensure that data from different Zones are reported in the same way and on the same timeline. The proposed

composition of the membership of the Quarterly Review Meetings will involve MiDA M&E Zonal Managers, District Directors in the intervention Zones, Regional Implementation Consultants and Implementing Entities and representatives of beneficiaries. Reports of the quarterly review sessions from the three intervention zones will be submitted to MiDA in Accra and these outputs will be used to enrich the QPR.

Prior to the submission of the Annual Supplementary Report, the MiDA M&E Directorate will facilitate and coordinate an Annual Review Session of the overall Program. The main purpose of review is to assess performance towards achieving results and seek additional information to augment issues and trends identified during implementation. A key feature of this review session will be a presentation by the MiDA M&E team on annual results based on indicators. Products of the Annual Review Session will provide information to augment the Annual Supplementary Report. It will also provide additional information that will be a basis for the review of implementation strategies by project managers and implementing entities. The Annual Review Session will be held on/around the end of October (actual dates TBD), and will bring together MiDA staff, MCC counterparts, implementers and key stakeholders (e.g., District Directors in the intervention Zones)

At the mid-point of the Compact Term, MiDA with the assistance of an external Consultant will lead the Mid-Term Review of the Program. The review will draw on all performance reports and analyses prepared to date including interim evaluations. The purpose will be to determine if the Program and its component projects/activities are on track to achieving the final targets established in the Compact and agree on corrective actions where needed. The format of the review and the specific questions/issues to be addressed will be determined by MiDA in consultation with MCC.

At the conclusion of the Program, MiDA will, with the assistance of an external Consultant, will conduct a Program Completion Review and prepare a final report called a Program Completion Report (PCR). The PCR will be prepared according to guidelines provided by MCC taking into consideration, among other things, the objectives and content of the Impact Evaluations. In addition to normal Progress Report content, the PCR will provide:

- A concise description of the Program from proposal to completion
- A preliminary assessment of the Program's outcomes
- Identification of beneficiaries including relevant characteristics, such as gender, age and income level and degree of participation
- A preliminary assessment of the Program's sustainability
- Lessons learned, including changes that might have been made in M&E criteria, policies, procedures and practices related to the Program.

Finally, MCC or MiDA may request Ad Hoc Evaluations or Special Studies to be conducted by independent consultants. These may be quantitative or qualitative and cover, for example, focus groups to elicit beneficiary and stakeholder feedback on access, utilization and satisfaction or otherwise of services provided by the various MiDA implementing agencies as well as feedback from beneficiaries.

5. Managing Monitoring and Evaluation

The M&E Directorate

The MiDA M&E Directorate will be led by the *M&E Director* whose primary responsibility is to manage all M&E activities. The M&E Director is assisted by a team of four M&E Zonal Managers, a Research Economist and a Statistician. The M&E Zonal Managers are required to carry out the core function of monitoring all MiDA activities in their respective zones in addition to responsibilities for data quality assurance described in Annex VI. *Zonal M&E Managers* will ensure that all such activities are carried out with the strictest established code of conduct and will alert management to issues that can adversely affect results in a timely fashion. The *Research Economist* will plan and liaise with hired Consultant(s) to conduct

various research and impact studies of the Ghana Compact to enable MiDA and Stakeholders determine the extent to which Compact objectives are being achieved. The *Statistician* will lead in the collection, analysis and presentation of numerical data on the implementation of MiDA's programs and activities. In addition, each staff member has been assigned specific liaison responsibilities for the various projects and for key M&E issues, contracts and deliverables.

The M&E Directorate will be responsible for the following:

- **Establish an M&E Information System:** The M&E Directorate will oversee development of an integrated M&E system. See below for more on M&E Information System.
- **Develop M&E Policies, Procedures and Processes:** The M&E policies, procedures and processes will be documented in either an M&E Manual or other format, to be used by all MiDA Staff and project implementers.
- **Provide M&E Orientation and Capacity Building for Stakeholders:** The M&E Directorate will be responsible for communicating the M&E Plan and M&E System to all Key Stakeholders involved in the Ghana Compact, particularly project implementers, to ensure there is a common understanding of the overall process. This will take the form of orientation and capacity building sessions at the Zonal and National levels and would focus on issues such as:
 - Reviewing and validating indicator definitions, data collection methods and sources, and timing/frequency of data collection and reporting;
 - Target setting and review
 - Data quality controls and verification procedures;
 - Impact Evaluation questions and methodology.

M&E Orientation and Capacity Building for Stakeholders will be an ongoing activity and will be rolled out as compact implementers come on board.

- **Establish an Effective Documentation System:** The M&E Directorate will develop and use a documentation system to ensure that key M&E actions, processes and deliverables are systematically recorded. The documentation will encompass the following elements:
 - Performance Monitoring Plan (provided in Annex I of this M&E Plan)
 - Performance Indicator Tracking Table (See Annex II attached)
 - Changes to the M&E Plan (See Annex VI)
 - Key M&E deliverables including TORs, Contracts/Agreements, Surveys (including data collection instruments, reports/analyses).
- **Disseminate Information and Findings:** The M&E Directorate will develop and implement a systematic dissemination approach to ensure participation of all the stakeholders, and to facilitate feedback of lessons learned into the Compact implementation process. Different approaches to information packaging and dissemination will be employed depending on the Stakeholders being targeted. Information will be disseminated following the completion and adoption of findings from surveys, studies, quarterly and supplementary reports. Apart from dissemination seminars and the website, periodic outreach sessions (frequency to be determined) will be vehicles for disseminating information and findings.
- **Conduct Data Quality Reviews:** Data quality reviews will be conducted on a periodic basis to assess the quality of data reported to MiDA. An Independent Reviewer will be hired by MiDA for this work. The reviewer will carry out ex-ante and ex-post data quality assessments. See above section on data quality (under section 3: Performance Monitoring).
- **Participate in Project Monitoring:** The M&E Directorate will participate in Project Monitoring through site visits, review of Project reports and analysis of Performance Monitoring and other data. Project Monitoring will be an on-going exercise beginning from the start of actual implementation of activities.

- **Facilitate Beneficiary Feedback:** Participatory Monitoring and Evaluation (PM&E), using the Citizen Satisfaction Score Card on Local Government service delivery will be undertaken to measure beneficiary perceptions of the quality, efficiency and adequacy of the different services provided by the various Local Government and MiDA Implementing Agencies. This information will contribute to corrective action and will also provide an opportunity to deepen public accountability. It will also provide valuable feedback on the strengths and weaknesses of the various interventions on the beneficiaries. Beneficiary assessments will be rolled out approximately six months after implementation of Compact interventions and will be conducted twice during the Compact period.
- **Formulate an M&E Work Plan:** A detailed Work Plan of M&E activities has been developed and will be updated quarterly. The Work Plan can be found on the MiDA website.
- **Supervise the Design and Implementation of an Impact Evaluation Strategy:** The M&E Directorate will contribute to the design of the MiDA Impact Evaluation Strategy, and will contract for and supervise the implementation of Impact Evaluations and associated data collection efforts, as noted in Annex IV of this document. Impact Evaluation processes will commence with the GLSS5+ round one in the Fourth Quarter of the Compact implementation period.
- **Foster a Results-oriented Culture:** As the champion of results based management the M&E Directorate will take steps to foster a results oriented culture within MiDA and among its Implementing Partners from the very inception of the compact.

Information System for M&E

The M&E Directorate will oversee the development of a Management Information System (MIS) for M&E that facilitates timely transmission of management critical performance data, analysis and reports to the MiDA management team. The system has as its basis the Performance Indicators identified in this M&E Plan as well as output and process indicators that will be used by MiDA project managers to manage their activities. Microsoft SQL SERVER 2005 software will be procured to develop the system. When database is installed the model will be translated to database structures and tested with sample data. Thereafter a third party application will be developed to connect to the database.

The following attributes will be considered when designing the system:

- Integration, to the extent possible, with MiDA's overall Management Information System (MIS)
- Integration with the proposed MCC BIDS system that will become the primary vehicle through which all MCA entities will report to MCC
- Ability to store data on project outputs and outcomes and generate reports for management
- Ability to link project outputs and outcomes to budget allocations/spending
- Ability to document key M&E actions, processes and deliverables, as described previously
- Ability to store and track updates to an M&E Work plan
- Technology platform that is appropriate to the needs of MiDA and the technical capability of the core users of the system.

Budget

The cost of the M&E component of the Compact is estimated at approximately \$15 million (excluding salaries and other direct costs, which are covered under MiDA's administrative budget). The costs were derived on the basis of a preliminary estimate of the resources that will be required to implement the main components of the M&E agenda. This draft budget is being reviewed and updated as the Program develops.

Review and Revision of the M&E Plan

The M&E Plan is intended to be a living document. As such it will evolve over time in the course of Program implementation. To ensure its continued usefulness, the M&E Plan will be reviewed annually subsequent to the Annual Review of Program results. The purpose of the review is to determine whether

the M&E Plan is working as intended – i.e., to provide performance data that is as accurate and timely as resources will permit for program management and decision making. More specifically, the review will determine whether:

- The sequence of interventions and outcomes is occurring as planned
- Indicator definitions are precise and accurate
- Indicators and targets are appropriate (i.e., whether they continue to directly, objectively and adequately capture the results they were intended to capture).

If any changes are required as a result of the review, MiDA will update the M&E Plan to reflect the changes including a justification for each change. The revised M&E Plan will be submitted to MCC for approval. The need for flexibility will be carefully balanced with the need for a predictable framework against which performance can be tracked over time. Thus, adjustments to material elements of the Plan (e.g., revision of targets) will be carried out only if there is strong justification. Furthermore if such material changes are made, approval of the MiDA Board will be sought prior to submission to MCC for approval.

ANNEXES

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Annex VII:	Indicator Changes

ANNEX I: Performance Monitoring Plan

PROGRAM COMPONENT	INDICATOR	INDICATOR DEFINITION	MEASURE- MENT UNIT	DATA COLLECTION METHOD	DATA SOURCE	RESPONSIBLE ENTITY	FREQUENCY & PERIODS OF DATA COLLECTION
COMPACT GOAL:	REDUCE POVERTY THROUGH ECONOMIC GROWTH LED BY AGRICULTURAL TRANSFORMATION						
	Crop income (Northern Zone)	Net income per household from growing yams, sorghum and groundnuts (as proxies of the most likely crops grown). Northern Zone is comprised of the following five districts: Savelugu Nanton, Tolon Kumbungu, Tamale, West Mamprusi and Karaga.	US\$	Survey of FBOs	FBO Survey Report	Institute of Statistical, Social and Economic Research (ISSER)	Baseline 2008, Final 2011
	Crop income (Afram Basin Zone - East)	Net income per household from growing maize, yams and cassava (as proxies of the most likely crops grown). Afram Basin Zone - East is comprised of the following two districts: Fanteakwa and Kwahu South.	US\$	Survey of FBOs	FBO Survey Report	ISSER	Baseline 2008, Final 2011
	Crop income (Afram Basin Zone - West)	Net income per household from growing maize, yams and cassava (as proxies of the most likely crops grown). Afram Basin Zone - West is comprised of the following four districts: Ejura Sekyedumase, Afram Plains, Sekyere East and Sekyere West.	US\$	Survey of FBOs	FBO Survey Report	ISSER	Baseline 2008, Final 2011
	Crop income (Southern Zone)	Net income per household from growing pineapples and vegetables (as proxies of the most likely crops grown). Southern Zone is comprised of the following twelve districts: Gomaa, Awutu Efutu Senya, Akuapim South, Manya Krobo, Dangme West, Yilo Krobo, Kpando (North Dayi), Hohoe, Ketu, Keta, South Tongu and Akatsi.	US\$	Survey of FBOs	FBO Survey Report	ISSER	Baseline 2008, Final 2011
	Aggregate poverty gap of beneficiaries	Aggregate poverty gap measures the income value of beneficiaries at the poverty line minus average income of beneficiaries below the poverty line multiplied by the number of beneficiaries below the poverty line.	US\$	Survey of FBOs	FBO Survey Report (utilizes GLSS5+ and FBO survey data)	ISSER	Baseline 2008, Final 2011
PROGRAM OBJECTIVE 1:	INCREASE PRODUCTION AND PRODUCTIVITY OF HIGH-VALUE CASH AND FOOD CROPS IN THE INTERVENTION ZONES						
	Production of staple crops	Metric tons of maize, yams, cassava, groundnuts, millet and Sorghum (as proxies of most likely crops grown) grown and produced by the FBOs	Metric tons	Survey of FBOs	FBO Survey Report	ISSER	Baseline 2008 then Annually; starting 2009

PROGRAM COMPONENT	INDICATOR	INDICATOR DEFINITION	MEASURE- MENT UNIT	DATA COLLECTION METHOD	DATA SOURCE	RESPONSIBLE ENTITY	FREQUENCY & PERIODS OF DATA COLLECTION
		participating in the Program.					
	Production of high-value crops	Metric tons of pineapple (as proxy of most likely crop grown) grown and produced by the FBOs participating in the Program,	Metric tons	Survey of FBOs	FBO Survey Report	ISSER	Baseline 2008 then Annually; starting 2009
	Yield of Maize (metric tons/hectare)	Metric tons/hectare of maize (as proxy of most likely crop grown) grown and produced.	Metric tons	Survey of FBOs	FBO Survey Report	ISSER	Baseline 2008 then Annually; starting 2009
	Yield of Yam in the Northern Zone: Yams	Metric tons/hectare of yam (as proxy of most likely crop grown) grown and produced.	Metric tons/hectare	Survey of FBOs	FBO Survey Report	ISSER	Baseline 2008 then Annually; starting 2009
	Yield of Export-grade Pineapple in the Southern Zone:	Metric tons/hectare of export-grade pineapples (as proxy of most likely crop grown) grown and produced.	Metric tons/hectare	Survey of FBOs	FBO Survey Report	ISSER	Baseline 2008 then Annually; starting 2009
PROGRAM OBJECTIVE 2:	ENHANCE THE COMPETITIVENESS OF HIGH-VALUE FOOD AND CASH CROPS IN LOCAL AND INTERNATIONAL MARKETS						
	Additional Ghanaian agriculture exports: Pineapples	Additional metric tons of pineapple (as proxy of most likely crop exported) exported.	Metric tons	SPEG (Sea Freight Pineapple Exporters of Ghana) to provide Data on an annual basis	Administrative Records of SPEG	SPEG (Sea Freight Pineapple Exporters of Ghana)	Annually; starting 2009
	Additional Ghanaian agriculture exports: Asian Vegetables	Additional metric tons of Asian vegetables (as proxy of most likely crop exported) exported.	Metric tons	VEPEAG (Vegetable Producers and Exporters Association of Ghana) to provide Data on an annual basis	Administrative Records of VEPEAG	VEPEAG (Vegetable Producers and Exporters Association of Ghana)	Annually; starting 2009
	Ghana Discount	Price (including cost of Cargo, Insurance and Freight) of pineapple (as proxy of most likely crop exported), imported into the European markets from Ghana (Euro/kg), divided by price (including cost of Cargo, Insurance and Freight) of pineapple imported into the European markets from countries other than Ghana (Euro/kg). Import data will be based on information published by Eurostat.	Number	Review of Eurostat Publication	Eurostat Publication	MiDA Statistician	Annually, starting 2009
AGRICULTURE PROJECT OBJECTIVE	ENHANCE THE PROFITABILITY OF CULTIVATION, SERVICES TO AGRICULTURE & PRODUCT HANDLING IN SUPPORT OF THE EXPANSION OF COMMERCIAL AGRICULTURE AMONG GROUPS OF SMALL HOLDER FARMS						
COMMERCIAL TRAINING	Accelerate the development of commercial skills and capacity among FBOs and their business partners (including service providers to FBOs and other entities adding value to agricultural crops) such as processors						
	Number of farmers adopting new technologies and farming methods	Number of farmers in the Farmer-Based Organizations (FBOs) participating in the Program that adopts new technologies and farming methods, assuming an 85% adoption rate. Adoption refers to a sustained application (or internalization by	Number	Extraction from Records of CMC (Primary Data Source)	Administrative records of CMC	CMC	Annually, Starting 2009

PROGRAM COMPONENT	INDICATOR	INDICATOR DEFINITION	MEASURE- MENT UNIT	DATA COLLECTION METHOD	DATA SOURCE	RESPONSIBLE ENTITY	FREQUENCY & PERIODS OF DATA COLLECTION
		farmers) of a new technology introduced.					
	Percentage of post harvest loss at farm-gate (metric tones lost/metric tons produced)	(i) Metric tons of post harvest lost, divided by (ii) metric tons of total harvest produced at the farm-gate.	Percent	Extraction from Records of CMC (Primary Data Source)	Administrative records of CMC	CMC	Annually Starting 2009
	Number of SMEs processing products and/or providing inputs to farmers	Increase in farm produce processed or inputs supplied since (joining the project.) (previous year)	Number	Extraction from Records of CMC (Primary Data Source)	Administrative records of CMC	CMC	Annually Starting 2009
	Number of FBOs Trained in Commercial Agriculture	Number of FBOs completing training in Commercial Agriculture (disaggregated by stage of training)	Number	Extraction from Records of CMC	Administrative records of CMC	CMC	Quarterly, Starting 2008
	Number of Farmers Trained in Commercial Agriculture	Number of Farmers completing training in Commercial Agriculture (disaggregated by stage of training)	Number	Extraction from Records of CMC	Administrative records of CMC	CMC	Quarterly, Starting 2008
IRRIGATION ACTIVITY	Establish a limited number of retention ponds and weirs requested by the FBOs and FBO partnerships for whom access to water is critical to the success of their business objectives						
	Number of hectares irrigated	Number of hectares of crop land irrigated as a result of the Program	Hectares	Extraction from Records of CMC	Administrative records of CMC	CMC	Annually, starting 2009
	Number of FBOs that have requested new water retention technologies	The number of FBOs that have requested weirs, dams, ponds or other types of water retention technologies to MiDA for support	Number	Extraction from Records of CMC	Administrative records of CMC	CMC	Annually, starting 2009
	Number of water retention technologies constructed	Number of weirs, dams, ponds or other types of water retention technologies constructed through MiDA support	Number	Extraction from Records of CMC	Administrative records of CMC	CMC	Annually, starting 2009
LAND ACTIVITY	Improve tenure security for existing land users and to facilitate access to land for commercial crops in the intervention zones						
	Number of days to conduct a land transaction	Number of days to purchase, rent or sell a parcel of land from initiation of negotiation with current landowner to registration in title or deeds registry of the property right acquired.	Number	Survey	Land Survey Report	Land Data Collection Consultant	Baseline (2008), then annually; in 2009
	Number of land disputes resolved in the targeted districts	Total Land disputes resolved by the Surveyor, through ADR mechanisms and Adjudication Committee in Awutu Efutu Senya, then scaled up to Savelugu-Nanton and Kwahu North	Number	Review of Administrative Records of the Surveyor, ADR team, Adjudication Committee	Land Survey Report	Land Data Collection Consultant	Baseline (2008), then annually; in 2009
	Number of land rights registered in the pilot registration districts	Number of targeted parcels registered in the title registry. The Pilot Registration Districts (PRDs) are Kwahu North, Awutu-Effutu-Senya and Savelugu Nanton; then scaled up to cover six (6) more districts.	Number	Review of the Land Title Register	Land Title Register	Ministry of Lands, Forestry and Mines (MLFM)	Baseline (None) Biennial in 2009 and 2011
	Percent of	Number of backlog of cases cleared by	Percent	Review of Court	Register of the	Judicial Service	Baseline 2008

PROGRAM COMPONENT	INDICATOR	INDICATOR DEFINITION	MEASURE- MENT UNIT	DATA COLLECTION METHOD	DATA SOURCE	RESPONSIBLE ENTITY	FREQUENCY & PERIODS OF DATA COLLECTION
	backlogged land cases cleared by the Judicial Service	the district circuit courts through the issuance of Registrars Summons and adjudication of live cases divided by Number of backlogged land cases times 100		Register	Circuit Courts in MiDA zones		Biennial, in 2009 and 2011
	Percent of users of "On-Demand Services" that have completed a transaction	Number of users who have fully received support services (completed) to improve the quality and pace of formalization of land transactions divided by number of users of on-demand services	Percent	Review of Administrative Records of On-Demand Services Providers	Land Survey Report	Land Data Collection Consultant	Baseline (2008), then annually in 2009
	Number of land disputes being addressed informally	Number of land disputes that have been heard at least once by the ADR team but not yet resolved.	Number	Review of Administrative Records of the ADR team	Land Survey Report	Land Data Collection Consultant	Baseline (2008), then annually in 2009
	Percent of people aware of their land rights	Number of people able to articulate their land rights divided by the number of people interviewed in the survey times 100.	Percent	Survey	Land Survey Report	Land Data Collection Consultant	Baseline (2008), then periodically (TBD)
POST HARVEST ACTIVITY	Facilitate strategic investments by FBOs in post-harvest infrastructure improvements and to build the capacity of the public sector to introduce and monitor compliance with international plant protection standards						
	Volume of products passing through post-harvest treatment	Metric tons of pineapple, among other crops, passing through small-scale storage facilities, pack house pre-coolers or pack houses.	Metric tons	Review of CMC Records	Administrative records of CMC	CMC	Baseline (none) Annually; starting 2009
CREDIT ACTIVITY	Augment the supply of, and access to, credit provided by financial institutions operating in the intervention zones						
	Portfolio-at-risk of agricultural loan fund	Share of value of all loans disbursed from the agricultural loan fund that have one or more installments of principal or interest past due over thirty (30) days, disaggregated by short-term and medium-term loans	Percent	Central Bank of Ghana (BoG) will collect data from the records of participating financial institutions and report to MiDA	Central Bank of Ghana Report to MiDA	The Central Bank of Ghana	Baseline (none) Quarterly, starting 2008 (latter part)
	Value of loans disbursed to clients from agricultural loan fund	Value of loans disbursed from the agricultural loan fund for on-farm and off-farm investment by institutions (including financial institutions, input suppliers, etc.), disaggregated by short-term and medium-term loans.	US\$	BoG will collect data from the records of participating financial institutions and report to MiDA	Central Bank of Ghana Report to MiDA	The Central Bank of Ghana	Baseline (none) Quarterly; starting 2008
	Number of additional loans	Number of loans disbursed from the agricultural loan fund for on-farm and off-farm investment by institutions (including financial institutions, input suppliers, etc.), disaggregated by short-term and medium-term loans.	Number	BoG will collect data from the records of participating financial institutions and report to MiDA	Central Bank of Ghana Report to MiDA	The Central Bank of Ghana	Baseline (none) Quarterly; starting 2008
	Number of PFIs accredited	Number of Financial Institutions that have been accredited by Bank of Ghana as eligible for participating in the Agricultural Credit Program. Financial Institutions refer to	Number	Central BoG will submit quarterly reports on the accreditation process to MiDA	Central BoG Administrative records	Central BoG	Semi-annually, starting June 2008

PROGRAM COMPONENT	INDICATOR	INDICATOR DEFINITION	MEASURE- MENT UNIT	DATA COLLECTION METHOD	DATA SOURCE	RESPONSIBLE ENTITY	FREQUENCY & PERIODS OF DATA COLLECTION
		Commercial Banks, Rural Banks, Non-Bank Financial Institutions and Financial NGOs.					
	Value of loans disbursed to accredited PFIs per quarter	Dollar value of total loans disbursed to accredited PFIs in each quarter.	US\$	Central BoG will submit quarterly reports on the accreditation process to MiDA	Central BoG Administrative records	Central BoG	Quarterly, starting June 2008
FEEDER ROADS ACTIVITY	Increase access to major domestic and international markets, and to facilitate transportation linkages from rural areas to social service networks (including, for instance, hospitals, clinics and schools)						
	Vehicle operating costs on roads requiring medium and major rehabilitation (i.e., classified as BSRS, BSRE or BSUP)	Vehicle operating costs including both operation and maintenance costs and travel time, disaggregated by road segment. Medium rehabilitation consists of upgrading road surface from average gravel to bitumen surface and major rehabilitation consists of upgrading road surface from poor gravel to bitumen surface	US\$	World Bank's Highway Design and Maintenance (HDM-IV) Standards Model	Ministry of Transportation, (MoT)/Department of Feeder Roads (DFR) Reports to MiDA	MoT/DFR	Annually, starting 2009
	Kilometer of Feeder Roads Improved	"Feeder Roads" refer to the 930 km gravel or bitumen surfaced roads earmarked for improvement in eight of the 23 MiDA Program Districts. A feeder road is improved when; 1) it is upgraded from its gravel condition to a bitumen surfaced road (BSUP); 2) Rehabilitated from its poor condition (BSRE) or 3) Resealed in its fair condition (BSRS). Indicator will be disaggregated by BSUP/ BSRE/BSRS	kilometer	Use of distance measurement instrument (DMI) mounted on vehicle.	MoT/DFR Reports PMSC	MoT/DFR	TBD upon submission of consultant work plan
TRANSPORTATION PROJECT OBJECTIVE	REDUCE THE TRANSPORTATION COSTS AFFECTING AGRICULTURAL COMMERCE AT SUB-REGIONAL AND REGIONAL LEVELS						
N-1 ACTIVITY	Reduce the bottleneck in accessing the International Airport and the Port of Tema and to support an expansion of Ghana's SCHEDULE 2-2 export-directed horticulture base beyond current production						
	Volume-to-Capacity Ratio on the N1	Volume-to-capacity (V/C) ratio is a conventional level-of-service measure for roadways, comparing roadway demand (vehicle volumes) with roadway supply (carrying capacity). Volume-to-Capacity (V/C) Ratio helps determine the level of traffic congestion on a road.	Number (Traffic Congestion level – Severe, High, Moderate and Low)	Data will be collected by placing pneumatic tubes connected to recording devices at selected points along the N1, for a period of 48 contiguous hours.	Feasibility Study Report GHA Report to MiDA	Feasibility Study Consultant ² MoT/ Ghana Highway Authority (GHA) – Planning Division	Baseline 2008 End of Project, 2011
	Vehicles per hour at peak hour	Number of vehicles on road at peak traffic hour. "Peak hour" also known as a "rush hour" is that part of the day	Number	Data will be collected by placing pneumatic tubes connected to	Feasibility Study Report and	Feasibility Study Consultant	Baseline 2008

² Data from the Feasibility Study Consultant's report will be used to verify (and amend wherever necessary) baselines in Annex II

PROGRAM COMPONENT	INDICATOR	INDICATOR DEFINITION	MEASURE- MENT UNIT	DATA COLLECTION METHOD	DATA SOURCE	RESPONSIBLE ENTITY	FREQUENCY & PERIODS OF DATA COLLECTION
		characterized by busy traffic and congestion on the roads, with both private and public transport.		recording devices at selected points along the N1, for a period of 48 contiguous hours	GHA Report to MiDA	MoT/ GHA – Planning Division	End of Project, 2011
	Travel time at peak hour	“Travel time” refers to time spent in minutes or hours by a driver to traverse the 14 km stretch of the N1 at peak hour. “Peak hour” also known as a “rush hour” is that part of the day characterized by busy traffic and congestion on the roads, with both private and public transport.	Minutes	Data will be collected by placing pneumatic tubes connected to recording devices at selected points along the N1, for a period of 48 contiguous hours	Feasibility Study Report and GHA Report to MiDA	Feasibility Study Consultant MoT/ GHA – Planning Division	Baseline 2008 End of Project, 2011
	International Roughness Index	IRI is a road-surface quality measure (height of jumps in meters per kilometer distance).The IRI, though measured in meters/kilometer, can be expressed as a dimensionless quantity.	Number	A laser would be mounted in a specialized van; the height of jumps by the laser would be measured whilst driven across the road or highway system.	Feasibility Study Report and GHA Report to MiDA	Feasibility Study Consultant MoT/ GHA – Planning Division	Baseline 2008 End of Project, 2011
	Right of Way Acquired	Acquisition of Right-of-way refers to the easement or strip of land that would be granted for the 14km modifications of the Mallam-Tetteh Quarshie segment of the N1.	Yes/No	Publication by Government of Ghana	Executive Instrument	MoT/ GHA	4 th Quarter (2008)
	Feasibility Studies Report Submitted	A feasibility study report is a document that will determine the viability (technical and Economic) of the N1 project, after a study has been conducted by a consultant.	Yes/No	Feasibility Studies	Consultant Report	Feasibility Study Consultant MoT/ GHA	4 th Quarter (2008)
	% Physical Completion of N1	Percentage Physical Completion refers to work completed on the N1 at a particular point in time as compared to the projection of total work to complete the project.	Percent	Physical inspection and analysis of specific sub work activities by Supervising Consultant.	Consultant Report,	Feasibility Study Consultant	Annually in 2009 and 2010
TRUNK ROADS ACTIVITY	Facilitate the growth of agriculture and access to social services						
	Annual Average Daily Traffic (AADT)	Annual average daily traffic (AADT) is the total volume of vehicle traffic in both directions of a highway or road for a year divided by 365 days. Number of vehicles per day adjusted for time-of-day and seasonal differences for each road.	Number	Use portable or removable equipment to conduct the survey for periods of 7-14 days. An AADT value is then extrapolated from the collected data	Feasibility Study Report and GHA Report to MiDA	Feasibility Study Consultant MoT/ GHA – Planning Division	Baseline 2008 Annually; starting Y4
	International	IRI is a road-surface quality measure	Number	A laser would be	Feasibility Study	Feasibility Study	Baseline 2008

PROGRAM COMPONENT	INDICATOR	INDICATOR DEFINITION	MEASURE- MENT UNIT	DATA COLLECTION METHOD	DATA SOURCE	RESPONSIBLE ENTITY	FREQUENCY & PERIODS OF DATA COLLECTION
	Roughness Index (of roads requiring minor rehabilitation)	(height of jumps in meters per kilometer distance).The IRI, though measured in meters/kilometer, can be expressed as a dimensionless quantity. Minor rehabilitation consists of re-gravelling (i.e., change from poor gravel to improved gravel surface)		mounted in a specialized van; the height of jumps by the laser would be measured whilst driven across the trunk road.	Report and GHA Report to MiDA	Consultant MoT/ GHA – Planning Division	Annually, starting 2009
	International Roughness Index (of road requiring major rehabilitation)	IRI is a road-surface quality measure (height of jumps in meters per kilometer distance).The IRI, though measured in meters/kilometer, can be expressed as a dimensionless quantity. Major rehabilitation consists of (i) bitumen surfacing (i.e., change from gravel to bitumen surface) (ii) rehabilitation and resurfacing of bitumen surfaced roads.	Number	A laser would be mounted in a specialized van; the height of jumps by the laser would be measured whilst driven across the trunk road.	Feasibility Study Report and GHA Report to MiDA	Feasibility Study Consultant MoT/ GHA – Planning Division	Baseline 2008 Annually, starting 2009
	Kilometer of Trunk Roads Improved	"Improved Trunk Roads" refer to the 230 km roads earmarked for construction or rehabilitation in the Afram Basin Zone to facilitate agriculture or give access to social services.	kilometer	Use of distance measurement instrument (DMI) mounted on vehicle.	Supervising Consultant's Progress Report	Construction Supervision Consultant	TBD upon submission of consultant work plan
FERRY ACTIVITY³							
Facilitate growth of the agricultural sector of the Afram Basin Zone							
	Travel time for walk-on passengers and small vehicles	Travel Time is defined as the average time spent by walk-on passengers and small vehicles to cross Volta River, including time spent waiting to board ferry and to on- and off-load	Minutes	Specialized surveys for the baseline data. Monitoring data to be collected through protocols designed by the VLTC in consultation with MiDA	Feasibility Study Report VLTC Report to MiDA	Feasibility Study Consultant Volta Lake Transport Company (VLTC)	Baseline 2008 Annually, starting 2010
	Travel time for trucks to cross the Volta Lake	Travel Time is defined as the average time spent by trucks to cross Lake Volta, including time spent waiting to board ferry and to on- and off-load. "Trucks" refer to haulage trucks and vehicles other than bicycles, motorcycles, saloon cars, 4x4, mini-buses, larger buses, etc.	Minutes	Specialized surveys for the baseline data. Monitoring data to be collected through protocols designed by the VLTC in consultation with MiDA	Feasibility Study Report VLTC Report to MiDA	Feasibility Study Consultant VLTC	Baseline 2008 Annually, starting 2010
	Annual Average Daily Traffic (vehicles)	Annual average daily traffic (AADT) is the total volume of vehicular traffic in both directions of the Ferry crossing routes for a year divided by 365 days. Number of vehicles per day is adjusted for time-of-day and seasonal differences for each crossing route.	Number	Use portable or removable equipment to conduct the survey for periods of 7-14 days. An AADT value is then extrapolated from the collected data	Feasibility Study Report VLTC Report to MiDA	Feasibility Study Consultant VLTC	Baseline 2008 Annually, starting 2010
	Annual Average Daily	Average daily traffic is the number of	Number	Use portable or	Feasibility Study	Feasibility Study	Baseline 2008

³ Targets will be set in Annex II based on the Feasibility Study Report

PROGRAM COMPONENT	INDICATOR	INDICATOR DEFINITION	MEASURE- MENT UNIT	DATA COLLECTION METHOD	DATA SOURCE	RESPONSIBLE ENTITY	FREQUENCY & PERIODS OF DATA COLLECTION
	Traffic (passengers)	passengers per day, adjusted for time-of-day and seasonal differences		removable equipment to conduct the survey for periods of 7-14 days. An AADT value is then extrapolated from the collected data	Report VLTC Report to MiDA	Consultant VLTC	Annually, starting 2010
	Rehabilitation of Akosombo Floating Deck Completed	Rehabilitation of the Akosombo Floating Deck is complete when it is upgraded from its poor condition to a better state to accommodate servicing of ferries plying the Volta Lake.	Yes/No	Physical inspection and analysis of specific sub work activities by Supervising Consultant.	Supervising Consultant 's Progress Report	Construction Supervision Consultant	TBD upon submission of consultant work plan
	% Physical Completion of Civil Works at Landing Stages	Percentage Physical Completion refers to work completed at the Ferry Landing Stages (at Adawso and Ekye Amanfrom) at a particular point in time, as compared to the projection of total work to complete the project.	Percent	Physical inspection and analysis of specific sub work activities by Supervising Consultant.	Supervising Consultant 's Progress Report	Construction Supervision Consultant	TBD upon submission of consultant work plan
	% Physical Completion of Ferry Terminals	Percentage Physical Completion refers to work completed at the Ferry Terminals at a particular point in time, as compared to the projection of total work to complete the project.	Percent	Physical inspection and analysis of specific sub work activities by Supervising Consultant.	Supervising Consultant 's Progress Report	Construction Supervision Consultant	TBD upon submission of consultant work plan
RURAL DEVELOPMENT PROJECT	STRENGTHEN THE RURAL INSTITUTIONS THAT PROVIDE SERVICES COMPLEMENTARY TO, AND SUPPORTIVE OF, AGRICULTURAL AND AGRI-BUSINESS						
PROCUREMENT CAPACITY ACTIVITY	Support the development of procurement professionals and reinforce the capabilities of government to procure goods and services						
	Time per procurement	Amount of time to execute contract award from the point of receiving a requirement for processing to contract award, disaggregated by the size of each award as follows: (i) US\$ 2,500 and below, (ii) US\$ 2,501 - US\$ 10,000, (iii) US\$ 10,001 - US\$ 100,000, (iv) US\$ 100,001 - US\$ 500,000 and (v) US\$ 500,001 and above.	Weeks	Review of Administrative Records of Public Procurement Authority (PPA)	Data Collection Support Consultant's Report to MiDA	Data Collection Support Consultant	Baseline 2008 Semi-annually, starting 2008
	Quality of procurement	Quality of procurement processes followed from the point of receiving a requirement for processing to contract award.	High, Medium, Low, etc	Survey	Data Collection Support Consultant's Report to MiDA	Data Collection Support Consultant	Baseline 2008 Annually, starting 2009
COMMUNITY SERVICES ACTIVITY⁴	Enhance the sustainability of the Agriculture Project by providing the necessary infrastructure to improve health of communities, to enhance skill development through access to education, and to facilitate small-scale post-harvest processing of agricultural products⁵						

⁴ Primary source of baseline data for community services (Education, water and sanitation, and rural electrification) will be the GLSS5+ survey report, but other data may be collected by a third party contractor, e.g. Feasibility Study Consultant, as needed.

PROGRAM COMPONENT	INDICATOR	INDICATOR DEFINITION	MEASURE- MENT UNIT	DATA COLLECTION METHOD	DATA SOURCE	RESPONSIBLE ENTITY	FREQUENCY & PERIODS OF DATA COLLECTION
LOCAL GOVERNMENT SERVICE DELIVERY	Score card of citizen satisfaction with services	Client feedback on the performance of public services. It combines qualitative and quantitative methods to collect useful demand side data that can help improve the performance of public services.	High, Medium, Low, etc	The criteria for determining each performance level (1, 2, 3, 4 and 5) of public services is defined by representatives of service clients (community members)	Survey Report on citizen satisfaction	Consultant Procured by MiDA	Baseline 2008 Annually; starting 2009
EDUCATION FACILITIES	Gross enrolment rate	The total number of pupils enrolled in primary school (i.e., Grade 1 through Grade 6) expressed as a percentage of the total number of primary school-aged in the population. Primary school-aged population is defined as children ages 6 through 11 years in the population, estimated from the latest population census or population projections	Percent	Obtain secondary data on Primary schools from GES/EMIS. Current population values for primary school aged children are extrapolated from the National Census	GES/EMIS Data/ MOESS Report	Ghana Education Service (GES) /MOESS	Baseline 2008 Annually, starting 2009
	Gender parity in school enrolment	Number of females enrolled in school divided by the number of males enrolled in school.	Number	Obtain secondary data on Primary schools from GES/EMIS.	EMIS Data/ GES/EMIS Data/ MOESS Report	Ghana Education Service (GES) /MOESS	Baseline 2008 Annually, starting 2009
	Number of Schools constructed / rehabilitated to MOESS standards	Aggregated number of schools constructed or rehabilitated to standards accepted by MOESS in all MiDA Districts	Number	MiDA routine monitoring	Admin records of District Assemblies, Consultant	M&E Managers, CS Manager	Quarterly, starting in 2008
WATER AND SANITATION	Distance to collect water	Distance between house and water source in kilometers.	Meters	Household Survey	GLSS5+ Survey Reports	ISSER/GSS	Baseline 2008 Annually, starting 2009
	Time to collect water	Time spent collecting water, including travel and waiting time.	Minutes	Household Survey	GLSS5+ Survey Reports	ISSER/GSS	Baseline 2008 Annually, starting 2009
	Distance to sanitation facility	Distance between house and sanitation facility in kilometers.	Meters	Household Survey	GLSS5+ Survey Reports	ISSER/GSS	Baseline 2008 Annually, starting 2009
	Travel time to sanitation facility	Time spent traveling to and waiting at sanitation facility.	Minutes	Household Survey	GLSS5+ Survey Reports	ISSER/GSS	Baseline 2008 Annually, starting 2009
	Incidence of Guinea worm or Bilharzias	Number of individuals suffering from illness attributed to Guinea worm, Diarrhea and Bilharzias divided by the number of individuals, in the relevant district (or other area).	Per 1,000 population	Household Survey	GLSS5+ Survey Reports	ISSER/GSS	Baseline 2008 Annually, starting 2009
	Incidence of Diarrhea	Number of individuals suffering from illness attributed to diarrhea divided by	Per 1,000 population	Household Survey	GLSS5+ Survey Reports	ISSER/GSS	Baseline 2008 Annually, starting 2009

PROGRAM COMPONENT	INDICATOR	INDICATOR DEFINITION	MEASURE- MENT UNIT	DATA COLLECTION METHOD	DATA SOURCE	RESPONSIBLE ENTITY	FREQUENCY & PERIODS OF DATA COLLECTION
		the number of individuals, in the relevant district (or other area)					
	Average number of days lost due to Guinea worm, Diarrhea or Bilharzias	Number of days spent accessing treatment and recovering from illness attributed to Guinea worm, Diarrhea or Bilharzias.	Number	Household Survey	GLSS5+ Survey Reports	ISSER/GSS	Baseline 2008 Annually, starting 2009
	Number of stand-alone boreholes constructed to CWSA standards	Aggregated number of stand-alone boreholes constructed to standards accepted by CWSA in all MiDA Districts	Number	MiDA routine monitoring	Admin records of District Assemblies, Consultant	M&E Managers, CS Manager	Quarterly, starting in 2009
WATER AND SANITATION	Number of Small Town Water Systems constructed to CWSA standards	Aggregated number of Small Town Water Systems (STWS) constructed to standards accepted by CWSA in all MiDA Districts	Number	MiDA routine monitoring	Admin records of District Assemblies, Consultant	M&E Managers, CS Manager	Quarterly. Starting in 2011
	Percentage of households in target districts with electricity	Number of households with functional electricity connections divided by the total number of households, in the relevant district (or other area). A household is a family unit with a head, male or female, from whom other members of the unit derive livelihood	Percent	Household Survey	GLSS5+ Survey Reports	ISSER/GSS	Baseline 2008 Annually, starting 2009
	Percentage of schools in target districts with electricity	Number of schools with functional electricity connections. Schools refer to Pre-schools, Primary schools, Junior Secondary Schools (JSS), Senior Secondary Schools, as well as vocational and technical institutions	Number	Household Survey	GLSS5+ Survey Reports	ISSER/GSS	Baseline 2008 Annually, starting 2009
RURAL ELECTRIFICATION	Percentage of agricultural processing plants in target districts with electricity	Number of agricultural processing plants with functional electricity connections	Number	Household Survey	GLSS5+ Survey Reports	ISSER/GSS	Baseline 2008 Annually, starting 2009
	Number of Electric Power Transformers installed to ECG / NED standards	Aggregated number of Electric Power Transformers installed to standards accepted by ECG / NED in all MiDA Districts	Number	MiDA routine monitoring	Admin records of District Assemblies, Consultant	M&E Managers, CS Manager	Quarterly, starting 2009
	Number of Kilometers of Electric Power distribution lines constructed to ECG / NED standards	Aggregated number of Kilometers of Electric Power distribution lines constructed to standards accepted by ECG / NED in all MiDA Districts	Number	MiDA routine monitoring	Admin records of District Assemblies, Consultant	M&E Managers, CS Manager	Quarterly
FINANCIAL SERVICES ACTIVITY	Number of inter-bank transactions	Number of checks received by rural banks plus number of remittances received by rural banks.	Number	Central BoG will collect data from the records of participating financial institutions and report to	Central BoG Administrative records	Central BoG, APEX Bank	Semi-annually, starting 2008

PROGRAM COMPONENT	INDICATOR	INDICATOR DEFINITION	MEASURE- MENT UNIT	DATA COLLECTION METHOD	DATA SOURCE	RESPONSIBLE ENTITY	FREQUENCY & PERIODS OF DATA COLLECTION
				MiDA			
	Value of deposit accounts in rural banks	Dollar value of total deposits in rural banks.	US\$	Central BoG will collect data from the records of participating financial institutions and report to MiDA	Central BoG Administrative records	Central BoG, APEX Bank	Semi-annually, starting 2008
	Number of PFIs Automated under the Automation/Computerization and Interconnectivity of Rural Banks Activity	Number of Financial Institutions that have been Automated/Computerized under the Financial Services component of the MiDA Compact	Number	Project Implementation Team will submit quarterly reports on the accreditation process to MiDA	Project Implementation Reports	Project Implementation Team	Annually, starting December 2008
	Number of PFIs Connected to the WAN under the Automation/Computerization and Interconnectivity of Rural Banks Activity	Number of Financial Institutions that have been connected to the WAN under the Financial Services component of the MiDA Compact	Number	Project Implementation Team will submit quarterly reports on the accreditation process to MiDA	Project Implementation Reports	Project Implementation Team	Annually, starting December 2008

Annex II: Indicators, Baselines and Targets

Compact Goal: Reduce poverty through economic growth						
Indicator	Baseline	Targets / Year				
		1	2	3	4	5
Crop income (Northern Zone) (US\$)	\$700 ⁶					135% increase over baseline ⁷
Crop income (Afram Basin Zone - East) (US\$)	\$820 ⁸					55% increase over baseline ⁹
Crop income (Afram Basin Zone - West) (US\$)	\$540 ¹⁰					142% increase over baseline ¹¹
Crop income (Southern Zone) (US\$)	\$1,860 ¹²					33% increase over baseline ¹³
Aggregate poverty gap of beneficiaries (US\$)	TBD in 2008	TBD (in 2008 after FBO Survey)				

Objective Level

Indicator	Baseline	Year				
		1	2	3	4	5
Objective: Increase production and productivity of high-value cash and food crops in the Intervention Zones in Ghana.						
Production of staple crops (metric tons)	430,000			1% increase over baseline	4% increase over baseline	11% increase over baseline
Production of high-value crops (metric tons)	225,000		2% increase over baseline	5% increase over baseline	16% increase over baseline	50% increase over baseline
Productivity of land (metric tons/hectare): maize	1.9			1% increase over baseline	4% increase over baseline	12% increase over baseline
Productivity of land in the Northern Zone (metric tons/hectare): yams	7			61% increase over baseline	65% increase over baseline	75% increase over baseline
Productivity of land (metric tons/hectare): export-grade pineapple	8			1% increase over baseline	8% increase over baseline	26% increase over baseline

⁶ Baseline assumes that 2 hectares are cultivated.

⁷ Target assumes that 2.2 hectares are cultivated.

⁸ Baseline assumes that 1 hectare is cultivated.

⁹ Target assumes that 1.1 hectares are cultivated.

¹⁰ Baseline assumes that 1 hectare is cultivated.

¹¹ Target assumes that 1.1 hectares are cultivated.

¹² Baseline assumes that 2 hectares are cultivated.

¹³ Target assumes that farmers transition from maize, yam and cassava production to 2 hectares of pineapple and 1 hectare of vegetable cultivation.

Indicator	Baseline	Year				
		1	2	3	4	5
Objective: Enhance the competitiveness of high-value cash and food crops in local and international markets.						
Additional Ghanaian agriculture exports (metric tons): pineapple	0			8,300	14,500	21,700
Additional Ghanaian agriculture exports (metric tons): Asian vegetables	0			1,344	2,192	3,178
The ratio of (i) price of Ghanaian imports into European markets (Euro/kg) to (ii) price of non-Ghanaian imports into European market (Euro/kg)	0.75			0.75	0.78-0.81	0.81-0.88

Outcome Level

Agriculture Project						
Indicator	Baseline	Targets / Year				
		1	2	3	4	5
Commercial Training Activity						
Number of farmers adopting new technologies and farming methods (annual targets are not cumulative)	0		5,100	12,750	15,300	17,850
Percentage of post harvest lost at farm gate (metric tones lost/metric tons produced)	20%		10-14%	10-14%	10-14%	10-14%
SMEs processing products and/or providing inputs to farmers	TBD (in 2008)	TBD (in 2008)				
Irrigation Activity						
Number of hectares irrigated	0	0	280	1,100	1,720	1,960
Land Activity						
Number of days to conduct a land transaction ¹⁴	TBD (in 2008)		50% decrease from baseline	67% decrease from baseline		
Registration of land rights in the pilot registration districts	TBD (in 2008)			30% increase from baseline		100% increase from baseline
Number of backlogged land dispute cases cleared by judicial service	TBD (in 2008)	TBD				
Post-Harvest Activity						
Volume of products passing through post-harvest treatment (metric tons)	0			111,820	129,900	143,400
Credit Activity						
Portfolio-at-risk of agricultural loan fund	0%		20%	20%	20%	20%
Value of loans disbursed to clients from agricultural loan fund (US\$)	0		4,500	12,000	14,500	17,000
RSRS	0		5,000	13,000	15,500	18,000

¹⁴ World Bank: Doing Business in Ghana report – Registering Property 2006 – 382 days. Need to confirm if the indicator used by the World Bank and the indicator in this M&E Plan are defined in the same way. If they are, then the data maybe used either to establish the baseline or forecasts (if any) for target setting purposes. Targets already established should not be changed without clearance from MCC.

Agriculture Project						
Indicator	Baseline	Targets / Year				
		1	2	3	4	5
Feeder Roads Activity						
Vehicle operating costs on roads requiring medium and major rehabilitation (i.e., those classified as BSUP, BSRE, BSRS) ¹⁵	TBD (in 2009)					TBD (in 2008)

Outcome Level

Transportation Project						
Indicator	Baseline	Targets / Year				
		1	2	3	4	5
N-1 Activity						
Volume capacity ratio	0.85-1					0.26
Vehicles per hour at peak hour	>2000					3,120
Travel time at peak hour	60 minutes					20 minutes
International roughness index	TBD (in 2008)					2.5
Trunk Roads Activity						
Annual average daily traffic	570				35% increase in traffic volume	35% increase in traffic volume
International roughness index (of roads requiring minor rehabilitation)	9-12			6.0	6.0	6.0
International roughness index (of roads requiring major rehabilitation)	9-12			3.5	3.5	3.5
Ferry Activity						
Travel time for walk-on passengers and small vehicles	150 minutes					TBD (in 2008)
Travel time for trucks	370 minutes					TBD (in 2008)
Annual average daily traffic (vehicle)	53					TBD (in 2008)
Annual average daily traffic (passenger)	541					TBD (in 2008)

Outcome Level

Rural Development Project						
Indicator	Baseline	Targets / Years				
		1	2	3	4	5
Procurement Capacity Activity						
Time per procurement	TBD (in 2008)					TBD (in 2008)
Quality of procurement	TBD (in 2008)					TBD (in 2008)
Community Services Activity						
Local Government Service Delivery Sub-Activity						
Score card of citizen satisfaction with services	TBD (in 2008)					TBD (in 2008)
Education Facilities Sub-Activity						
Gross enrolment rates	TBD (in 2008)					TBD (in 2008)
Gender parity in school enrolment	TBD (in 2008)					TBD (in 2008)

¹⁵ Targets for VOC on roads requiring medium rehab was 30% decrease from baseline in yrs 3, 4 and 5 respectively. For roads requiring major rehab, targets were 40% decrease from baseline in yrs 3, 4 and 5.

Rural Development Project						
Indicator	Baseline	Targets / Years				
		1	2	3	4	5
Water and Sanitation Facilities Sub-Activity						
Distance to collect water	TBD (in 2008 after GLSS5+)		TBD (in 2008 after GLSS5+)			
Time to collect water			TBD (in 2008 after GLSS5+)			
Distance to sanitation facility			TBD (in 2008 after GLSS5+)			
Travel time to sanitation facility			TBD (in 2008 after GLSS5+)			
Incidence of guinea worm or bilharzias			TBD (in 2008 after GLSS5+)			
Incidence of diarrhea			TBD (in 2008 after GLSS5+)			
Average number of days lost due to guinea worm, diarrhea or bilharzias			TBD (in 2008 after GLSS5+)			
Rural Electrification Sub-Activity						
Percentage of households in target districts with electricity	TBD (in 2008 after GLSS5+)		TBD (in 2008 after GLSS5+)			
Percentage of schools in target districts with electricity			TBD (in 2008 after GLSS5+)			
Percentage of agricultural processing plants in target districts with electricity			TBD (in 2008 after GLSS5+)			
Financial Services Activity						
Number of inter-bank transactions	210,000	TBD (in 2008)				
Value of deposit accounts in rural banks	1,680 billion Cedis					

Annex III: Indicators Tied to Disbursements

SECTION 1. AGRICULTURE PROJECT					
Indicator	Baseline	Year 2	Year 3	Year 4	Year 5
Agriculture Project					
Productivity of land (metric tons/hectare) of program farmers: maize	1.9	-	-	1 % increase over baseline	4 % increase over baseline
Productivity of land in the Northern Zone (metric tons/hectare) of program farmers: yams	7	-	-	61 % increase over baseline	65 % increase over baseline
Productivity of land (metric tons/hectare) of program farmers: export-grade pineapple	8	-	-	1 % increase over baseline	8 % increase over baseline
Additional Ghanaian agriculture exports (metric tons): pineapple	0	-	-	8,300	14,500
Additional Ghanaian agriculture exports (metric tons): Asian vegetables	0	-	-	1,344	2,192
Commercial Training Activity					
Number of farmers adopting new technologies and farming methods	0	-	5,100	12,750	15,300
Percentage of post harvest lost at farm-gate (metric tones lost/metric tons produced)	20%	-	10-14%	10-14%	10-14%
Irrigation Activity					
Number of hectares irrigated	0	-	280	1,100	1,720
Land Activity					
Number of days to conduct a land transaction	TBD	-	50% decrease from baseline	67% decrease from baseline	-
Registration of land rights in the pilot registration districts	TBD	-	-	30% increase from baseline	-
Post-Harvest Activity					
Volume of products passing through post-harvest treatment (metric tons)	0	-	-	111,820	129,900
Credit Activity					
Portfolio-at-risk of agricultural loan fund	0%	-	20%	20%	20%
Value of loans disbursed to clients from agricultural loan fund (US\$)	0	-	4,500	12,000	14,500
Feeder Roads Activity					
Vehicle operating costs (on roads requiring medium and major rehabilitation)	TBD	-	-	TB	TBD
SECTION 2. TRANSPORTATION PROJECT					
Indicator	Baseline	Year 2	Year 3	Year 4	Year 5
Trunk Roads Activity					
International roughness index (of roads requiring minor rehabilitation)	9-12	-	-	6.0	6.0
International roughness index (of roads requiring major rehabilitation)	9-12	-	-	3.5	3.5

SECTION 3. RURAL SERVICES DEVELOPMENT PROJECT					
Indicator	Baseline	Year 2	Year 3	Year 4	Year 5
Community Services Activity: Water and Sanitation Facilities Sub-Activity					
Incidence of disease (guinea worm, diarrhea or bilharzias)	TBD	TBD during Compact Q5			
Financial Services Activity					
Number of inter-bank transfers	210,000	TBD during Compact Q5			
Value of deposit accounts in rural banks	1,680 billion Cedis	TBD during Compact Q5			

Annex IV: Impact Evaluation Plan

MiDA has planned two levels of impact assessment: (a) impact of MiDA program on growth and development in intervention districts and of the national economy, and (b) impact of activity-specific interventions on households and farmer-based organizations. Primarily, the impact assessment of the MiDA program will focus on this latter aspect – the changes in the livelihoods of households and their income-earning abilities and access to social services.

Third-party, independent evaluation teams hired by MiDA will seek to attribute impact to MiDA programs by comparing MiDA beneficiaries to a counterfactual, or comparison groups. The evaluation hypotheses, methods, data sources and questions to be answered through the evaluation are presented below.

Overview of data sources

Monitoring and evaluation of the overall program will rely heavily on an expanded version of the ongoing national household living standards survey GLSS 5 to cover enumeration areas in all the 23 MiDA program districts. This expanded survey, also known as GLSS5+, will be conducted jointly by GSS, Institute for Statistical, Social and Economic Research (ISSER, University of Ghana), and Yale University. The GLSS5+ includes a random sub-sample of 5,000 households in approximately 333 EAs of the GLSS 5. However, to allow for district-level tracking of program outcomes and the disaggregation of impacts within MiDA Intervention Zones, Compact funds will be devoted to increasing the sample size of the GLSS 5+ in the MiDA target districts by approximately 9,000 households, and modifying the GLSS5+ survey instrument to answer the questions discussed below.

The major data sources for the MiDA evaluation are, but not limited to, the following:

- GLSS5+, conducted by ISSER and GSS
- FBO Surveys, conducted by ISSER
- Market Surveys (to measure impact of roads), conducted by contactor TBD
- Community Services Survey, conducted by contactor TBD
- Credit Surveys, conducted by contactor TBD

1. Program wide evaluation

Purpose and methods

The impact on the national economy will be assessed by looking at the performance of the economy using published public data on various indicators, particularly of agricultural production and exports. The most important consideration will be the extent of change taking place in the structure of the economy as a result of the program. In addition, the GLSS5+ will allow for comparison of outcomes in MiDA Intervention Districts versus those in districts outside of MiDA intervention areas. This analysis will employ a quasi-experimental design (difference-in-difference) to compare outcomes like growth or well-being in MiDA and non-MiDA districts. Additionally, the evaluation may use propensity score matching (matching MiDA beneficiaries and similar individuals outside of MiDA districts) to contribute to the impact assessment.

The essential idea of the evaluation is that the difference in the specified indicators of well-being between MiDA program district households and their non-MiDA counterparts at the end of the

program relative to differences in well-being indicators at the beginning would be measured by Z say, where Z is defined as:

$Z = (W_{MiDA2012+} - W_{non-MiDA2012+}) - (W_{MiDA2007+} - W_{non-MiDA2007+})$, where W denotes the average over the relevant sample households of indicators of well-being.

However, MiDA expects to obtain very rich and exhaustive data from the GLSS5+ for a better than the above simple difference-in-difference estimator. The estimation of an econometric model will allow for controlling for differences in initial observed characteristics between MiDA Program groups and non-MiDA Program groups and for changes in exogenous variables. It will also help to estimate the possibly heterogeneous impact of the MiDA Program on different types of households or individuals. For instance, using the rich data on household demographics, landholdings, assets, etc, we can estimate the effect of the Ghana Compact on that measure of well-being as:

$W_{hdt} = X_{hdt}\beta + \lambda_h + I_{dt}\gamma + \varepsilon_{hdt}$, where W_{hdt} is an indicator of well-being for household h in district d at time t (say, the household's income, consumption, or farm yield), I is an indicator variable that takes the value 1 in 2012 only in MiDA districts, and 0 otherwise. X is a vector of exogenous determinants of W, and λ is a household effect, which might be permitted to be correlated with X. The scalar coefficient γ is the difference-in-difference estimator of the program impact corresponding to Z above.

Key questions

- Has there been a change in the well-being of MiDA beneficiaries over the life of the Compact?
- Can changes in well-being be attributed to activities implemented under the Compact?

Data source

GLSS5+ combined with activity-specific surveys as needed.

2 Agriculture Project

Farmer and Enterprise Training in Commercial Agriculture Activity

Activity goal and description

The goal of the Farmer and Enterprise Training in Commercial Agriculture is to accelerate the development of commercial skills (including management, business planning, technology applications and marketing) and capacity among FBOs and their business partners, including service providers to FBOs and other entities adding value to agricultural crops such as processors.

Key questions

- Does the FBO training program encourage farmers to adopt new technologies/techniques (including using land more intensively and efficiently, choosing crops that are more competitive, optimizing the use of inputs, including labor)?
- What is the magnitude of spillover from MiDA-trained farmers on proximate farmers and those in the MiDA-trained farmers' social networks?
- Does the FBO training program cause an expansion in farmers' yields, profits and sales?
- Do expanded yields and sales lead to higher incomes and enhanced access to social services?

Method of evaluation

The method of evaluation will be a Randomized rollout of FBO training. MoFA will select an excess number of qualified FBOs for training and ISSER will randomly select a smaller number of FBOs for training in each round that the training is offered. This means that all qualified FBOs will receive

training, but that order of training is selected randomly. For example, MoFA will select 600 FBOs before the first round of training starts and ISSER will randomly choose 300 FBOs for the initial round of training. Additionally, the evaluation will examine spillover using data collected on social networks of FBO members (using data from FBO survey and the GLSS5+).

Treatment and control groups

Beneficiaries receiving training first (in 2008 and 2009) compared to those receiving training in later years (in 2010 and 2011).

Data sources

- GLSS5+ (and FBO survey) to look at social networks and spillover.
- Survey of FBO members by ISSER conducted annually.
- Survey related to farmer yields and recall error, conducted by MOFA and ISSER. As a compliment to the data collected through the FBO surveys, MOFA (SRID) will conduct plot-level measurements of nine crops, using a sample of households generated by ISSER. Crop cutting will likely take place in the second half of 2008. Results of this crop cut (harvest) will be compared to the 2009 FBO survey conducted by ISSER in which farmers will be asked about their yields in the 2008 harvest (i.e., farmers will recall production levels). Based on the comparison, ISSER will calculate the magnitude of farmers' recall error (expected completion mid-2009).

Rehabilitation of Feeder Roads

Activity description

Up to 950 km of feeder roads have been identified for improvements in eight (8) districts in the Intervention Zones in order to reduce transportation costs and time, to increase access to major domestic and international markets, and to facilitate transportation linkages from rural areas to social service networks (including, for instance, hospitals, clinics and schools). The extent to which the feeder roads are rehabilitated or upgraded will depend upon, among others, their current condition, the present and projected traffic volume as a result of increased agricultural activity and productivity in those districts.

Key questions

- Do improved roads lead to higher farm income through reduced input cost and higher producer price at the farm gate that are associated with reduced travel time and vehicle operating cost (transport cost)?

Method of evaluation

Merely comparing incomes of individuals living near roads and those who do not biases evaluation results because there may be something fundamentally different about people who live near roads (more entrepreneurial, business oriented etc.). Also, because road improvements have been selected in an intentional way, we cannot compare incomes of individuals before and after road construction.

The evaluation will use a difference-in-differences strategy and examine the growth in outcome measures for farmers located near newly-constructed rural roads relative to farmers whose access to road transport did not change. The evaluation will estimate directly the short-run impact of road construction on prices, transportation costs, and transportation times. Additionally, the evaluation will use spatial information from monitoring surveys to evaluate the long-term impact of road construction on farm sales, profits, technology, and farmer household welfare.

Specifically, consider two communities we will call X and Y. X and Y are communities in one of the MCA districts which will receive new rural roads. X is a community not currently served by an improved road, while Y is already served by an improved road.

One dimension of the impact of a new road is the increase in the price farmers receive for their output. Our first estimate of the direct impact of a new road on this price is the price in X after the completion of the road minus the price in X before the completion of the road. Of course, there is seasonality in prices, and there are many other factors that influence the time trend of staple prices, so we will compare the change in the price of the staple in X over this period to the change in the price of the same staple in Y (which was served by an improved road over the entire period). The relative increase in the price of the staple good in X over the same increase in Y provides an estimate of the impact of the road.

To ensure that attribution of the impact of the road on prices and transportation costs is correct, the evaluation will rely on two further refinements of the method:

1. Use data on rural road priorities from the Ministry of Road Transport for the MCA districts that have already completed construction of priority rural roads. Again we will examine communities (call them X' and Y') that either were already served by improved roads (Y'), or which had improved roads newly constructed (X'). We will examine the prices of staples produced in X' and Y' over the same period that we examined for communities X and Y. It is important to emphasize that no roads are constructed during this period in communities X' and Y' (only community X received a new road during this period). Therefore, we should see no change in the price of the staple in community X' relative to that in Y', so these communities serve as a "control group" for the evaluation.
2. Use the high frequency data that we collect on prices and transportation costs to estimate the timing of the impact of the new roads. Precisely how many months after the completion of a new rural road do transportation costs fall by how much? As above, we will use a "difference-in-differences" strategy, examining the change in transportation costs (or prices) in places newly-connected with improved roads versus places in which there has been no change in local roads.

Treatment and control groups

Communities newly served by improved roads, before and after the completion of the road, in comparison to farmers with similar road access whose access to road transport did not change.

Data sources

- GLSS 5+ to identify farmer locations.
- Survey of prices at commercial markets linking roads and farming communities to be conducted by third-party firm contracted by MiDA.

3. Rural Development Project

Project goal

The Rural Development Project is designed to support agriculture and agribusiness development under the Agriculture Project and to strengthen the rural institutions that provide complimentary services.

Financial Services Activity

Activity description

123 rural banks (nearly all rural banks in Ghana) will be eligible to be connected to a WAN. The WAN is focused on moving funds electronically domestically and internationally, and making the rural banks a part of the payment system. This connection will be rolled out in a number of phases over years 2-5 of the compact. Simultaneous to rolling out the WAN, MiDA will support computerization and automation of the rural banks. This will include providing computers, new accounting software, and software training to over 600 branches (all rural banks), starting in MiDA districts, and then moving to the rest of the country.

Key questions

- Does enhanced connectivity made possible by the WAN lead to the following?
 - increase number of fund transfers
 - increase number informal sector deposits
 - decreased cost of remittances
 - decrease check and fund clearing time
 - increase savings (number of accounts and volume).

Method of evaluation

Randomly choose among qualified banks for project rollout. The phased timing of the rollout provides an excellent opportunity for evaluation of the impact of the program. Note that this only works if there is an excess demand from banks that want to be connected, i.e., well over 35 banks that meet eligibility criteria.

Treatment and control groups

Banks randomly chosen for early rollout versus those chosen to be connected to WAN later

Data sources

- Rural bank administrative records to evaluate the impact of the program on transaction volumes, flows of remittances and profits. Transactions here mean transfers and payments (for instance paying cocoa farmers electronically rather than with checks, or using the bank network rather than more expensive western union) and other non-lending transactions.
- GLSS5 + to evaluate the impact of the program on farming activities, financial decisions and investment choices by farmers and catchment area of treatment and control rural banks.

Community Services Activity (Education, Water and Sanitation and Electrification)

Activity description

MiDA will support Community Services to complement the Agriculture Project by funding construction and rehabilitation of educational facilities, construction and rehabilitation of water and sanitation facilities and electrification of the rural areas, and by providing capacity building support to local government institutions

Key questions

- What is the impact of the MiDA interventions on access to education, electricity, water & sanitation, and other social services?
- What is the impact on social (e.g. health, education) and economic (e.g. employment, household income) outcomes?

*Method of evaluation*¹⁶

Regression discontinuity design: Districts will share with the evaluation team list of all non-eligible and eligible projects and those actually implemented. The prioritization or ranking of projects will be revealed to the evaluation team before implementation begins (before any construction, but excluding Phase I schools). This assumes that districts will have limited funds, and cannot implement all eligible projects. Evaluation team will examine the impact of those implemented versus those eligible but not implemented.

Treatment and control groups

Projects around the discontinuity (cutoff) will be compared to each other. So, for example, if 15 desired boreholes in a district are ranked by priority, and five are supported by MiDA, the evaluation team would compare outcomes in communities in which five funded boreholes were drilled with outcomes in communities in which the five next-best boreholes would have been drilled had MiDA had more funds.

Data sources

- GLSS5+ community survey conducted in 2008 and 2010/11, conducted by ISSER and GSS.
- Survey of community services to be conducted by third-party contractor in 2009 and 2010 or 2011, to be determined.

Evaluations of activities not discussed above

Currently there are no plans to evaluate activities related to land tenure, post-harvest infrastructure, upgrades to the N1, improvements of trunk roads, and improvements in ferry services on the Volta Lake because it was not possible to identify a credible comparison group for these activities. However, MiDA will coordinate monitoring of these activities. MiDA hopes to be able to evaluate the impact of credit on farmers' productivity and, consequently, on income; but such an evaluation is still in the planning stages at the time of writing. If this evaluation takes place, a survey related to credit will be carried out by a third-party survey firm contracted by MiDA.

¹⁶ Yet to be finalized but MiDA is considering the options detailed in this section.

ANNEX V: Performance Indicator Documentation¹⁷

Documentation of key characteristics of performance indicators is important to ensure that relevant information is not lost or forgotten and can be accessed easily by anyone with a need to know the information. This information will eventually be stored as part of the MIS and/or in the general M&E files. The documentation is imperative to forestall situations where details are forgotten or individuals with knowledge of the details move on to other activities/positions. Ensuring that the information documented is up to date is also important. Thus the performance indicator documentation is a “living document” that may undergo changes as and when necessary. However, any changes must be based on a strong justification and such justifications if approved by MCC would be documented for future Data Quality Assessments. Below is the framework of sample performance indicator documentation [also known as performance indicator reference sheet (PIRS)] and its information requirements.

Performance Indicator Reference Sheet – Template			
Compact Goal: <i>The highest level result to be achieved by the result which this indicator measures</i>			
Project Objective: <i>The project level objective under which the indicator fits</i>			
Activity Outcome: <i>The activity level outcome under which the indicator fits</i>			
Sub-Activity Outcome (if applicable): <i>The sub-activity level outcome under which the indicator fits</i>			
Performance Indicator Title: <i>Exactly as it appears in the Compact, M&E Plan or Activity Monitoring Plan</i>			
Is This an Annual Report Indicator? No ___ Yes ___, for Reporting Year(s) _____			
DETAILED DESCRIPTION OF THE INDICATOR			
Precise Definition(s): <i>The definition should be as precise as possible and over time it should be expanded as details of its meaning become clear</i>			
Definition of Indicator Components if Index or Composite Indicator:			
Unit of Measure:			
Calculation Methodology:			
Disaggregated by:			
Justification & Management Utility: <i>How does this indicator measure the intended result? How does it reflect the result? Why is it considered a valuable indicator for the intended result?</i>			
PLAN FOR DATA ACQUISITION BY MCA Country Governing/Accountable Entity			
Data Collection Method: <i>This description should be as detailed as possible, including all steps to data collection no matter how small.</i>			
Data Source(s): <i>This should be as precise as possible, to the level of the specific record book in which data are to be found for example.</i>			
Method of Data Acquisition by MCA Country Governing/Accountable Entity: <i>How do the data flow from the data source to the MCA accountable entity?</i>			
Frequency and Timing of Data Acquisition by MCA Country Governing/Accountable Entity: <i>This should be in the format of (for example) quarterly by the 15th of April, July, October and January. Data reported on these dates to MCA should be for Jan1 – March 30, April 1- June 30, July 1 – Sept 30 and Oct 1- Dec 30.</i>			
Individual(s) Responsible at MCA Country Governing/Accountable Entity:			
Entity and Individual(s) Responsible for Providing Data to MCA Country Governing/Accountable Entity:			
Location of Data Storage: <i>Precisely where, in which record books for example, are data stored?</i>			
DATA QUALITY ISSUES			
Date of Initial Data Quality Review:			
Procedures for Initial Data Quality Reviews:			
Known Data Limitations and Significance (if any): <i>Where are the weaknesses in the data? It is important that this be as detailed as possible.</i>			
Actions Taken or Planned to Address Data Limitations:			
Did the Last Data Quality Review Result in a Change to the Definition or Target? Yes () No ()			
If Previous Data Quality Review Resulted in any Modification(s), how?			
Date(s) of Future Data Quality Reviews:			
OTHER NOTES			
Notes on Baselines/Targets:			
Other Notes:			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
THIS SHEET LAST UPDATED ON:			

¹⁷ Work on the documentation of information on each performance indicator in the Ghana Compact is in progress.

The information in these sheets will undergo substantial updates as implementers come on board and thereafter if and when any changes occur (e.g., indicator definition is refined) or new information becomes available (e.g., data quality review is conducted).

ANNEX VI: Data Quality Strategy

A. INTRODUCTION

M&E data provide important information for project management and decision-making and on progress achieved towards the Program's objectives and goals. Consequently, the quality of data must be ensured to maintain confidence in this information. MiDA will take a multi-pronged approach to ensure data quality. A key element will be the conduct of independent Data Quality Reviews which will assess data collection, analysis, and dissemination systems to determine the utility, objectivity, and integrity of the information. The recommendations resulting from the reviews will help to constantly improve collection, processing, and dissemination of data. Additional elements include capacity building efforts for implementers and others responsible for collecting and reporting data to MiDA. The capacity building initiatives will be upstream interventions aimed at strengthening implementers' data collection systems and controls to reduce the possibility of data quality problems occurring when data are actually collected and reported. A third element is encouraging constant use of data that are gathered and reported to MiDA. Widespread use will quickly highlight data discrepancies thereby identifying areas where improvements are required.

For MiDA, Data Quality Reviews will cover all data reported in the M&E Plan, including data submitted by implementers and any surveys financed through the Compact. Generally, MiDA will conduct both *ex-ante* and *ex-post* data quality reviews. The *ex-ante* will examine data collection, processing, storage, analysis and dissemination systems that Implementing Entities and secondary data providers have put in place. Weaknesses identified will be documented and recommendations for improvement will be made. *Ex-ante* reviews, for instance, will be done for the government IEs before they start any serious data collection and will involve at a minimum an assessment of the readiness of these establishments to collect and report quality data. Baseline data will be validated as part of *ex-ante* through feasibility studies, surveys and implementer data collection.

The *ex-post* reviews will examine processes and mechanisms put in place by Implementing Entities, secondary data providers and MiDA in the collection, processing and storage of data for analysis and dissemination of results on Compact activities. Data quality issues identified will be documented and recommendations will be made for improvement to assure data quality in future. While the M&E Directorate will lead the *ex-ante* data quality reviews, an independent data quality reviewer will conduct the *ex-post* reviews, but will first review the *ex-ante* report before proceeding.

B. CRITERIA FOR DATA QUALITY REVIEWS

In conducting a Data Quality Review, performance indicators will be assessed based on the following criteria:

1. *Validity*

- Are the indicators defined well and are data reported in an appropriate format?
- Are the data gathered consistent with the documented definition of the indicators?
- Is there a verifiable source for the data gathered?

2. *Reliability*

Is there:

- Consistency: Is the same data gathering process (including instrument and sampling process) being employed over time and across locations?
- Quality Control: What are the procedures in data collection to guard against bias? Are procedures reviewed periodically? Are there random checks at each stage?
- Transparency: Are there procedures in writing and are problems reported?

3. *Timeliness*

- Are data collected and reported regularly and are they relevant?
- Is reported data the most recent?

- Is the date of data collection clearly identified?

4. *Precision*

- If sampling is used, is the margin of error reported?
- Is the margin of error less than expected change in the indicator?
- Is the margin of error acceptable for decision-making, given cost/benefit?

5. *Adequacy*

- To what extent do the indicators for a particular expected result fully measure it?
- Are they sufficient to characterize and/or measure the result?

6. *Practicality*

- Is data collection and reporting overly costly compared to the extent to which it measures the intended result?

C. ROLES & RESPONSIBILITIES

MiDA M&E Directorate, Project Managers and Information and Communication Technology (ICT) Unit will play key roles in ensuring data quality.

Role of MiDA M&E Directorate

The M&E Directorate will be the primary unit responsible for ensuring the collection, processing, analysis and dissemination of quality data in MiDA. To augment the external data quality assessments and to assess data quality between rounds of external reviews, the M&E directorate will also undertake periodic internal reviews of data quality. The internal reviews will involve Project Managers, Zonal Managers and the Chief Operating Officer.

Prior to the data collection phase, MiDA M&E Directorate will ensure that MiDA staff, Implementing Entities and secondary data providers are brought up to date on the minimum standards of data quality. For instance, the M&E Directorate will make sure that indicator definitions and other components of the Performance Monitoring Plan are well understood and applied by all those identified to collect data for MiDA.

The M&E Zonal Managers will follow up on data collection plans of implementers and other Consultants involved in M&E activities to ensure that recommendations from ex-ante and ex-post reviews are being implemented. They will also ensure compliance by all stakeholders on data quality standards.

In addition, the M&E Directorate will organize forums where project results will be reviewed both internally and externally. One of the objectives of these reviews described is to validate the data collected and ensure that it is accurate, consistent and a true representation of actual phenomena in the field. **It will facilitate** triangulation of collected data on periodic basis and ensure consensus is built among MiDA, IEs and stakeholders on program results. The sessions will, in addition, identify bottlenecks that affect data quality and recommend improvements in data collection, processing and reporting. Suggested recommendations will be documented and an actions-tracking matrix drawn for follow-up.

The external forum will involve Implementing Entities and other key stakeholders.

Role of MiDA ICT Unit

MiDA's ICT Unit will also play a part in the implementation of the data quality strategy. The Data Analyst will review all data collection instruments and participate in all data quality processes. In addition, s/he will generate credible data throughout the flow of data capture to the processing and storage stages. MiDA's ICT Unit will extend similar assistance to IEs either directly or through hired Consultants. The M&E Directorate will work with the MiDA ICT Unit to establish Data Source Approval, Data Profiling and Data Normalization procedures in order to strengthen the data quality regime of MiDA and to ensure coordination with other IEs in the choice of software. This is important since various analyses to be done for the impact evaluation will be based on data collected by different IEs.

Methodologies shall be employed to verify that software for data processing used by an IE will meet the data validity criterion (i.e. Format, Data Type, Range, Limit, Presence and Spell checks).

These checks will ensure that:

- All fields have values (Presence Check)
- Values assigned the fields are in their right data types (Data Type Check)
- Values are assigned the proper data formats (Format Check)
- Null values are not substituted for fields that should have values (Presence Check)
- Values that are based on range are selected from a lookup rather than being entered from the input form (Range Check).

Roles of Project Managers

The M&E team will liaise with Project Managers on performance monitoring to roll-out the M&E Performance Monitoring Plans of MiDA's technical sectors. This includes compliance to data quality assurance as stipulated in MiDA's M&E Policies and Procedures. Structurally, the four Zonal M&E Managers, Research Economist and Statistician have been assigned to each technical sector to provide technical assistance on data collection, evaluation and data quality assurance.

D. CAPACITY BUILDING OF IMPLEMENTERS AND PROVISION OF TECHNICAL ASSISTANCE

A training needs assessment related to data collection and quality control capability will be conducted to identify areas for strengthening, to guarantee that MiDA's data quality expectations are met by IEs. The training will ensure that IEs adequately interpret the Compact, its objectives and performance indicators, while appreciating their pivotal role in ensuring that complete, accurate and credible data is collected and reported. The M&E Unit will facilitate the capacity building process which will be supported by an external consultant.

To complement the above, technical assistance on data quality assurance in the form of one-on-one engagements with IEs as well as group sessions in workshop formats will be provided by MiDA. The individual engagements will include review of instruments designed for data collection, participation in pre-testing of instruments and conducting spot checks on collected data. The workshops are tailored to ensure that MiDA and IEs share experiences and adopt good data quality practices.

E. TOOLS TO ENSURE DATA QUALITY AND AUDIT PREPAREDNESS

To strengthen the culture of data quality assurance within MiDA and the IEs, a data quality compliance checklist based on the *Validity, Precision, Reliability, Integrity, Timeliness, Adequacy and Practicability* of data, will be designed and used on routine basis. The checklist will be used to determine the credibility of data collected and/or reported from IEs. Findings of each internal data quality review will be documented and stored, to serve as a tool to triangulate findings of future data assessments by interdependent data quality experts. Proper documentation of these findings will ensure that IEs and MiDA are prepared for future program audits, as reported data on performance indicators can be traced to their sources.

F. THE INDEPENDENT DATA QUALITY REVIEWER

A core element of MiDA's data quality strategy is that data quality reviews will be conducted by an independent entity, such as a local or international specialized firm or research organization, or an individual Consultant. Independence of the data quality review process is critical to ensuring the integrity of the assessment and increasing external confidence in data that are reported. The scope of work for the Consultant will cover the five year life span of MiDA's activities.

The reviews will assess data and data collection systems against the six data quality standards listed above. Where data quality problems are identified these will be documented and recommendations provided on how the problem will be resolved. Exact timing and frequency of data quality verification by the DQR will be

determined before the contractor comes on board. As a general rule the ex-ante reviews will be done before and during data collection and the timing of the reviews will generally relate to the periods of data collection.

Once these reviews are completed, the M&E Directorate will also be responsible for monitoring implementation of corrective actions that may be recommended to improve the quality of data.

Ex-post reviews will be conducted after data is collected and/or during data entry. Resources permitting this will be conducted twice in the life time of an implementer.

Due to the integrated nature of the MiDA Program (involving Agriculture, Transportation and Rural Development Project Activities), the Data Quality Review team will be composed of experts with corresponding specialties. For example, to assess transportation data on Vehicle Operation Costs and the International Roughness Index, the services of a mechanical engineer will be required. The M&E Directorate will facilitate the external review of data quality by managing the contract under which the data quality reviews will be ordered.

The methodology for data quality review will include a mix of document and record reviews, random site visits, and key informant interviews. Initially ex-ante and ex-post reviews will be scheduled to ensure that data collection systems are functioning well and also to fix any problems in the early stages of implementation. The reviews will be thoroughly documented in a report, describing any weaknesses found in the (i) instrument development, (ii) training of enumerators (iii) data collection methods, (iv) handling and processing of data by responsible entities, and (iv) analysis and reporting procedures. The report will also make recommendations for overcoming those weaknesses where possible. Where it is not technically possible or cost-effective to overcome problems, the report will identify replacement indicators or data sources that would be more accurate and efficient. Final reports from Data Quality Reviews will be publicly available on the MiDA website.

G. CONCLUSION

High data quality increases satisfaction, eliminates doubts and reduces costs because less time will be spent trying to reconcile the data. Activities outlined in the strategy need to become the normal flow of the data warehouse process. Monitoring data quality and providing corrective measures to improve quality and assure the integrity of results reported by MiDA should be considered as an integral part of the process of ascertaining poverty reduction at the end of the Compact.

ANNEX VII: Indicator Changes

Indicator Changes at the Outcome Level

Name of Original Indicator: Not Applicable
CP: ___ Yes ___ No If Yes, Years in which targets are CPs: Not Applicable
Type of Change: <i>e.g., drop indicator; revise definition; revise target</i> New Indicator Introduced
New/Revised Indicator and/or target: Number of backlogged land dispute cases cleared by Judicial Service
Justification/Rationale for Change: This indicator has been introduced to measure the results of the intervention to clear up land case backlogged in the regional Courts.
Implications of Change: The effect of the intervention to clear up land case backlogged in the regional Courts will not go unnoticed.
MCC Approval: Granted: _____ Date _____ Not Granted: _____ Date: _____ Location of Supporting Documentation: _____

Name of Original Indicator: Number of land disputes in the pilot registration districts
CP: ___ Yes ___ <input checked="" type="checkbox"/> No If Yes, Years in which targets are CPs:
Type of Change: <i>e.g., drop indicator; revise definition; revise target</i> Drop Indicator
New/Revised Indicator and/or target: TBD. MiDA is considering % of land disputes resolved in pilot registration districts which is a more direct measure of the dispute resolution intervention,
Justification/Rationale for Change: This indicator has been dropped from the M&E Plan and for reporting to MCC in the quarterly report because it does not directly measure the outcomes of the dispute resolution interventions. Number of land disputes will, however, be tracked by the land project manager and be used for project management purposes.
Implications of Change: This change will not have any adverse effects on the program
MCC Approval: Granted: _____ Date _____ Not Granted: _____ Date: _____ Location of Supporting Documentation: _____

Name of Original Indicator: Vehicle operating costs (on roads requiring minor rehabilitation)
CP: ___ <input checked="" type="checkbox"/> Yes ___ No If Yes, Years in which targets are CPs: Yr 4 and Yr 5
Type of Change: <i>e.g., drop indicator; revise definition; revise target</i> Drop Indicator
New/Revised Indicator and/or target: TBD. MiDA is considering Travel Time as a new indicator since it was a key variable in determining the ERR.
Justification/Rationale for Change: VOC is not the appropriate measure for this category of roads (i.e. those requiring minor rehabilitation) since the HDM 4 model and, thus, VOC was not used in the Economic Analysis related to these roads. The variable used was travel time, which is why travel time is being considered as an alternative measure.
Implications of Change: Dropping this indicator means that the CP list has to be modified to reflect this change.
MCC Approval: Granted: _____ Date _____ Not Granted: _____ Date: _____ Location of Supporting Documentation: _____

Name of Original Indicator: Vehicle operating costs (on roads requiring medium rehabilitation)
CP: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Years in which targets are CPs: Yr 4 and Yr 5
Type of Change: e.g., drop indicator; revise definition; revise target This is largely a cosmetic change where the indicator is being combined with another indicator "Vehicle operating costs (on roads requiring major rehabilitation)" for clarity of reporting and to maintain consistency with the economic analysis.
New/Revised Indicator and/or target: Vehicle operating costs on roads requiring medium and major rehabilitation (i.e., classified as BSRS, BSRE or BSUP)
Justification/Rationale for Change: Both Indicators refer to the same thing. The only difference is in the levels of disaggregation.
Implications of Change: Combining these indicators mean that the CP list has to be modified to reflect this change
MCC Approval: Granted: _____ Date _____ Not Granted: _____ Date: _____ Location of Supporting Documentation: _____

Name of Original Indicator: Vehicle operating costs (on roads requiring major rehabilitation)
CP: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Years in which targets are CPs: Yr 4 and Yr 5
Type of Change: e.g., drop indicator; revise definition; revise target Combine with another indicator "Vehicle operating costs (on roads requiring medium rehabilitation)"
New/Revised Indicator and/or target: Vehicle operating costs on roads requiring medium and major rehabilitation (i.e., classified as BSRS, BSRE or BSUP)
Justification/Rationale for Change: Both Indicators refer to the same thing. The only difference is in the levels of disaggregation.
Implications of Change: Combining these indicators mean that the CP list has to be modified to reflect this change
MCC Approval: Granted: _____ Date _____ Not Granted: _____ Date: _____ Location of Supporting Documentation: _____

Name of Original Indicator: Incidence of guinea worm, diarrhea or bilharzias
CP: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Years in which targets are CPs: TBD
Type of Change: e.g., drop indicator; revise definition; revise target Split into two distinct indicators
New/Revised Indicator and/or target: 1. Incidence of Guinea worm or Bilharzias 2. Incidence of Diarrhea
Justification/Rationale for Change: This indicator was modified to allow for classification of indicators. Specifically, Guinea Worm and Bilharzias are water-borne diseases while Diarrhea is sanitation-related.
Implications of Change: Splitting these indicators mean that the CP list has to be modified to reflect this change
MCC Approval: Granted: _____ Date _____ Not Granted: _____ Date: _____ Location of Supporting Documentation: _____

Name of Original Indicator: Percentage of households, schools and agricultural processing plants in target districts with electricity
CP: ____ Yes ____√__ No If Yes, Years in which targets are CPs:
Type of Change: <i>e.g., drop indicator; revise definition; revise target</i> Split into three distinct indicators
New/Revised Indicator and/or target: 1. Percentage of households in target districts with electricity 2. Percentage of schools in target districts with electricity 3. Percentage of agricultural processing plants in target districts with electricity
Justification/Rationale for Change: A good indicator must be specific and since Schools, Households and Agricultural Processing Plants are distinct entities, it is logical to split the original indicator into the three distinct indicators outlined above.
Implications of Change:
MCC Approval: Granted: _____ Date _____ Not Granted: _____ Date: _____ Location of Supporting Documentation: _____

New Output Indicators

<p>New Indicators:</p> <p><i>Commercial Agricultural Training Activity</i></p> <ol style="list-style-type: none"> i. Number of FBOs Trained in Commercial Agriculture ii. Number of Farmers Trained in Commercial Agriculture <p><i>Irrigation Activity</i></p> <ol style="list-style-type: none"> i. Number of FBOs that have requested new water retention technologies ii. Number of water retention technologies constructed <p><i>Land Facilitation Activity</i></p> <ol style="list-style-type: none"> i. Percent of users of “On-Demand Services” that have completed a transaction ii. Number of land disputes being addressed informally iii. Percent of people aware of their land rights <p><i>Credit Activity</i></p> <ol style="list-style-type: none"> i. Number of PFIs accredited ii. Value of loans disbursed to accredited PFIs per quarter <p><i>Community Services Activity - Education</i></p> <ol style="list-style-type: none"> i. Number of Schools constructed / rehabilitated to MOESS standards <p><i>Community Services Activity – Water and Sanitation</i></p> <ol style="list-style-type: none"> i. Number of stand-alone boreholes constructed to CWSA standards ii. Number of Small Town Water Systems constructed to CWSA standards <p><i>Community Services Activity – Rural Electrification</i></p> <ol style="list-style-type: none"> i. Number of Electric Power Transformers installed to ECG / NED standards ii. Number of Kilometers of Electric Power distribution lines constructed to ECG / NED standards <p><i>Financial Services Activity</i></p> <ol style="list-style-type: none"> i. Number of PFIs Automated under the Automation/Computerization and Interconnectivity of Rural Banks Activity ii. Number of PFIs Connected to the WAN under the Automation/Computerization and Interconnectivity of Rural Banks Activity <p>Justification/Rationale for Addition: The above mentioned indicators have been added to the M&E plan to provide a fuller picture of progress towards final results beginning with the earliest achievements in the results chain – outputs. The outputs added to the M&E plan are all key leading measures of outcomes that are anticipated in later years of the Compact.</p>

Implications of Change: Addition of these indicators to the M&E plan will allow MiDA to report on early results at the output level earlier in the compact implementation period.

MCC Approval: Granted: _____ **Date** _____

Not Granted: _____ **Date:** _____

Location of Supporting Documentation: _____