

## Building Capacity for Monitoring & Evaluation



## Millennium Villages: Bonsaaso, Ghana

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## LIST OF ACRONYMS

AEW	Agriculture Extension Workers
CAPs	Community Action Plans
CDF	Comprehensive Development Framework
DDPs	District Development Plans
DPO	District Planning Officer
GPRSP	Ghana's Poverty Reduction Strategy Paper
HDI	Human Development Index
MDBS	Multi Donor Budgetary Support
MDGs	Millennium Development Goals
M&E (or ME)	Monitoring and Evaluation
MVP	Millennium Village Project
PRA	Participatory Rural Appraisal
PRSP	Poverty Reduction Strategy Paper
PM&E (or PME)	Participatory Monitoring and Evaluation
QPM	Quality Protein Maize
SIPA	School of International and Public Affairs
S.M.A.R.T.	Specific, Measurable, Achievable, Relevant and Time bound
TOT	Training-Of-Trainers
UNDP	United Nations Development Programme

## **EXECUTIVE SUMMARY**

The eight Millennium Development Goals (MDGs) form a blueprint for reducing poverty and serve to align the international community toward a common vision of poverty eradication. Set to be achieved by 2015, this United Nations-led initiative focuses on promoting human development as a vital element to sustained social and economic progress. With the assistance of international institutions and local communities, national governments have created poverty reduction strategies to focus on specific methods to reach the MDGs. Ghana is among the governments fully committed to achieving these goals.

Considered an “island of peace and stability,” Ghana has experienced sustained political and democratic stability, free and fair elections and freedom of expression. Since 2000, Ghana has also sustained relative economic stability due in part to implementation of the Ghana poverty reduction strategy papers, with an annual GDP growth rate reaching 6.5 percent in 2006/7. In Ghana, increased governmental attention to the MDGs has led to some progress toward achievement. However, large portions of the population continue to live in extreme poverty with approximately one-third of the total population of 22 million still living below the national poverty line in a country where the per capita income is approximately US \$520.

Ghana’s dedication to poverty eradication coupled with the magnitude of extreme poverty compelled the Millennium Village Project (MVP) to open a site in the Amansie West District of the Ashanti Region. A cluster of approximately thirty-one rural villages, home to roughly 30,000 residents, was launched as a Millennium Village site in January 2006, known within the project as the Bonsaaso village cluster.

A team of six graduate students, from the School of International and Public Affairs (SIPA) at Columbia University, has been requested by the Earth Institute to assess participatory approaches to a monitoring and evaluation (M&E) system, to identify elements of an effective M&E system and to provide recommendations for the MVP site in Ghana. Our investigation included a detailed case-study overview of the agriculture sector, given that most community members cultivate mainly low-yielding crops and cash-crops. Our methodology also included research on Ghana, the MVP initiative and M&E practices, including participatory approaches; articulation and analysis of current M&E related activities. To inform our findings we gathered information through two field visits in order to conduct interviews and focus group discussions with MVP Ghana staff, partners, government officials and community members.

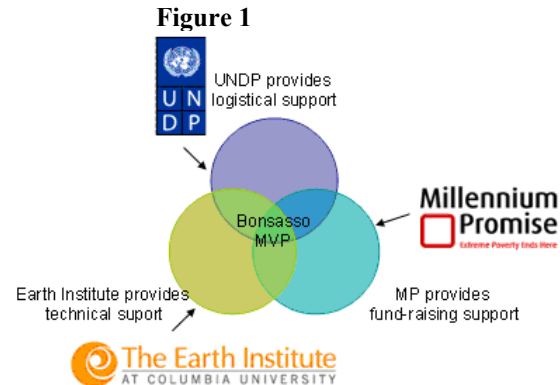
For the entire investigation a series of recommendations are provided to incorporate elements of Participatory Monitoring and Evaluation (PM&E) into the current system; to identify aspects that need to be strengthened; to assess knowledge gaps that may exist within the project and key stakeholders, and finally; to set forth possible strategies for future actions to strengthen community capacities. At each stage of this report we assessed the effectiveness, efficiency, relevance and sustainability of implementing a PM&E plan, as well as, recommendations for implementing such strategies. Our findings are divided into eight categories, capturing various components of baseline and ongoing data collection, current M&E activities, institutional analysis, flow of information within the project, project budget allocations and overall sustainability and scalability within the Ghanaian context.

This report has been shared with the Ghana MVP staff, Earth Institute and UNDP stakeholders, as well as the SIPA community.

## PROJECT BACKGROUND

MVP, an initiative sponsored by the Earth Institute at Columbia University<sup>1</sup> in conjunction with the United Nations Development Program Programm<sup>2</sup> (UNDP) and The Millennium Promise,<sup>3</sup> supports impoverished villages in their efforts to attain the Millennium Development Goals (MDGs).<sup>4</sup> The project has been launched as a way to establish “proof of concept” for a

series of multidisciplinary micro-level interventions that have been created to achieve the MDGs. MVPs have been launched in twelve sites, each at different stages of implementation, in distinct ecological zones throughout Africa. MVP focuses on several key sectors, including: agriculture, environment, health, education and infrastructure. The MVP initiative is uniquely defined by its holistic, fast-paced and well-financed approach accomplished through participatory and community-led decision making.



The aim of this report is to focus on the MVP site located in the Amansie West District of the Ashanti Region of Ghana. Known locally as the Bonsaaso MVP village cluster, the site was launched in January, 2006. Comprised of approximately thirty-one villages, the cluster is home to roughly 30,000 residents, most of whom are farmers with small plots of land. Extreme lack of basic services and a strongly committed local government are two of the main reasons why Bonsaaso cluster was chosen as an MVP site. Currently in the beginning of the third year of implementation, the Bonsaaso cluster is in the process of developing a sustainable and PM&E plan. The MVP Ghana team and Earth Institute are committed to creating a PM&E system that illustrates the impact of the project to stakeholders, enhances the structure for scalability and provides ongoing corrective measures for programming enhancements.

<sup>1</sup> The Earth Institute at Columbia University leads the research and development of cutting-edge science-based solutions, based on the UN Millennium Project findings, for the Millennium Villages. See <http://www.millenniumvillages.org/about/index.htm>.

<sup>2</sup> As the lead implementing partner of the Millennium Villages project, UNDP coordinates village- and national-level activities and supports the scaling-up of the project to the national level.

<sup>3</sup> With regard to Millennium Villages, Millennium Promise's core activities include raising funds from the private sector, working with partner organizations to support the project and engaging the private sector in the development of markets around the Villages.

<sup>4</sup> Goal 1: Eradicate extreme poverty and hunger; Goal 2: Achieve universal primary education; Goal 3: Promote gender equality and empower women; Goal 4: Reduce child mortality; Goal 5: Improve maternal health; Goal 6: Combat HIV/AIDS, malaria and other diseases; Goal 7: Ensure environmental sustainability; Goal 8: Develop global partnerships for development.



## COUNTRY AND VILLAGE BACKGROUND

### Country Overview:

Ghana is a tropical-climate country situated on the Atlantic coast of West Africa. According to the 2004 census, Ghana's population was approximately 21.664 million inhabitants making it one of the most densely populated countries in the region.<sup>5</sup> According to the 2007/2008 Human Development Index (HDI), Ghana ranked 137 out of a total of 177 countries.<sup>6</sup> Also according to this report, 44.8 percent of the population



Figure 2

lives on less than US \$1 per day. Paradoxically, Ghana is often referred to as “the rising star” economy of the region. Wealthy with natural resources, Ghana has roughly twice the per capita output of the poorest countries in West Africa.<sup>7</sup>

Table 1: Ghana at a glance- Key Data & Statistics<sup>8</sup>

Key Data & Statistics	Year	Latest data
External debt (% of GNI)	2005	63.6
GDP (current US \$) (billions)	2006	12.9
GNI per capita, Atlas method (current US \$)	2006	520
Life expectancy at birth, total (years)	2005	57
Population, total (millions)	2006	22.5
Population growth (annual %)	2006	1.9
School enrollment, primary (% net)	2006	69.5

The recent positive economic stimulus for Ghana is a result of tighter monetary and fiscal policies aimed at reducing the twin deficits and improving social services. These changes, in conjunction with high cocoa prices and profit from the gold sector, have set Ghana on a 6 percent yearly growth trend that makes it likely to reduce poverty and surpass the MDGs by

2015.<sup>9</sup> Yet, one of the main economic weaknesses is a heavy reliance on subsistence and cash crop-oriented agriculture; high exposure to external shocks related to changes in commodities prices and terms of trade.<sup>10</sup> Cocoa and gold remain of key importance to Ghanaian economy, representing about 65 percent of the exports. As a result of this dependence, export concentration growth rates tend to be volatile.<sup>11</sup> Another challenge concerns shortages in the provision of energy. However, long run shortages coupled with recent oil discoveries of up to 1.3 billion barrels, as of June 2007 raises hopes for the future.<sup>12</sup>

5 UNICEF, 2006. State of the World's Children Report, New York.

6 Human Development Report 2007/2008

7 CIA World Factbook, 2008

8 World Development Indicators Database, April 2007

9 UNU – WIDER Research Paper No. 2005/58

10 Subsistence agriculture accounts for 37% of GDP and 60% of the work force.

11 The Economist Intelligence Unit

12 Oxford Analytica, reports on Ghana 2007



Within Ghana's national development policy, two priorities exist. One is to reach the MDGs by 2020, the other is the implementation of a poverty reduction strategy aimed at diversifying a productive base and to make the labor force more inclusive. Overall, poverty is seen as a limit to public investment in infrastructure as most of the nation's resources are in the form of social spending.

***Donor Assistance:***

Ghana received significant debt relief in 2006, thereby reducing the burden on government spending, and as a result, facilitated cash flows towards infrastructure and other capital-intensive investment. Since 1997, the country has made an effort to pool aid assistance with other development partners within a national framework seeking to prevent fragmentation often caused by multiple concurrent projects. Evaluations of past country assistance strategies reveal that the effectiveness of aid can be improved by including participation of local stakeholders, aligning financial and technical assistance on Ghana's priorities, strengthening country governance systems and accountability mechanisms to ensure ownership, incorporating sustainability of reforms and working with other development partners in order to reduce distortions and transaction costs.<sup>13</sup>

Since 1980, Ghana started receiving more foreign aid per capita than the average African country.<sup>14</sup> As dependency on aid flows grew, the government of Ghana and its development partners agreed on a scheme that would smooth the trend of aid flows to finance poverty-related expenditures. The Multi Donor Budgetary Support (MDBS) Agreement, signed in March 2003, between the government of Ghana and key development partners, aims to overcome the problems of tied-aid and of aid-dependency by guaranteeing constant and predictable revenues. The Comprehensive Development Framework (CDF), a World Bank set of principles that guides development and poverty reduction through external assistance, is one formal way the national government can enhance ownership and the achievement of the MDGs. One of its aims is to harmonize efforts between external partners and the country's development programs. With MDBS, the inflows are deposited into a consolidated fund to be used at the government's discretion. Expenditures are financed as outlined in Ghana's Poverty Reduction Strategy Papers (GPRSP) and national budget, resulting in the synchronization of aid flows and private flows. (See Appendix #1)

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<sup>13</sup> National Development Planning Commission, *Ghana Poverty Reduction Strategy 2003 Annual Progress Report*, 2004.

<sup>14</sup> UNU – WIDER Research Paper No. 2005/58

### **Bonsaaso Village Cluster - Background:**

Bonsaaso village cluster is located in the Amansie West District of the Ashanti Region of Ghana. The area is characterized by hot, humid, tropical climate conditions with diverse land features and vegetation including forests. The thirty-one villages are separated from one another by geographic factors such as forests and rivers which isolate some more than others despite being located in a relatively compact area.<sup>15</sup>



**Figure 3**

The following table summarizes the pre MVP site conditions within the Bonsaaso Cluster and major challenges articulated by MVP in the 2007 Annual Report:

**Table 2: Major Challenges Bonsaaso**

Major Challenges of the Bonsaaso Village Cluster <sup>16</sup>	
<b>Agriculture</b>	<p>Most of the youth of the area tend to work in illegal gold mining sites for money instead of engaging in food production. Consequently, farm labor is scarce and expensive and mainly undertaken by older adults, who are not strong enough for the task. In addition, the process of land preparation is laborious because of the nature of the vegetation. A few farmers overcome the latter challenge by using herbicides, but this is something most of the farmers cannot afford.</p> <p>There is very little land left for food crop production. Most of the fertile lands, especially those that are located near the communities, have been used for cocoa production, pushing food crop production to more distant lands. Farmers have to walk long distances, sometimes more than five kilometers, before reaching their farms. In addition to this, farmers have difficulty in finding a ready market for their farm produce because of long distances from market centers and the poor condition of the road network. This in turn becomes a great disincentive and does not motivate farmers to produce large quantities of farm produce.</p>
<b>Business Development</b>	<p>Apart from cocoa and palm oil, which farmers produce for cash, all other farming activities are at the subsistence level which often limits income levels, continues a cycle of poverty and perpetuates narrowly defined export base. Poor road networks make access to market centers difficult and have become an impediment to business development. The farmers' world is limited to primary production of food and raw materials; farming is not practiced as a business as there is little knowledge of processing their farm produce for the market.</p> <p>Only two of the thirty-one Bonsaaso Millennium Village communities have electricity; therefore access to the internet in such communities is difficult. Land phone service is absent throughout the cluster while cell phone service in the communities is unreliable and can be accessed only at specific points in a few of the communities. The road network is unpaved with numerous pot-holes. Rain causes portions of the road become slippery and impassible. In the dry season the road is very dusty. Isolation due to the poor nature of the roads and inaccessibility is drastic.</p>

<sup>15</sup> [www.millenniumvillages.org](http://www.millenniumvillages.org)

<sup>16</sup> Information for this table extracted from Millennium Village Project, 2007, Annual Report For Ghana, Bonsaaso Millennium Village

## *Building Capacities for Monitoring & Evaluation in the Millennium Villages- Bonsaaso, Ghana*

<b>Health</b>	<p>Malaria, buruli ulcer, anemia, malnutrition, maternal health risks, hypertension, low tuberculosis (TB) detection rate and HIV/AIDS are the main health problems in this region. Without functional health facilities in Bonsaaso, community members have to travel distances of between two and forty kilometers depending on type of health facility required. Insufficient staffing of medical doctors, nurses, midwives and other paramedical staff in the district to treat health-related problems of the communities. The poor nature of roads, coupled with the lack of sufficient vehicles, make community health outreach activities extremely difficult. Similarly, movement of sick people to health facilities is equally difficult, sometimes with fatal consequences.</p> <p>People in the communities are generally poor and sometimes cannot afford the purchase of prescribed drugs. In the same vein, many of the community members are unable to pay the US\$16.0 per year premium to register for the national health insurance which gives them access to free medical care. Inputs such as hand gloves, disinfectants, laboratory chemicals, essential drugs, refrigerators, standby electricity generators, etc. are necessary for effective health delivery in the health facilities but these inputs are inadequately supplied or are completely unavailable in the area.</p>
<b>Education</b>	<p>Many communities in Bonsaaso lack school facilities with only six primary schools in the area. Students are forced to walk long distances, in some cases more than five km, to and from school. As a result, truancy, tardiness and exhaustion complicate the learning environment. None of the schools have the full-time commitment of qualified teachers due to the harsh conditions of schools. The result is that most of the schools are staffed by untrained teachers. Currently, there are thirty-one teachers handling 1,096 primary school pupils in the Bonsaaso cluster with a pupil-teacher ratio of about 35:1.</p> <p>In most schools, teaching and learning materials such as chalk, tables, chairs, exercise books, pens and pencils, chalk- or marker- boards, charts etc. are not available to facilitate teaching and learning. In addition to this, there is only one toilet facility for both boys and girls. It is a common sight to see school children working at illegal gold-mining sites during school hours.</p>
<b>Water &amp; Sanitation</b>	<p>A number of communities in the Bonsaaso cluster do not have adequate clean water sources (boreholes). People queue with containers at collection points for what is often unsafe drinking water. Some of the community members prefer to drink untreated water collected from rivers and streams instead of water from the boreholes. In addition, poor sanitary education often leads to human defecation and urination in general areas, which consequently penetrates the soil and contaminates drinking water.</p> <p>Water from boreholes in some of the communities is of questionable quality because of high concentration of iron of 4.62mg/L which is above the level recommended by the WHO. This is demonstrated by water turning a blue or black color when it comes into contact with fresh plantain or cassava; and developing a rusty and oily film on the surface when allowed to stand in a container for a few hours.</p>

## SIPA TEAM PROJECT APPROACH

An effective M&E system is the cornerstone to successful programming, budget allocation, accountability and capacity building for any development project. Figure 4 from UNDP's Handbook on Monitoring and Evaluating for Results, depicts how M&E objectives are linked together in a continuous process.<sup>17</sup> The figure illustrates that learning informs decision making and better decisions lead to greater accountability to stakeholders.

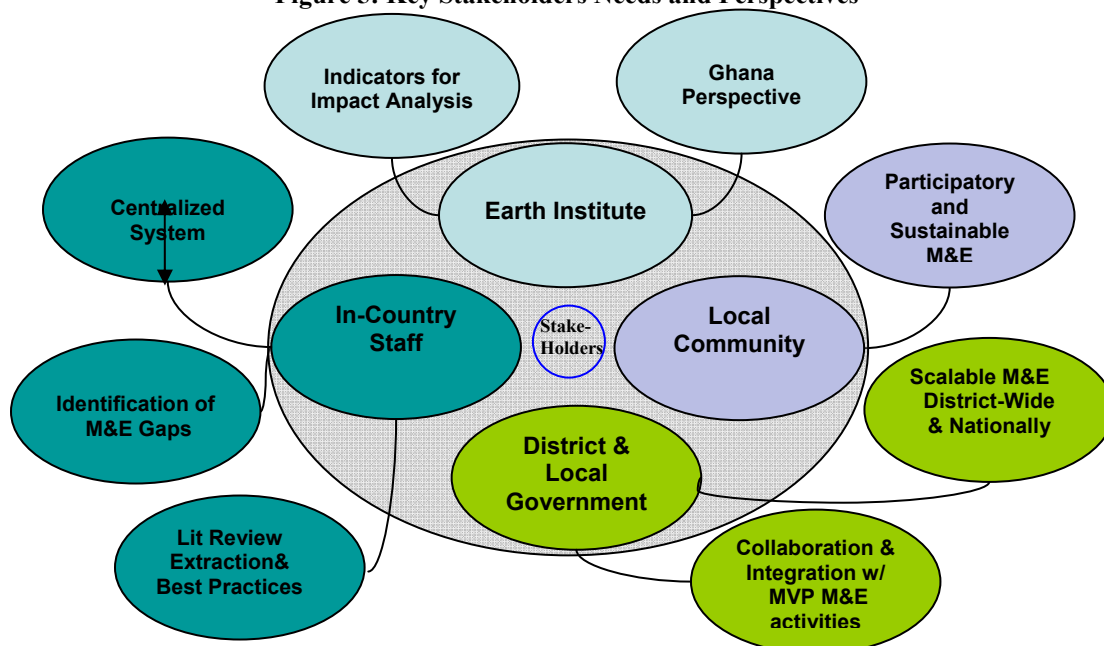
Figure 4: M&E Objectives



### Key Stakeholders Needs and Perspectives:

An effective PM&E system will meet the interests and needs of the key stakeholders of the MVP project. Particularly at the local level, there is an explicit need to incorporate community feedback of a PM&E system, which builds local capacities for assessing the effectiveness, efficiency, relevance and sustainability of the project. The following is an illustration of the four primary stakeholders and their key M&E needs:

Figure 5: Key Stakeholders Needs and Perspectives



<sup>17</sup> United Nations Development Programme, 2002 Handbook on Monitoring and Evaluating for Results. Evaluation Office, New York, p. 6.

Key stakeholders have a range of PM&E interests aimed at achieving the common goal of monitoring and evaluating the progress and impact of the project. Each stakeholder will utilize different tools to reach this common goal, as illustrated in the figure above. The Earth Institute, which represents the **headquarters perspective** and provides scientific expertise, will need to analyze the impact of the project interventions in all MVP sites in Africa through a set of 118 core process indicators. Headquarters' ultimate goal is to improve its ability to measure impact in order to prove that the MDGs are attainable.

The in-country **Ghana MVP team** is seeking a formal, centralized, computer-based PM&E system to be adapted to the Ghana situation with input from other successful development initiatives. This tool should enable program managers to allocate and prioritize resources efficiently while measuring both program achievements and weaknesses in achieving these goals.

At the **local level**, the communities within the Bonsaaso village cluster have a need for inclusion and participation in the PM&E system that will fine-tune programming, strengthen local capacities, enable efficient budgetary decisions and set the bases for sustainability after the MVP team exits Ghana.

The **district and local government perspective** have a stake in experimenting innovative approaches to MDG programming at local level, leading toward a scalable PM&E system that can be replicated at the district and national levels. To achieve this integration, close collaboration between government staff, village communities and the MVP Ghana Team regarding PM&E activities is essential.

***Project Focus:***

The MVP project in Bonsaaso is currently in the process of developing a PM&E system. The Earth Institute invited our team (a) to identify the structure and elements of an effective M&E system, (b) to review and assess the M&E system(s) currently in place, and (c) to evaluate the capacity for an effective M&E system at the cluster level. Given the multiplicity of stakeholder interests presented above, the focus of our project began with this stakeholder analysis in order to incorporate all needs into plans for a PM&E framework.

## METHODOLOGY

The following methodology presents the framework followed by our team in the assessment. The primary focus is to reach the targeted objectives outlined above. The strategy entails the following activities:

**1. Research:** An extensive literature review of methodologies, tools, structures and elements of PM&E was conducted. Case studies, PM&E best and worst practices, handbooks on evaluation and challenges within the PM&E process were consulted in this review. Research also focused on participatory approaches to PM&E.

**2. Institutional Analysis:** We identified the main stakeholders within MVP Ghana and defined their interests and resources in order to determine the linkages and dynamics that took place in the planning phase of the project. This assessment was done in order to define an effective strategy of integration of participation in an M&E system and needs of key stakeholders.

**3. Information-Gathering:** Information was gathered from each organizational level of MVP program. Our team conducted key informant interviews with the Earth Institute and Millennium Promise staff in New York as well as MVP staff, government officials, UNDP staff and village community members in Ghana. In early January, 2008 a team of three members visited the Bonsaaso cluster. The aim of this exploratory site visit was to develop an overview of the MVP in Ghana and to gather information regarding the current PM&E activities and PM&E capacities in the Bonsaaso village cluster. Using relevant participatory appraisal techniques, direct observations, focus group discussions and key informant interviews the team gathered information on local perceptions of PM&E. Key activities in the January site visit include:

- Interviews with twelve management staff including all sector coordinators,
- Meeting with the Amansie West District Planning Officer (DPO),
- Participation in Keniago village annual review and planning workshop and conflict resolution meeting in Aboaboso village,
- Discussions with two village focus group,
- Attendance at Watreso community debriefing activity.

This initial site visit allowed our team to understand the traditional power hierarchy; MVP and government structures; the social, economic and geographic characteristics of the Bonsaaso village cluster, and the existing PM&E system in MVP Ghana – our specific project focus. Building upon the exploratory site visit in

January a second site visit was conducted in March, 2008 with the explicit goal to focus on an agriculture case study. Key activities in the March site visit include:

- Interviews with five MVP Ghana staff and two UNDP Ghana staff,
- Meeting with the Amansie West District Director for Agriculture,
- Discussions with six village focus groups (specifically addressing agriculture issues) and four out of six district agriculture extension workers (AEW),
- Visit to cocoa pod procurement site.

**4. Tools of Analysis:** In order to review and assess current PM&E activities, matrices similar to the example below were used as an organizational tool for our team. For example, the *monitoring matrix* captures the current program activities planned and conducted in the Bonsaaso village cluster. This list of activities, divided by sector, includes each related element to be monitored, and the methods for monitoring. This exercise facilitated a general understanding of current monitoring methods to help organize the focus of the project.

Matrix #1: Monitoring Matrix		Sector : Education Input Indicators	
Activity	Element to be monitored	Monitoring Method	GAP
Procurement of Furniture	Receive Furniture	Shipping Bill	
Distribution of Furniture	Even Distribution Among Cluster	Inventory	✓

Table 3: Example of Monitoring Assessment Tool

A similar exercise highlights the impact of all program activities. In order to conduct an impact analysis, a second *impact matrix* specifies desired impacts and how this goal is to be measured.

Matrix #1: Impact Matrix		Sector : Education Impact Indicators	
Desired Impact	Definitions	Measurement Level	GAP
Universal primary education is achieved in the Bonsaaso Village cluster	Enrollment in primary schools, regardless of age, as a percentage of official primary school age population, for primary school	Gross enrolment rates for within cluster	✓

Table 4: Example of Impact Assessment Tool

**5. Agriculture Sector Case Study:** Agriculture is the cornerstone of the Bonsaaso village cluster's livelihood and culture. Cultivation of various crops plays an integral role in every aspect of a villager's daily life and, according to the agriculture sector coordinator, roughly 40 percent of the Bonsaaso village cluster population consists of farmers.<sup>18</sup> Prior to the inception of the project, villagers depended exclusively on agricultural production and sales of cocoa and palm oil to purchase food, pay for household needs and to cover health and/or education expenses. Agriculture is, therefore, the foundation on which to base poverty

<sup>18</sup> Isaac Kankam-Boadu, interview by March SIPA team, 11 January 2008.



alleviation in this community. Recognizing this importance, MVP's initial program, beginning in March 2006, involved strengthening various aspects of the agriculture sector. Parallel to the MVP agriculture initiatives, Ghana's national, regional and district-level planning also focuses on agriculture as the key to increasing the standard of living, especially for those living in rural areas.

It is for these reasons that our team chose to conduct an in-depth case study specifically on the PM&E initiatives occurring in the agriculture sector, including an overview of the organizational structure, various stakeholders; PM&E at each stage of programming (planning, implementing and monitoring and evaluation) as well as our key findings and recommendations. (Please refer to the case study in the appendix for full details.)

**6. Group Presentation and Report:** Results from our research activities, findings and recommendations were presented at a meeting organized by the Economic and Political Development (EPD) unit of SIPA on 25 April 2008. This report will be made available to all key stakeholders including the Earth Institute, Economic and Political Development unit at SIPA, and the MVP Ghana staff.

## **LIMITATIONS, CONSTRAINTS AND EXTERNALITIES**

The following is a description of limitations and resource constraints affecting the work of our team as well as the MVP project as a whole. Also included here is a list of assumptions that framed the work of the project due to these limitations:

**Timeframe (short field visits):** Each of the two field visits completed by our team was limited to a period of less than two weeks. Due to these short field visits, the team found it difficult to develop rapport, build trust and garner feedback from the community in focus group discussions regarding potential strengths and weaknesses of the program. In addition, MVP Ghana staff's heavy workload limited the level of our direct contact with them.

**Language:** There are several languages spoken in the Bonsaaso village cluster, consisting mainly of Twi and other Akan languages. Although many community members speak and understand English, few were comfortable communicating with us in English. This presented a challenge during focus group discussions and interviews. To address this limitation MVP Ghana staff assisted as interpreters during meetings and workshops in the communities. Aiming for impartiality, an independent translator was hired during the March site visit. In the first instance the language constraint created a strong selection bias as people were chosen by MVP staff, or because they could speak English.

**Selection Bias:** During both field visits the SIPA team met with several community members for informal and focus group discussions and interviews. In each case, the team interacted primarily with individuals or groups who were either self-selected or selected with the assistance of MVP staff or by community opinion leaders. As a result, it is likely that the team only interacted with community members who have elected, or have been able to participate in MVP activities; thereby, missing the perspectives of the poorest community members with limited access to, or time for, such meetings to share their views and needs. Additionally, in the communities, the SIPA team was not able to randomly select samples of residents in the communities for discussions. This bias can also be considered to understand the needs and perspectives of the Bonsaaso community as a whole given that the SIPA team was only able to visit the communities where MVP staff was conducting other business. Therefore, there is a possibility of some selection bias in the

Bonsaaso village cluster themselves given that the team was not able to visit all villages nor to randomly select villages to visit.

**Externalities:** Despite MVP's holistic and comprehensive approach to poverty-reduction strategies, there are several factors beyond the direct control and ability of MVP. Some of the most significant externalities, frequently expressed by villagers themselves, are explained below as ongoing challenges that villagers face now and into the future that may affect the viability of the program:

- Illegal gold mining (nearby site: Galamsey) activities are having serious environmental repercussions. Streams and rivers are being silted and polluted, while lands are quickly being eroded. Young farmers are being seduced to work in the dangerous mines as they are more profitable than farming.
- Electricity is infrequent and unreliable for most community members, MVP staff and the district office. Frequent power outages disrupt planned office activities. Villagers have often requested that MVP expand the electricity network to their community. However, it is the responsibility of the Ghanaian government to expand the electricity grid.
- Weather-related events also cause disruptions and unpredictability for farmers. One example involves the timing for maize planting. Despite the full supply of maize seed to farmers, planting was severely delayed in 2007 in some villages, due to the early onset of rains. Lands were severely flooded, resulting in crop destruction, blocking farmers' access to transport and market as well as their inability to plant seeds during routine planting months. High rainfall and humidity also resulted in higher incidence of black pod diseases on cocoa plantations and weather had a huge impact on agricultural yields.
- Vehicle access is also a constraining factor for MVP staff; five MVP vehicles are fully employed at all times. The staff mitigates this resource scarcity by coordinating field visits by geographic location, not functional activities. This often results in delays and operational inefficiencies.
- Cluster Distribution: Travel time to Manso Nkwanta (MVP office location) is a minimum of two hours from Kumasi, the nearest large city. In addition, the distance between villages in the cluster (and from Manso Nkwanta to the villages) can range from one to three hours on unpaved and unmarked roads.

## PARTICIPATORY PLANNING, MONITORING AND EVALUATION ACTIVITIES

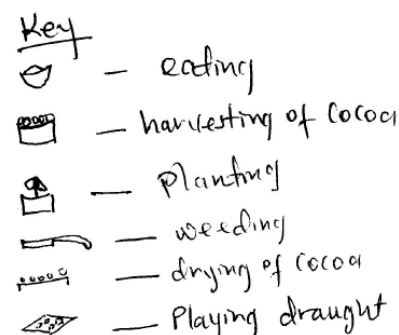
### **PM&E and related activities in Bonsaaso Village Cluster:**

A results-based approach to PM&E provides government officials, development managers and civil society with a method of learning from best and worst practices, service delivery improvement, more efficient use of financing and demonstrating results as part of accountability to key stakeholders.<sup>19</sup> Participatory M&E provides for active involvement in the planning, monitoring and evaluation process by those with a stake in the program, including donors, partners, participants and beneficiaries. MVP aims to create a model for achieving the MDGs that can be sustainable at all stages of programming: planning and design; gathering and analyzing the data; systematic monitoring of programming, identifying and documenting the evaluation findings; conclusions and recommendations and preparing an action plan to improve program performance.<sup>20</sup> One key ingredient for creating a sustainable approach is the use of participatory methods. Participatory planning and monitoring involves local beneficiaries in identifying needs and strategies, measuring, recording, collecting, processing and communicating information in the decision-making process. Participatory evaluation assists in adjusting and redefining objectives, reorganizing institutional arrangements or re-allocating resources as necessary. A continuous planning, monitoring and evaluation system requires continuous surveillance in order to assess the local development project's impact on intended beneficiaries.<sup>21</sup>

### **Planning Stage Effective PM&E**

The planning stage of an effective PM&E system involves developing a comprehensive framework for monitoring and evaluation; providing guidance on how to develop a PM&E plan as well as criteria for selecting and planning evaluations.<sup>22</sup> A participatory process should be incorporated in monitoring and evaluation decisions, development of data collection instruments as well as analysis plans. One of MVP's initial activities during the planning stage involved the collected

**Figure 6: Daily activities for men in Manukrom**



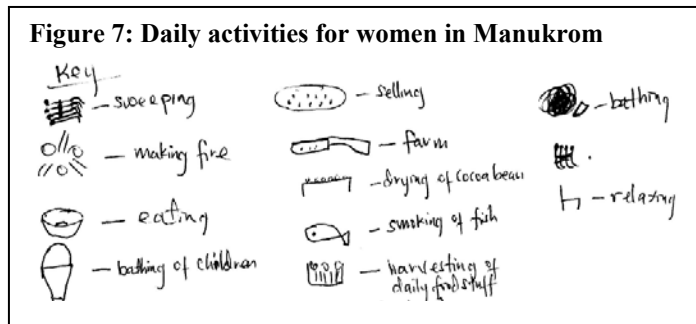
19 World Bank, 2004. *Monitoring and Evaluation: Some Tools, Methods & Approaches*. The International Bank for Reconstruction and Development/THE WORLD BANK. Washington D.C.

20 USAID Center for Development Information and Evaluation, 1996. *Performance Monitoring and Evaluation TIPS*. U.S. Agency for International Development. Washington D.C.

21 See <http://www.fao.org/docrep/006/ad346e/ad346e0e.htm>

22 United Nations Development Programme (UNDP), 2002. *Handbook on Monitoring and Evaluating for Results*. United Nations Development Programme Evaluation Office, New York.

of baseline data. MVP also successfully executed a participatory approach using activities such as gender-specific daily activities, wealth-ranking and formulation of community action plans (CAPs), in addition to daily activity charts, seasonal calendars and leaky pots. These activities were conducted in order to collect data regarding population, gender, socio-economic data, an assessment of community needs, as well as a way to generally expose villagers to the participatory framework. MVP Ghana has implemented several participatory techniques a creative wealth ranking system as part of the needs assessment and also used drawings in defining daily activities in Manukrom (see example). This is an example of good participatory practices that can implemented for successful PM&E programming.



### ***Implementing and Monitoring PM&E***

The next PM&E stage, monitoring, can be described as a continuous assessment of impact at each stage of the project. Systematically measuring a program's progress provides key stakeholders with ongoing indications of strengths or weakness, towards the achievement of desired impact.<sup>23</sup> PM&E differs from other conventional approaches in that it seeks to engage key project stakeholders more actively in reflecting and assessing the progress of their project and in particular the achievement of results. Below are two examples of defining the key differences between participatory approaches and more conventional techniques.

<sup>23</sup> United Nations Development Programme (UNDP), 2002. Handbook on Monitoring and Evaluating for Results. United Nations Development Programme Evaluation Office, New York.

**Two sample elements of a PM&E system<sup>24</sup>:**

**Table 5: Core PM&E Principles, as defined by the World Bank<sup>25</sup>**

Core principles of PM&E: <sup>26</sup>	
1.	Primary stakeholders are active participants – not just sources of information
2.	Building capacity of local people to analyze, reflect and take action
3.	Joint learning of stakeholders at various levels
4.	Catalyzes commitment to taking corrective actions

PM&E approaches encompass a wide and expanding range of philosophies, tools and methodologies clearly differentiated from conventional evaluation. Rolf Sartorius of Social Impact provides a table contrasting the conventional and participatory approaches, similarities and differences can be compared and contrasted with World Bank approaches.

**Table 6: Participatory Evaluation vs. Conventional Evaluation<sup>27</sup>**

Conventional Evaluation		Participatory Evaluation
<b>Why</b>	Accountability, usually summary judgements about the project to determine if funding continues	To empower local people to initiate, control and take corrective action
<b>Who</b>	External experts	Community members, project staff, facilitator
<b>What</b>	Predetermined indicators of success, principally cost and production output	People identify their own indicators of success
<b>How</b>	Focus on “scientific objectivity” distancing of evaluators from other participants; uniform complex procedures; delayed limited access to results	Self evaluation; simple methods adapted to local culture; open immediate sharing of results through local involvement in evaluation processes
<b>When</b>	Midterm and completion	Any assessment for program improvement; merging of monitoring and evaluation, hence frequent small evaluations

**Evaluation PM&E**

Program evaluation is a time-bound management tool used to systematically and objectively assess the relevance, efficiency, effectiveness and impact of ongoing and completed programs and projects. Based

<sup>24</sup> Please see appendix for additional examples of PM&E in other international programs

<sup>25</sup> Rolf Sartorius. *Participatory Monitoring and Evaluation Programs Systems: Improving the Performance of Poverty Reduction Programs and Building Capacity of Local Partners*. Social Impact, Washing D.C.

<sup>26</sup> <http://go.worldbank.org/G966Z73P30>

<sup>27</sup> Rolf Sartorius. *Participatory Monitoring and Evaluation Programs Systems: Improving the Performance of Poverty Reduction Programs and Building Capacity of Local Partners*. Social Impact, Washing D.C.

on the data and findings of an evaluation, decisions on policy or strategy should be informed and related to ongoing program interventions. Evaluation can also be used to demonstrate accountability to decision-makers, donors, beneficiaries and other key stakeholders.<sup>28</sup> MVP has yet to begin the evaluation process; baseline data is still being collected as MVP project enters its third year; projects are yet to be fully implemented; monitoring systems that reflect PRA techniques are not yet initiated.

While many of the integral components to an effective and sustainable PM&E system are yet to be implemented in MVP Ghana, M&E tools are currently in use by key stakeholders in the project. These tools are an important introductory step in the PM&E process. Assessing the relevance, efficiency, effectiveness, impact and sustainability of the project can only be done once all stages of a PM&E system are fully implemented. Each of these current M&E tools was researched and analyzed in order to illicit our findings and recommendations, which are discussed at length in the subsequent section.

**Table 7: Current PM&E Tools Used By MVP Ghana**

Stakeholder/Institution	Specific M&E Tool
Earth Institute	<ul style="list-style-type: none"><li>▪ Baseline Sector Pathways</li><li>▪ Annual Reports</li><li>▪ Quarterly Quantitative</li><li>▪ Conference Calls</li></ul>
MVP Ghana Staff	<ul style="list-style-type: none"><li>▪ Quarterly Reports</li><li>▪ Sector Quarterly Narrative Reports</li><li>▪ Minutes taken from Community Meetings (i.e. Community debriefing sessions)</li><li>▪ Informal Activities</li></ul>
Bonsaaso Cluster	<ul style="list-style-type: none"><li>▪ Review of Community Action Plans</li><li>▪ Direct Observation</li><li>▪ District Assembly Meetings (Minutes taken)</li><li>▪ Unit Committee Meetings (Minutes taken)</li><li>▪ Sector Committee Meetings (Minutes taken)</li></ul>
District Level Municipalities	<ul style="list-style-type: none"><li>▪ Monthly M&amp;E Reports (sent to regional and national government)</li><li>▪ District Municipality Meetings</li></ul>

<sup>28</sup> UNFPA, 2004. *Programme Manager's Planning, Monitoring and Evaluation Toolkit*. Division for Oversight Services.



## **KEY FINDINGS AND RECOMMENDATIONS**

This section details the key findings from site visits, institutional analysis, agriculture case study and core indicator assessment. Where relevant, the SIPA team proposes concrete recommendations to address the main gaps and challenges identified in this report.

### **1. Timeliness of baseline data analysis and prospective M&E system**

#### ***1.1. Baseline Data Processing:***

Baseline data for the MVP project in the Bonsaaso village cluster were collected in the initial stages of the project, beginning with the “MVP 1 villages” followed by the “MVP 2 villages.” The main distinction between the two is the schedule of implementation and level of detail in data collection with MVP 1 as the initial site. While baseline data was completed in MVP 1, baseline data are still being collected and entered in some MVP 2 villages as the project enters its third year. Furthermore, data have not been fully processed for either MVP 1 or MVP 2 villages and therefore cannot be analyzed. The tardiness of baseline data entry and analysis is thus a serious impediment to the ability to effectively monitor and evaluate the project. The absence of usable baseline data completely inhibits the ability to assess the implementation process, to make adjustments in project activities and to measure project impacts. Once baseline data are collected, tabulated and analyzed the results should be available to all project stakeholders to incorporate as part of their respective PM&E processes. The success of MVP’s comparative approach, hinges on the comparison of baseline information with final program goal of achievement of the MDGs.

#### ***Finding 1: Recommendation***

- MVP Ghana team, in conjunction with the Earth Institute, should immediately reallocate resources and invest in baseline data analysis complete data entry and statistical analysis.
- Once baseline data are analyzed, results should be used to provide a foundation for target-based progress reports and a final impact evaluation. Specifically, this should be incorporated into adjusting and redefining objectives, re-allocating funds as necessary and targets measured in quarterly reports. In addition, as the project just passed its mid-term point, it is critical that baseline data are analyzed in order to conduct a mid-term evaluation and to prepare plans for the second phase of the project.

- Given that baseline data analysis occurs in New York, the results of this analysis should be returned to the MVP Ghana staff for immediate use to modify programming as necessary and incorporate into updating annual targets and other impact goals.

## **2. Structural Constraints**

### ***2.1 Organizational Duplications and Inequalities:***

The process of government decentralization, beginning in 1988, has reoriented management of community development to the local level. Assembly members, area councils and unit committees have been created as local, modern institutions (parallel to the existing traditional models) with the mandate to initiate, facilitate and manage development activities at their communities.<sup>29</sup> The districts' local government structure in the Bonsaaso village cluster is made up of a district assembly, three area councils and thirty-four unit committees. District Assemblies operate with the highest political administrative authority with elected members (called assembly members) to articulate development concerns and act as a liaison between the district assembly and the local community. Unit Committee members are either elected or appointed. Their functions include undertaking institutional and educational campaigns, organizing communal labor, raising revenue, ensuring environmental sustainability, monitoring self-help programs, registering births and deaths, and developing the District's planning framework.

The traditional chieftaincy institutions continue to play a prominent role in the community, as a separate but independent power structure. Similar to the decentralized government institutions, traditional institutions also play a central role in organizing, implementing and coordinating development activities. These traditional power institutions are made up of chiefs whose positions are revered and command support from community members. The chiefs constitute potential rallying points for community mobilization and can act as agents of social change central to community development. The traditional hierarchy is as follows:

- Paramount Chief: Inherited, President of the Traditional Council. Functions include maintenance of law and order, settlement of disputes and community policy.
- Village Chiefs: Inherited, functions include land administration, settlement of marriage disputes and initiation of development programs.

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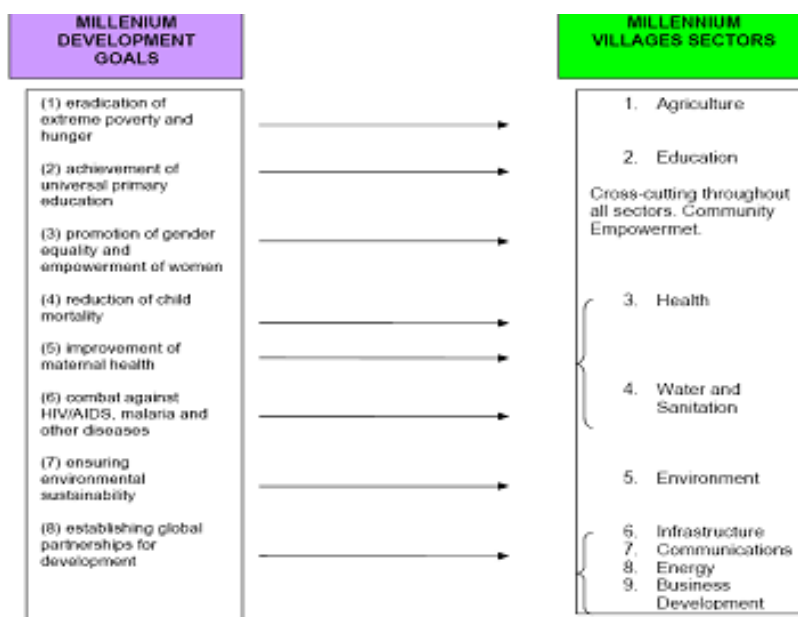
<sup>29</sup> Earth Institute background documents

- Village Elders: Functions include advising chiefs in land administration, assisting in implementation of community projects and communicating with community members regarding village business.

***MVP Ghana organizational structure:***

Unlike the government's decentralized approach to poverty alleviation, MVP Ghana is organized according to sectors, roughly corresponding to the eight MDGs (see Figure below). Each sector, lead by a coordinator, incorporates a committee for implementation of activities related to that sector.

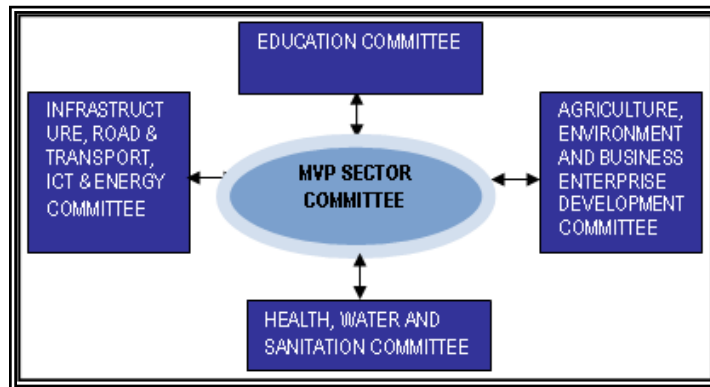
**Figure 8: MDGs and related MVP sectors**



Each sector has a coordinator and a committee that performs the following duties: supervises the localization process of the pathways; ensures implementation of the community action plans; advocates in favor of the community for better provision of services; acts as liaison between villagers and MVP Ghana staff; communicates with sector coordinators, other MVP Ghana staff and local government; mobilizes resources and contract relevant service providers; and implements M&E at the activity level.

Originally, MVP created ten separate sector committees through which to implement programming and mobilize community members.<sup>30</sup> However, MVP soon realized that overlaps existed between these sectors and existing government structures; leading to a duplication of efforts. To harmonize performance, several sector committees have been re-grouped, as reflected in the following figure:

**Figure 9 Organization of MVP Committee**



**Finding 2.1 Recommendations:**

- The government and traditional institutions function parallel to MVP sector committees, in some cases. Rather than encourage rivalry between the existing institutions, MVP can develop the capacity of existing institutions to harmonize activities. While MVP previously recognized overlap and has begun to fix these inconsistencies, this should be made fully operational throughout all villages.
- Sector committee membership should be monitored to determine if membership reflects the needs and interests of all community members. We observed that committee members may represent only those individuals motivated to participate and with time to volunteer in these groups. This means that the extreme poor may be omitted and underrepresented. Once again, pre-existing traditional and governmental structures may be useful in trying to address this gap. For example, linking community wealth ranking exercises with monitoring of sector committees could create a system to identify and include “core poor” decision making bodies. (see agriculture case study for more a detailed analysis of the wealth ranking exercise).
- Sector committees require continuous training and capacity building activities in order to fully meet their mandate and role. Training programs should continuously be organized for the sector committees to cover simple management tools- minutes and reports writing, conduct meetings, lobby

<sup>30</sup> agriculture, water & sanitation, health, environment, education, infrastructure, business development, energy, community development, and communication

activity/advocacy skills. Training on community education skills should also include how to receive and pass on information to others. Visual aides should be employed as a strategy for community sensitization and civic education. Sector committees require also to be trained on gender issues and intensify their involvement in participatory diagnosis (planning and monitoring). It is also crucial that sector committee members are sufficiently trained in leadership, conflict management and advocacy skills.

## **2.2 MVP's CAP process and the District Development Plans**

The Ghanaian government's macro-level approach to poverty alleviation through achieving MDGs is mirrored by the micro-level approach of MVP. The government uses macro--level tools, such as the District Development Plans (DDP), MDGs and Vision 2020, as a way to articulate their poverty reduction strategies. With the same planning objective, MVP utilized a participatory approach, referred to as Community Action Plans (CAPs) to define the needs and resources of each community. Both activities fulfill the same function, which is to translate the MDGs goals into practice.

**Table 8: CAP Techniques employed by MVP and community**

CAP Techniques:	
1.	Community "durbar" organized to initiate discussions on CAPs
2.	Needs assessment process
3.	Gender-centered perspectives garnered regarding community's resources and constraints
4.	Key development issues defined
5.	Key problems analyzed
6.	Strategic options and project proposals designed
7.	Group sessions led to determine prioritization of projects
8.	Ranking of community needs
9.	Community validation
10.	Community approval

MVP philosophy reinforces district development objectives. Therefore, in theory, strong consistency and cohesion between DDPs and the MVP programming would allow for scaling-up of this initiative. Hence, if MVP's planning was extracted from DDPs, then the validity of community choices would be questioned. CAPs should reflect the community's needs, resources and ability to implement their development plans; these should be a strategic combination of limited number of projects which have stability in purpose. MVP initiates the CAP process, using PRA techniques as a planning independent of the DDPs.

The design of CAP's and DDP's each employ different methods. The MVP-led CAPs process facilitated participatory techniques of rural appraisal, preference aggregation and ranking. Ultimately villagers assessed and prioritized their own needs. The government-led DDP process was not participatory, but a top-down approach aimed at achieving the MDGs. We found M&E considerations were not included in either plan.

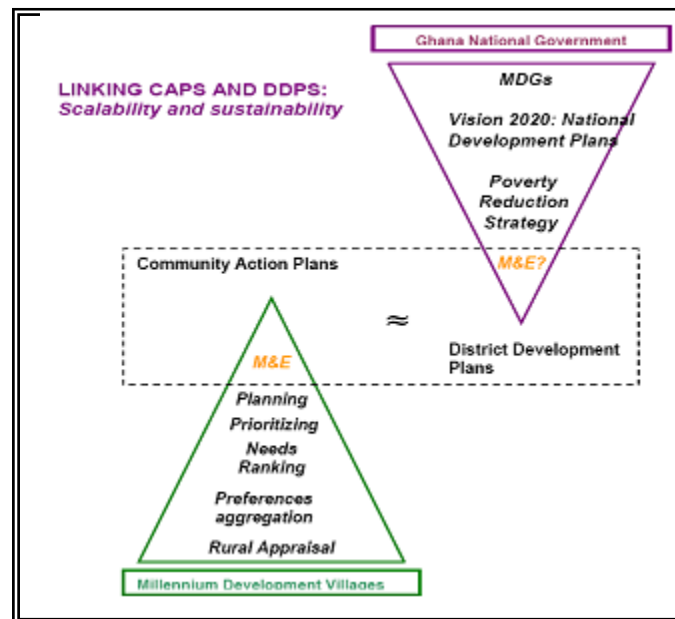


Figure 10

### **Finding 2.2 Recommendation**

- The optimal strategy is to design a PM&E system to be used throughout the project, including the planning stage. This will adapt MDGs to local needs and contexts in a participatory manner.
- MVP's approach to participatory assessment, through the CAPs exercise, exemplified the value of involving community members during the planning stage. The results of this activity should be used to inform other stages of the program, particularly monitoring and evaluation. This is a prime example of a PRA technique that was successfully planned, executed and accepted within the community. MVP should learn from their own experiences and success, being able to sustain the momentum in program implementation and M&E and use the CAPs as a benchmark to measure progress.

### **3. Informal, Qualitative and Quantitative Monitoring Systems:**

#### **3.1 Mixed method approach in the M&E framework:**

Qualitative and quantitative methods have different strengths and weaknesses. In order for both to be successful, several methodologies should be conducted: data collection must be balanced between the two methods, conducted with rigor, and adapted to specific settings within the Bonsaaso cluster. For example, in monitoring and evaluating the school feeding program it is crucial to measure: number of participating schools and resources, quality of the program perceptions of students, teachers, community health workers and parents, successes/weaknesses with the program and long-term affect of students' school attendance and performance. The SIPA team found evidence of both quantitative and qualitative monitoring and evaluation taking place in the Bonsaaso cluster. However we found that the qualitative data gathered were predominately informal and many times not analyzed even if it was documented.

Summary of Quantitative & Qualitative Current Activities	
<b>Qualitative</b>	Cluster teams gather data on quarterly basis and compile <b>cluster-wide quantitative reports</b> . Information is gathered by each sector manager for the core indicators applicable to their sector of responsibility and all information is then compiled by the team leader and other MVP staff in the Ghana office in a table. The table includes: <b>targets, quarterly progress and annual progress</b> . Additionally, each sector employs its own quantitative data collection which ultimately informs the cluster-wide quarterly report. For example, the health sector collects morbidity and mortality figures from each community health worker to monitor the health status of each catchment area of the cluster.
<b>Quantitative</b>	A method of <b>community-wide debriefing</b> sessions is utilized to gather feedback from the entire community or given village. This process is managed by the only cross-cutting team within MVP Ghana: the Community Development group. However, participation by each sector coordinator also takes place. These community debriefings take place one village at a time and are generally organized on the villages' taboo day with the aim of encouraging participation from a wide range of residents. Following the debriefing, the Community Development Facilitators are charged with <b>writing formal overview notes</b> from these sessions. However it is unclear how this information is then logged, analyzed and used for monitoring and evaluation purposes.  A <b>one page narrative report</b> , included in the quarterly quantitative reports, aims to highlight additional successes and challenges during the quarter. These supplements to the quarterly report are also used by the Earth Institute and Millennium Promise to compose annual reports and donor reports at the macro level.



	<p><b>Conference calls</b> with the Millennium Promise headquarters and Earth Institute in New York are conducted on a monthly basis with the cluster team. Participants include Millennium Promise Operations Manager, the Ghana Cluster Team Leader (as well as the Science Coordinator when available), technical staff (usually from the Earth Institute), and others from MVP and UNDP as necessary. There are also additional phone communications when warranted, usually regarding a technical issue with a specific sector. For example, if there are particular challenges within the infrastructure sector, the sector coordinator may conduct a separate call with the Earth Institute.</p> <p>There are several additional qualitative M&amp;E methods taking place in the Bonsaaso cluster which are not captured formally or analyzed in detail. For example, the MVP office at the district capital is open for chiefs, opinion leaders, unit committee members and other residents of the Bonsaaso cluster to visit in order to explain issues with the project or <b>lodge complaints verbally</b>. A similar verbal exchange occurs across the sector every time an MVP staff or local government staff is traveling within the community. These exchanges can be extremely insightful and helpful to the M&amp;E of the project if properly captured and analyzed.</p>
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**Table 9: Summary of Quantitative & Qualitative Current Activities**

***Finding 3.1 Recommendation***

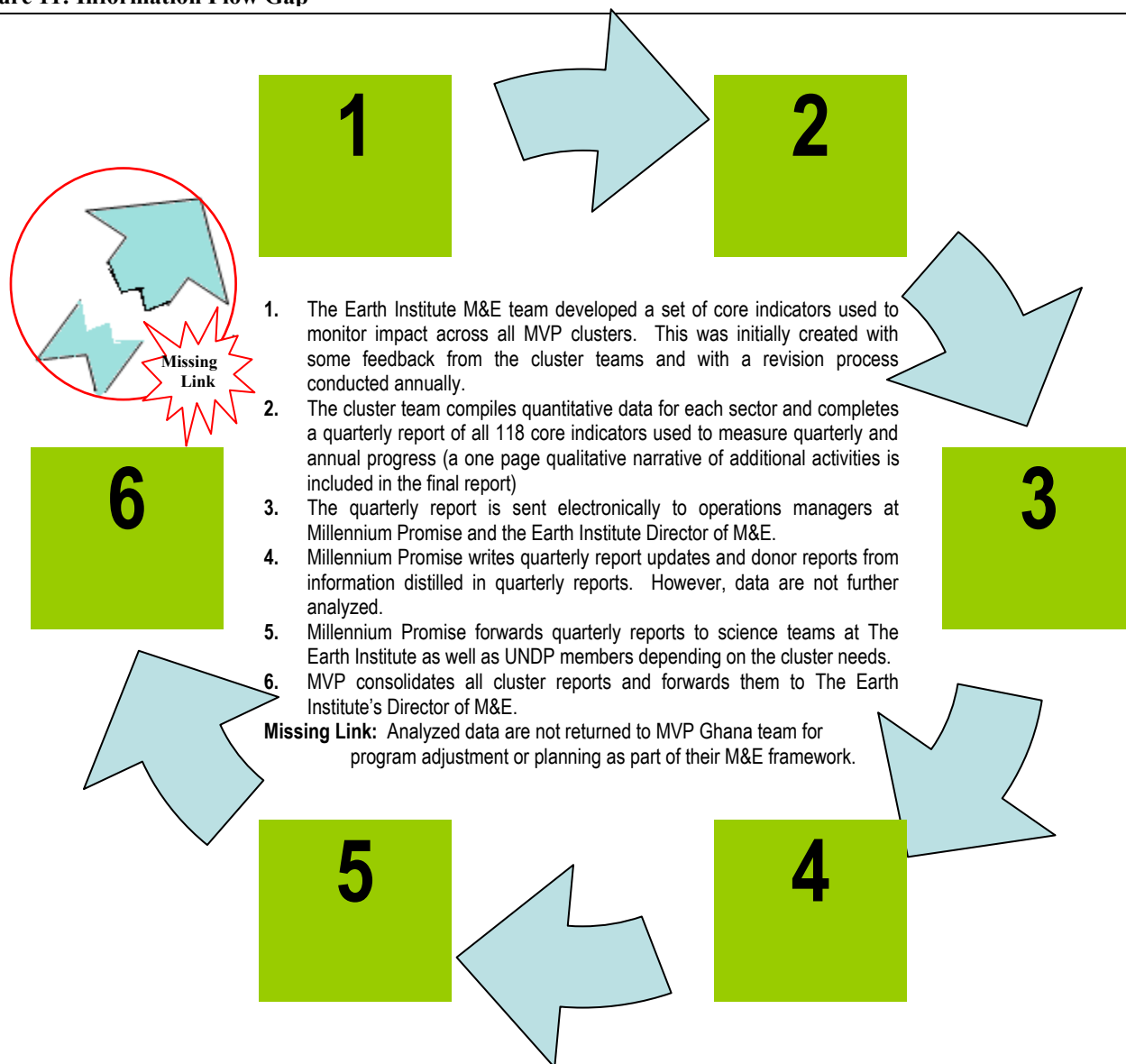
- SIPA team recommends the creation of a streamlined and ‘operational’ process for M&E in which both qualitative and quantitative data collection can be formalized and utilized.
- In addition to the quantitative data being collected, MVP Ghana should also use the qualitative data to set targets and monitor progress. Incorporating the direct voices of the villagers’ through informal and qualitative techniques, causes of any program challenges can be more easily distilled, clarified and adjusted. Addressing such nuances can create a more effective monitoring and evaluation tool which will more accurately achieve program’s desired impact.

## 4. Information Flow

### 4.1 Flow of M&E Information Among Stakeholders:

The goal of the information management system by MVP is to link all key stakeholders and promote a clear transfer of information between these stakeholders. The flow of information between MVP Ghana staff and partner organizations in New York provides important insight into the use of core indicators, which is to effectively communicate the quality and impact of the project. The figure below depicts information flow of MVP core indicators used for all MVP projects in Africa. The development and data collection process for these indicators is discussed in detail in the quantitative M&E section of this report. The current flow of

Figure 11: Information Flow Gap



#### **Finding 4.1 Recommendation**

- In order to improve MVPs information management system and incorporate all relevant data into the program's M&E system, the flow must be circular rather than linear. Data collected by the MVP Ghana team should be shared with the Earth Institute, Millennium Promise and UNDP stakeholders for appropriate analysis. Our recommendation for the Earth Institute is to transfer analyzed data back to the MVP Ghana team in a systematic and timely manner. This will enable the MVP Ghana team to utilize the information gathered to solve implementation challenges, take corrective and make budgeting adjustments accordingly.

### **5. Indicator S.M.A.R.T. Assessment**

#### **5.1 Core Indicators used in Quarterly Reporting:**

The key quantitative M&E conducted by MVP's is the collection of data using 118 process and output indicators. This activity is at the heart of the program's overall goal and is used to measure the project's progress and impact. As one of the only formal exchanges of information between the MVP Ghana team and the Earth Institute, the validity, relevancy and clarity of each indicator has been investigated. This investigation was conducted using a S.M.A.R.T. framework. The methodology and findings are below:

**Table 10: S.M.A.R.T. criteria used for assessment:**

<b>S.M.A.R.T</b>	<b>S.M.A.R.T. Indicator Assessment Criteria</b>
<b>Specific:</b> related to the results that the program/project seeks to achieve	Does the indicator have relevance for policy decisions for all stakeholders in the system, including the least powerful ones?
<b>Measurable:</b> stated in quantifiable terms	Relevant data for the indicators are available for the geographical area, and can be compared with other areas and at different periods of time. If the data are not readily available, they can be readily collected using practical means.
<b>Achievable:</b> realistic in what is to be achieved	Indicators should be an accurate reflection of the community's values and goals with respect to monitoring and evaluating.
<b>Relevant:</b> useful for management information purposes	Indicators should illustrate program aspects that are fundamental to the long-term viability of the community.
<b>Time-bound:</b> stated with target dates	The indicator must be measurable and consistent over time, so that comparable data are available. Leading indicators provide the benefit of giving the community ability to react by changing programs.

### **5.2 Gaps Found in Indicator analysis**

Refer to Appendix for a detailed analysis of 118 core indicators included on the quarterly reports for 2007. Analysis of these indicators was conducted using the S.M.A.R.T. framework in order to verify if each indicator is **Specific**, **Measurable**, **Achievable**, **Relevant** and **Time bound**.

- **Specificity:** Several of the indicators show a mismatch between the indicator description and its definition. For example, indicator # 83, on sanitation facilities, highlights a discrepancy in the reporting: the indicator measures a proportion while the definition refers an absolute number. Such inconsistencies may cause confusion or incorrect data collection. Consistency should be maintained between the indicator description and the definition.
- **Measurability and Relevance:** Most of the 118 indicators analyzed were relevant to MVP. However, several indicators are not relevant to the MVP Ghana programming because they do not reflect any current programming. For example, indicator #17, regarding the school feeding program, measures the number of children being fed by the number of breakfasts provided. Given that the program does not provide breakfast in the schools, there is a value of 0 in the target column indicating that it is not relevant to the MVP Ghana project. Such indicators could be removed from the quarterly report or rewritten to become relevant. Another set of indicators with a common weakness is the indicators related to training activities. This set of indicators does not specify what the criteria are for quality training or “well-trained” participants. Instead, the indicators are measured simply by attendance or participation not on the outcome of the trainings.
- **Time bound:** Although all indicators are included in each quarterly report, only ten of 118 explicitly state a time period for measurement. Although this may seem redundant, stating the time period for each indicator will avoid confusion in data collection and analysis, particularly if indicators are disaggregated.

### **Finding 5.1, 5.2 Recommendation**

- To improve relevancy and achievability all indicators should incorporate community participation and input from the Ghana MVP staff. Participation should include an ongoing revision and editing process for these indicators. The entire set of 118 indicators must be localized to the specific context of the Bonsaaso village cluster and reflect the activities carried out in this location. Any indicator that is not locally relevant or achievable should not be integrated into Bonsaaso village cluster M&E system.

- Overall, the project could improve the quarterly indicators to effectively monitor the program's progress. Furthermore, a revised set of indicators could then be formulated into output indicators to help both mid-term and final project evaluation. In creating the output indicators it may be helpful for the MVP Ghana team to match each activity with the output and then formulate the indicator using a format similar to the one listed below.

<p><i>[Number of or percent of planned] [Specific activity or service] that [have been carried out or achieved] [to expected standard of quality]</i></p>
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## 6. Budget Analysis

### 6.1 Co-funding and overhead costs

The table below summarizes the financial allocations per sector, as well as per activity, for MVP Ghana's 2008 budget. In 2008, a total of US **\$5,092,325** is allocated for the project. Funding sources for this budget range from an 81 percent contribution (MVP I and II) to 19 percent (government, private sector and the community collectively labeled as "other"). This is consistent with the 20 percent co-funding scheme suggested by UNDP in similar non-refundable financing schemes.

Table 11: MVP Ghana Budget Allocations<sup>31</sup>

Budget Allocations	
MVP I	913,998
MVP II	3,215,836
Government	531,938
Partners	211,219
Communities	219,334
<b>Total MVP Budget 2008</b>	<b>5,092,325</b>
<b>MVP I &amp; II contribution</b>	<b>81%</b>

Allocations for the 2008 budget divided by sector rank in the following order: Health (31%), Education (14%), Management overhead costs (13%) and Infrastructure (11%). Refer to the table below for a summary of the budget, allocations and corresponding rank within the project.

Table 12: 2008 MVP Ghana Budget allocation and sector ranking

	Total Budget allocated	Proportion of Total Budget	Rank in funding Priority
Management (overhead costs)	677,672	13%	3
Baseline Research	67,812	1.3%	12
Objective 1: Poverty reduction, hunger and Agriculture (M&E system included in this objective with 0% budget allocation—Workplan row 4.1)	480,619	9.4%	5
Objective 2 Improve Livelihoods of Men and Women	132,169	2.6%	7
Objective 3 Education	734,572	14%	2
Objective 4: Health	1,595,174	31%	1
Objective 5: HIV-AIDS, Malaria, TB	72,380	1.4%	10
Objective 6: Sustainable Development	103,110	2.0%	9
Objective 7: Water and Sanitation	453,255	8.9%	6
Objective 8: Communication Technologies	82,350	1.6%	11
Objective 9: Infrastructure	557,420	11%	4
Objective 10: Capacity Development and Participation	113,373	2.2%	8
Objective 11: Links with national & local government	22,420	0.4%	13
<b>Total Planned Budget for 2008</b>	<b>5,092,326</b>		

<sup>31</sup> 2008 MVP Ghana program budget, all figures are in Dec 2007 USD

Table 13: High and Low Budget Allocations per Sector

Sectors with higher budget allocations			
Sector	%	Details	Funding Partner in Cost-sharing
Health	31%	From the 31% allocated to health, 33.8% is destined to complete the provision of hybrid (solar/generator source of energy for 6 clinics, 3 staff quarters and one dispensary, Complete the procurement of Medical equipment for 7 clinics and Provide mechanized boreholes for 7 clinics. Furthermore, nearly 10% is destined to Finance 50% of health insurance cost	National Government providing 54% total costs for this sector.
Administrative Costs	18%	From the 18% destined administrative costs 83% is management, 15% is destined to improve livelihoods of men and women and 2% to link established institutions with the project through meetings and fostering partnerships.	Financial Institutions providing 20% of total costs for this sector.
Education	14%	From the 14% allocated to Education, 21% is destined to establishing the School Feeding Programmed in all 16 communities, 12% to work with 2 beneficiary communities to construct 6-unit classroom block each and 13% to construct boreholes for 10 schools	Community providing 18% total costs for this sector.
Energy, communication and infrastructure	11%	In terms of energy and communications, 32.3% of this budget is allocated to aid the Government efforts to connect 2 communities to national grid, 14.4% for Grid line extension from Kobriso – Hiamankwa and 18% for surfacing of 160m stretch of steep hill 9160 SQM, including ditches and drains.	National Government providing 29% total costs for this sector
Sectors with lower budget allocations			
Baseline Research	8%	All resources were spent on tools and questionnaires for the survey.	100% financed by MVP
Baseline cleaning	0%		
Capacity Development, Participation and Governance.	1.5%	37% are applied to the development of community centers (Learning centers) and 31% to the engagement of facilitators. But most importantly, 0-1% was budgeted in 2008 for empowerment and participation of women, institutionalization of effective partnership between the local governance and traditional governance in the cluster, establishment and institutionalization of periodic community interfaces, training of MVP staff on community engagements Development of community action plans, building capacities of local institutions and the <u>initiation of PM&amp;E systems for project staff and community based institutions</u>	95% financed by MVP and 5% by the community.
(P)M&E	0%		

#### Overview Observations for 2008 Budget

1. 13 percent of the 2008 budget is allocated for administrative costs, including overhead, which may be less than similar long-term development projects.
2. Despite MVP's intention to institute a PM&E system, zero funds are currently allocated for development of an M&E system. However, two separate line items identify funds either spent or allocated for M&E activities: one identifies \$7,200 for an M&E short-term consultancy and another



identifies \$4,000 for M&E. Additional details regarding this allocation and expense may be important for MVP's finance and administrative teams to investigate and then increase either by incorporating PM&E activities into current allocations or re-allocate some funds.

3. For the purpose of this external evaluation, it is unclear whether funds have been allocated or spent at this time.
4. The table above provides details on sector activities and defines main funding partners. This exercise shows that the government is a natural partner for MVP especially in the following sectors: Health, Energy, Communications and Infrastructure. However, minimal contributions are made in the Education sector, which reveals a window of opportunity for MVP Ghana to increase the government's participation in this particular sector of the project.
5. A sector that carries a relatively low weight in the budget allocation is capacity development, participation and governance. Within this relatively small amount, approximately one third is applied to the development of community centers (Learning Centers) and another third to the engagement of facilitators. However, the sector is not specifically allocated funding for PM&E related activities such as the following: empowerment and participation of women, institutionalization of effective partnerships between local government and traditional institutions, establishment and institutionalization of periodic community interfaces, training of MVP staff on community engagements, follow-up and monitoring related to the community action plans, building capacities of local institutions and the initiation of PM&E systems for project staff and community based institutions.

Given these overview observations we conclude that the project approach to allocation of funds is sectoral rather than holistic and PM&E is not among MVP Ghana's specific budgetary priorities.

***Finding 6.1 Recommendation***

- A PM&E system is essential to the realization of MDGs goals; therefore earmarking financial resources specifically for PM&E system will ensure success and sustainability of the project's objectives. If additional funding is necessary, enabling an effective PM&E system should be an immediate priority.

## **7. Dependency, Inefficiencies and Limits for Sustainability and Scalability**

### ***7.1 Risk to sustainability: Dependency on Sector Coordinators and MVP Ghana Team:***

One of the primary goals of MVP is to implement and integrate a sustainable approach into each stage of programming. Over the five-year program cycle, communities and local government build capacities to continue program initiatives and develop a sustainable foundation for growth.<sup>32</sup> As well, exit strategies should be determined and activated at the onset and continued for the duration of the project. MVP attempts to incorporate full community participation at each and every program stage. However, during SIPA team field visits, direct observations and discussions with both individuals and groups of key stakeholders, the SIPA team observed key challenges in the area of sustainability and scalability. Each challenge will be highlighted below with accompanying recommendations; as well certain key successes are also highlighted and explained.

#### ***MVP Ghana staff:***

The MVP Ghana staff's technical abilities, overall motivation and dedication to the project is extraordinary; they continue to foster a strong relationship with the community. However, one potential risk is creation of dependency upon this "dream team". The SIPA team found that current methods of knowledge transfer from the staff to the community are inadequate for the aggressive time frame of this project and can be problematic in terms of sustainability once MVP exits.

#### ***Finding 7.1 Recommendation:***

- While many of the exit strategies have been in place since the inception of the program (including knowledge transfer, subsidies and end-skills training), programs are still being managed by MVP Ghana staff. In order to sustain projects to achieve the MDGs, the community and local government need to take a leadership role in coordinating and managing the exit of the MVP project. While some steps have been taken, such as employment of seconded government workers and employment of community members for data collection and community health activities, many of these activities have been delayed in their implementation. The concern is therefore that the exit strategy will not be fully implemented by the end of the five year program.

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<sup>32</sup> <http://www.earth.columbia.edu/articles/view/1799>

### **7.2 Dependence on agricultural inputs:**

MVP supplies agricultural inputs to secure increased yield production (hybrid pods and seeds, fertilizer, training workshops for farmers) which should result in increased income and food consumption. Each input raises several questions pertaining to sustainability, including issues regarding: financing, knowledge transfer and replanting. In the first year, MVP fully subsidized the inputs, however, beginning in year two, the subsidies are gradually weaned until costs are eventually fully incurred by the farmers. The rationale lies in the income-generating activity in the inputs. Theoretically, the fully subsidized inputs should generate increased cash flow for the farmers, allowing them to purchase hybrid seeds, pods and fertilizers the next year. Training works in the same way – it provides the initial knowledge for farmers, with an initial intense start up, only to decrease as farmers gain the needed skills.

### **Finding 7.2 Recommendation:**

- Theoretically, this model should work. However, in focus groups, interviews and by direct observation, the SIPA team witnessed concerns about the shift in resources from MVP to the community members. While villagers were able to accurately articulate the strategy, they were skeptical and insecure that they could afford the unsubsidized costs associated with all needed inputs. Their trepidation was illustrated by the low number of villages completing a successful transition to unsubsidized inputs. Monitoring and evaluation needs to be conducted each stage of cost transfer; monitoring any successes and challenges the villages are facing with assuming these costs. No monitoring and evaluation has formally been implemented to track the progress of this transfer system.

### **7.3 Agriculture Extension Workers:**

As integral stakeholders in the community, AEWs aid in training and program implementation at the MVP, district and regional government level. The district government employs AEWs in each geographic region; the number of placed AEWs is based on population density. In the Bonsaaso village cluster, the government mandates only three AEWs for this region. Due to MVP's presence and negotiating skills, the government has since transferred an additional three AEWs to the Bonsaaso cluster; bringing the total number to six AEWs. MVP tops-off AEW salaries with additional incentives, including mopeds and salary bonuses.

***Finding 7.3 Recommendation:***

- While these incentives are warranted and perhaps needed, this does raise questions of sustainability and scalability upon MVP's exit. Before MVP exits and only three AEWs remain, farmers should take on responsibility of AEWs. This could be accomplished through additional partnerships with research institutes or other agriculture programs.

**8. Agriculture Sector Focused Case Study**

***8.1 Please see Agriculture case study (Appendix 4)***

### SUMMARY OF RECCOMENDATIONS BY STAKEHOLDER

Finding (GAP)	Headquarters NYC (EI+UNDP+CU)	Ghana MVP Team	Local and National	Villagers and Traditional Power Structure
Baseline data are not processed and are not in a usable format in which it can be used or analyzed	Tabulate and analyze baseline data ASAP Do a workshop session with key coordinators of all MVP sites in Africa to analyze the current core indicators and define priorities	Request access to baseline data in order to further develop targets and output objectives to use in the PM&E system	Communicate regularly with MVP in order to provide household survey data and other statistics that can serve as and contribute to baseline data.	Review CAPs to use as basis for village specific PM&E activities and outline what has been accomplished with participation in the project
Risk to sustainability: dependency on sector coordinators and MVP Ghana team	Join the Multi Donor Budgetary Support (MDBS), signed in March 2003 between the Government of Ghana and key development partners aim to overcome the problems of tied aid and of aid-dependency by guaranteeing constant and predictable revenues	Transfer knowledge and empower community and reduce dependency on sector coordinators  Turn-over the project to community and government, not only in terms of funding but also in programming and PM&E	Capacity building for sector committees, field staff and support to sector committees	MVP supports villagers empowerment, development of capacities and overall participation
Inefficiencies in Programming (duplications and inequalities)	Integrate sector activities where possible especially in PM&E activities	Communicate effectively and constantly with government and incorporate MVP committees into existing community and government committees where possible	Coordinate with PM&E activities initiated by MVP Ghana team and request full integration into MVP activities	Participation and representation of all community members within committee institutions used for project implementation
Scalability Risk: MVP's CAP vs. District Plans		MVPs pathways and its PM&E system should be aligned with the local and national levels	Include community members in review of	
Mixed method approach between qualitative and quantitative to be formally included in the PM&E framework	Capture more of the informal and/or qualitative PM&E activities through documentation in quarterly reports and through other means	Conduct mid term review to assess what has worked and what has not and adjust accordingly	Request copies of all MVP PM&E reports and summary of activities	Villagers need to set up their own PM&E system based on the participatory tools defined in the needs assessment.
Linear flow of M&E information among stakeholders	Explain to Ghana team how data / quarterly reports are used in NY and share indicator analysis with MVP Ghana team  Make the flow of information circular instead of linear	Plan for Ghana team to have more control over PM&E processes and formalize this commitment	Targeted trainings for Sector and Unit committees on coordinating and carrying out needed PM&E activities	Gather feedback either through community debriefing activity or direct contact with MVP Ghana staff to compare various perspectives on progress
Core indicators used in quarterly reporting to be utilized at its fullest extent	Edit core indicators with input from MVP Ghana team  Clarify all definitions of indicators and review using the S.M.A.R.T. framework	Refine targets as related to MVP Ghana overall indicator evaluation system	Provide input to MVP Ghana team on formation and editing of core indicators	
Limited resources allocated to PM&E	Raise funds and/or reallocate fund for PM&E specific activities	-A PM&E "sector coordinator" should be hired -Collection of usable pieces of information. Now that there is experience from baseline data collection, select ONLY relevant data that can be used	Alliance with government in order to use their statistics (if available)	Share information with local government and MVP Ghana team regarding who in the community is not participating in the MVP and why

## CONCLUSION

In order to achieve the Millennium Development Goals (MDGs), the Millennium Village Project (MVP) aims to support impoverished villages by reaching MDG targets. The “proof of concept” project provides a creative approach to localizing national poverty reduction strategies. In Ghana, MVP contributes to the country’s achievement of the MDGs through an intensive, holistic and participatory micro-level approach. However, through the SIPA team’s primary and secondary research within the Ghanaian context, especially by means of discussions, interviews and anecdotes gathered during site visits, an important warning sign emerged; communities were not able to articulate the specific indicators and methods used to measure this results-based approach to poverty alleviation. While many community members verbalized the ultimate MDG goal, to eradicate poverty, they did not explicitly state targets of how to get there.

Participatory monitoring and evaluation (PM&E) is essential to promoting the success of the project, which is determined by attaining the MDGs at the close of the five-year project. Although activities are monitored through a set of quantitative and qualitative techniques, mid-way through the project, PM&E has yet to be fully implemented. Success of the project and its effect, impact, scalability and sustainability is in jeopardy unless the project can be fully monitored and evaluated. Donors, government officials, civil society, skeptics and, most importantly, villagers themselves may observe the tangible improvements in livelihoods, but will be unable to quantify and measure whether these changes directly result from the project interventions. Furthermore, without a rigorous PM&E system improvements in programming will remain illusive as an evaluation or monitoring process will only produce results for what is inspected not what is expected.

Our first key recommendation calls for investment in the analysis of baseline data and redirection of the flow of this analysis, including process indicator analysis, to the MVP Ghana team. The planning phase of the project appears to have successfully employed participatory techniques, which should guide future data collection for an immediate mid-term review and subsequent end of project evaluation. Furthermore, locally relevant cross-sectoral annual goals must be operationalized using this data. Based on the lessons learned from these activities, programming should be continuously adjusted until the conclusion of the project. In order to incorporate community members into the M&E process the CAPs should be used to monitor project progress and evaluate impact. A universal set of core indicators will not adequately reflect

local progress and impact. Reincorporation of the CAPs will also address the challenge of implementing a PM&E system retrospectively.

In order to implement these project changes, budget reallocation can improve all sector-based activities by prioritizing PM&E. This may require staff training or hiring of a PM&E officer to coordinate, collect and analyze PM&E results for the duration of the project. Prioritizing community participation as a component of the M&E system will also address concerns regarding scalability and sustainability. Ultimately, the process of forming an effective PM&E system must unite community members, local and national government representatives and the MVP Ghana team.

## APPENDIX

### Appendix 1: DAC Countries' and International Organizations' ODA Disbursements to Ghana

#### DAC Countries: ODA net (Net disbursements, \$million)

Year	1 <sup>st</sup>		2 <sup>nd</sup>		3 <sup>rd</sup>		4 <sup>th</sup>		5 <sup>th</sup>		Total
2000	Japan	102.9	U.K.	79.9	U.S.A.	63.3	Denmark	37.2	Germany	32.0	376.0
2001	Netherlands	114.2	U.K.	97.8	U.S.A.	53.5	Denmark	39.7	Japan	34.6	396.0
2002	U.K.	123.7	U.S.A.	68.9	Netherlands	59.6	Denmark	51.5	Germany	34.0	406.2
2003	U.K.	131.3	U.S.A.	83.9	Netherlands	65.8	Denmark	56.7	Germany	46.8	396.0
2004	U.K.	263.5	Netherlands	152.6	Japan	115.4	U.S.A.	80.4	France	74.5	406.2

#### International Organizations: ODA net (Net disbursements, \$million)

Year	1 <sup>st</sup>		2 <sup>nd</sup>		3 <sup>rd</sup>		4 <sup>th</sup>		5 <sup>th</sup>		Total
2000	IDA	178.9	CEC	16.4	IFAD	5.3	UNDP	4.9	UNICEF	2.9	222.1
2001	IDA	158.9	AfDF	51.6	CEC	18.1	UNDP	4.0	UNICEF	3.0	253.9
2002	IDA	76.8	IMF	53.9	CEC	42.4	AfDF	39.1	IFAD	5.5	238.3
2003	IDA	243.6	CEC	71.2	AfDF	63.7	IMF	52.6	IFAD	6.3	462.0
2004	IDA	288.0	CEC	63.5	AfDF	47.7	IFAD	7.7	UNHCR	4.6	451.5

**Source: World Bank Group**

### Ghana's achievement towards Millennium Development Goals

Millennium Developing Goals Achievement	1990	1994	1997	2000	2003	2005
Goal 1: Eradicate extreme poverty and hunger						
Income share held by lowest 20%	7	..	..	..	..	..
Malnutrition prevalence, weight for age	..	27	..	25	22	..
(% of children under 5)						
Poverty gap at \$1 a day (PPP) (%)	15	..	..	..	..	..
Poverty headcount ratio at \$1 a day (PPP) (% of population)	45	..	..	..	..	..
Poverty headcount ratio at national poverty line	..	..	..	40	..	..
(% of population)						
Prevalence of undernourishment (% of population)	..	..	18	..	12	11
Goal 2: Achieve universal primary education						
Literacy rate, youth total (% of people ages 15-24)	82	..	..	..	..	..
Persistence to grade 5, total (% of cohort)	..	..	..	66	63	..



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Primary completion rate, total (% of relevant age group)	..	..	..	62.7	66.1	72.1
School enrollment, primary (% net)	..	..	..	61	62	65
Goal 3: Promote gender equality and empower women						
Proportion of seats held by women in national parliament (%)	..	..	..	9	9	10.9
Ratio of girls to boys in primary and secondary education (%)	..	..	..	87.9	92	90.8
Ratio of young literate females to males (% ages 15-24)	85.5	..	..	..	..	..
Share of women employed in the nonagricultural sector	57	..	..	..	..	..
(% of total nonagricultural employment)						
Goal 4: Reduce child mortality						
Immunization, measles (% of children ages 12-23 months)	61	68	73	84	80	83
Mortality rate, infant (per 1,000 live births)	75	..	..	68	..	68
Mortality rate, under-5 (per 1,000)	122	..	..	112	..	112
Goal 5: Improve maternal health						
Births attended by skilled health staff (% of total)	..	43.8	..	..	47.1	..
Maternal mortality ratio	..	..	..	540	..	..
(modeled estimate, per 100,000 live births)						
Goal 6: Combat HIV/AIDS, malaria, and other diseases						
Contraceptive prevalence (% of women ages 15-49)	..	20	..	..	25	..
Incidence of tuberculosis (per 100,000 people)	223	218	214.4	210.8	207.3	205
Prevalence of HIV, female (% ages 15-24)	..	..	..	..	..	1
Prevalence of HIV, total (% of population ages 15-49)	..	..	..	..	2	2
Tuberculosis cases detected under DOTS (%)	..	..	31.8	38.1	39.7	37.5
Goal 7: Ensure environmental sustainability						
CO2 emissions (metric tons per capita)	0.2	0.3	0.3	0.3	0.4	..
Forest area (% of land area)	33	..	..	27	..	24
GDP per unit of energy use	5	5	5	5	5	5
(constant 2000 PPP \$ per kg of oil equivalent)						
Improved sanitation facilities (% of population with access)	15	..	..	..	..	18
Improved water source (% of population with access)	55	..	..	..	..	75
Nationally protected areas (% of total land area)	..	..	..	..	..	16.2
Goal 8: Develop a global partnership for development						
Aid per capita (current US\$)	36.2	31.6	26.6	30.2	45.1	50.6
Debt service	36	22	27	22	5	4
(PPG and IMF only, % of exports of G&S, excl. workers' remittances)						
Fixed line and mobile phone subscribers (per 1,000 people)	2.9	3.1	6.9	17.2	51.2	143.1
Internet users (per 1,000 people)	0	..	0.3	1.5	11.8	18.1
Personal computers (per 1,000 people)	0	0.9	1.6	3	4.5	5.2
Total debt service	38	24	30	16	14	7

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(% of exports of goods, services and income)						
Unemployment, youth female (% of female labor force ages 15-24)	..	18.9	..	19.4	..	..
Unemployment, youth male (% of male labor force ages 15-24)	..	14.8	..	12.7	..	..
Unemployment, youth total (% of total labor force ages 15-24)	..	17.1	..	15.9	..	..
Other						
Fertility rate, total (births per woman)	5.7	..	4.8	4.6	4.4	4.1
GNI per capita, Atlas method (current US\$)	380	360	380	320	310	450
GNI, Atlas method (current US\$) (billions)	5.8	6.2	7	6.5	6.5	10
Gross capital formation (% of GDP)	14.4	24	24.8	23.9	23.2	29
Life expectancy at birth, total (years)	56.2	..	56.8	56.7	56.6	57.5
Literacy rate, adult total (% of people ages 15 and above)	58.5	..	..	..	..	..
Population, total (millions)	15.5	17.3	18.6	19.9	21.2	22.1
Trade (% of GDP)	42.7	62	85.4	116.7	92.5	97.7

## APPENDIX #2 Core Indicator Analysis

S.M.A.R.T. Analysis for Quarterly Indicators (below indicators taken from Q4 2007 report, Millennium Promise)									
#	Indicator Description	Definitions:	Measurement Level:	Specific	Measureable	Achievable	Relevant	Timebound	Notes:
1	Number of community members participating in MVP assessment and design activities in the last quarter.	Number of people attending MVP meetings, workshops, or focus groups, for assessment or identification, design, or planning purposes. Unit: Number	Total  Food insecure households/poor not getting 2 square meals a day, for at least five days a month Food secure households (non-poor)  Male youth (15-24 years)  Female youth (15-24 years)  Adult males (25-59)  Adult females (25-59)  Elderly males (60 and above)  Elderly females (60 and above)	✓	Unclear if measurement level for food secure/insecure HH is by HH or individual. If HH level move the word "poor" and place it directly after "insecure"	✓	✓	✓	This indicator does provide some overall indication of the scope of participation in the project, this indicator does not reflect of seek to measure the quality of the activity (meeting, focus group, etc) and therefore does not illuminate how knowledge, skills or attitudes have changed due to this participation.
2	Number of community members participating in MVP implementation activities in the last quarter.	Number of people attending MVP meetings, workshops, or focus groups. Unit: Number	Total	✓	(Same as above note for indicator #1)	✓	The indicator is on implementation, however, the definition	✓	(Same as above note for indicator #1)

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							only includes attendance at meetings, workshops or focus group discussions which begs the question if defined as is it in fact relevant?		
			Food insecure households/poor not getting 2 square meals a day, for at least five days a month Food secure households (non-poor)  Male Youth (15-24 years)  Female youth (15-24 years)  Adult males (25-59)  Adult females (25-59)						
3	Number of community members participating in MVP monitoring activities in the last quarter.	Number of people attending MVP meetings, workshops, or focus groups. Unit: Number	Total  Food insecure households (poor) not getting 2 square meals a day, for at least five days a month Food secure households (non-poor) Male Youth (15-24 years) Female youth (15-24 years) Adult males (25-59)  Adult females (25-59)	✓	(Same as above note for indicator #1)	✓	✓	✓	(Same as above note for indicator #1)
4	Number of community members participating in MVP evaluation, feedback, and learning activities in the last quarter.	Number of people attending MVP meetings, workshops, or focus groups. Unit: Number	Total  Food insecure households (poor) not getting 2 square meals a day, for at least five days a month Food secure households (non-poor) Male youth (15-24 years) Female youth (15-24 years) Adult males (25-59)  Adult females (25-59)	✓	(Same as above note for indicator #1)	✓	✓	✓	(Same as above note for indicator #1)
5	Number of institutions using participatory methods in activity planning and monitoring facilitated by MVP.	Informal organizations that have a common goal/concern. Formal organizations with terms of references, a formal mandate or a constitution. Unit: Number	Informal Institutions  Formal Institutions	✓	✓	✓	✓	✗	✓
6	Number of community-based partnerships facilitated by MVP.	Informal agreements or collaboration on activities between community-based groups and governmental, non-governmental and other community-based and organizations. Number of formal agreements signed between community-based organizations and governmental, non-governmental and other CBOs/organizations. Unit: Number	Informal Institutions  Formal Partnerships	✓	✓	✓	✓	✗	✓
7	Number of information packages created and	Information packages created and distributed.	For health	✓	✓	✓	✓	✗	✓

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8	distributed by the MVP for training and awareness creation.	Unit: Number	For education						
			For energy						
			For transport						
			For agriculture						
			For water						
			For environment						
			For gender						
			For health						
			For education						
			For energy						
			For transport						
			For agriculture						
			For water						
			For environment						
9	Number of new change agents recruited by or working with the MVP.	Outside agents: Number of facilitators, extension agents, outreach workers and civil servants, community health workers. Unit: Number	For health						
			For education						
			For energy						
			For transport						
			For agriculture						
			For water						
			For environment						
			For gender						
			For community mobilization	✓	✓	✓	Since there is a "0" target for several measurements levels of this indicator it appears that these are not relevant to the project.	✗	✓
			For communications/ICT						
			For same categories as above.						
			For health						
			For education						
			For energy						
			For transport						
9	Number of change agents trained by MVP.	Total number of facilitators, extension agents, outreach workers and civil servants, community health workers, community-based resource persons, community facilitators originating from within the community, community-based workers or community extension aides. Unit: Number	For health						
			For education						
			For energy						
			For transport						
			For agriculture						
			For water						
			For environment						
			For gender						
			For community mobilization	✓	✓	✓	Since there is a "0" target for several measurements levels of this indicator it appears that these are not relevant to the project.	✗	✓
			For communications/ICT						
			For health						
			For education						
			For energy						
			For transport						
			For agriculture						

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10	Number of capacity building activities, facilitated by the MVP.	Number of trainings and awareness activities facilitated by the MVP. Unit: Number	For health				Since there is a "0" target for several measurements levels of this indicator it appears that these are not relevant to the project.		
			For education						
			For energy						
			For transport						
			For agriculture						
			For water	✓	✓	✓		✗	✓
			For environment						
			For gender						
			For community mobilization						
			For communications/ICT						
11	Number of new rules established for negotiation and conflict resolution, facilitated by the MVP.	Number of rules. Unit: Number		✓	✓	✓	✓	✗	The definition for this indicator is unclear, and would be more clear if the work "rule" was defined in the context of the Bonsaaso village cluster
12	Number of new processes established for negotiation and conflict resolution, facilitated by the project.	Community meetings related to negotiation and conflict resolution. Unit: Number		✓		✓	✓	✗	The definition for this indicator is unclear, and would be more clear if the work "process" was defined in the context of the Bonsaaso village cluster
13	Number of new processes/institutions that have adopted participatory or social learning (including evaluation) approaches that have been facilitated by the MVP.	Community meetings and groups that include rules, operating procedures or management practices with participatory or social learning approach Unit: Number	Initiated by community group				Since there is a "0" target for several measurements levels of this indicator it appears that these are not relevant to the project.	✗	✓
			Initiated by project	✓	✓	✓			
			Initiated by government related group						
			Initiated by other						
14	Gross enrolment rates in MVP areas for primary schools.	Enrolment in primary schools, regardless of age, as a percentage of official primary school age population, for primary school in the cluster. Unit: Percentage	Gross enrolment rates for girls within cluster				✓	✗	The definition should include the phrase "and outside the cluster" since this is measured as well.
			Gross enrolment rates for girls outside cluster	✓	✓	✓			
			Gross enrolment rates for boys within cluster						
			Gross enrolment rates for boys outside cluster						
15	Average pupil attendance rates in schools within MVP area.	Attendance rates for students in school records as a percentage of enrolment. Unit: Percentage		✓	✓	✓	✓	✗	✓
16	Average teacher attendance rates for schools within MVP area.	Teacher attendance rates. Unit: Percentage		✓	✓	✓	✓	✗	✓
17	Number of children fed in school feeding programs in the last quarter.	Children benefiting in school feeding programs. Unit: Number	For breakfast				Since there is a "0" target for several measurements levels of this indicator it appears that these are not relevant to the	✓	✓
			For lunch	✓	✓	✓			

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				project.		
18	Number of non-formal education programs offered by the project.	Adult education and vocational training programs. Unit: Number	School-based  Non-school based	✓	✓	✓
				Since there is a "0" target for several measurements levels of this indicator it appears that these are not relevant to the project.	✗	There appears to be a discrepancy between this indicator, which reports a target of 500 non-school based programs, and the following indicator #19 which has a targets of 0 for each measurement level.
19	Number of participants in non-formal education programs in the last quarter offered by the MVP.	Number attending non-formal education programs such as adult education and vocational training programs. Unit: Number	School-based males  School-based females  Non-school based male  Non-school based female	✓	✓	✓
				Since there is a "0" target for several measurements levels of this indicator it appears that these are not relevant to the project.	✓	✓
20	Number of teachers trained by the MVP.	Teachers trained via formal methods.  Teachers trained via informal methods	Have attended teachers college  Teachers that have been trained by NGOs and other on the ground training.	This indicator does not explain what type or quality of training is being conducted.	✓	✓
				✓	✗	✓
21	Number of schools constructed by MVP.	Number of new schools constructed. Unit: Number		✓	✓	✓
				✓	✗	✓
22	Number of schools rehabilitated with new pit latrines by MVP.	Number of schools with new pit latrines built by the MVP. Unit: Number		✓	✓	✓
				✓	✗	✓
23	Number of schools rehabilitated with new teacher housing by MVP.	Number of schools provided with teacher housing in the last quarter, by the MVP Unit: Number		✓	✓	✓
				✓	✗	✓
24	Number of schools rehabilitated with new kitchens by MVP.	Number of schools provided with new kitchens. Unit: Number		✓	✓	✓
				✓	✗	✓
25	Number of schools rehabilitated with new classrooms by MVP.	Number of schools provided with new classrooms. Unit: Number		✓	✓	✓
				✓	✗	✓
26	Number of schools that were provided desks or chairs or textbooks or classroom materials by the MVP.	Number of schools provided with desks/chairs/textbooks or classrooms by the MVP. Unit: Number		✓	✓	✓
				✓	✗	✓
27	Number of stoves with improved efficiency installed in homes facilitated by MVP.	Number of newly installed stoves in households. Unit: Number		✓	✓	✓
				✓	✗	✓

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28	Number institutional stoves installed by MVP.	Number of newly installed stoves in institutions. Unit: Number		✓	✓	✓	✓	✗	✓
29	Public institutions with connections to electricity source; grid or off grid.	Number of clinics, schools and community centers with newly installed electricity connections. Unit: Number	Clinics	✓	✓	✓	✓	✗	✓
			Schools	✓	✓	✓	✓	✓	✓
			Community centers	✓	✓	✓	✓	✓	✓
30	Number of homes in the last quarter served by electricity service providers facilitated by the MVP.	Households with electricity. Unit: Number		✓	✓	✓	✓	✓	✓
31	Number of new high-wattage (0.5 kW) electricity sources in the entire cluster facilitated by the MVP.	New electricity sources in cluster. Unit: Number		✓	✓	✓	✓	✗	✓
32	Number of mechanical power installations in the cluster providing agro-processing services facilitated by the MVP.	Agro-processing services include milling, grinding services, other. Unit: Number		✓	✓	✓	Since the target for this indicator is "0" it appears not to be relevant to the report.	✗	✓
33	Investment in roads (\$US/in-kind)--MVP, Government, Partners) facilitated by the MVP.	Monetary investment in road related projects. Unit: Currency to be specified		✓	✓	✓	✓	✗	✓
34	Kilometers of roads built/upgraded to provide all-weather access within the cluster facilitated by the MVP.	Length of newly upgraded/maintained/rehabilitated road. Unit: Kilometers		✓	✓	✓	✓	✗	✓
35	Number of medical patients who used the emergency transportation system set up by the MVP..	Number of patients using the emergency transportation center. Unit: Number		✓	✓	✓	✓	✗	✓
36	Number of days community-managed vehicles facilitated by MVP that were out of service.	Number of days during which vehicles were not working. Unit: Number		✓	✓	✓	Since the target for this indicator is "0" it appears not to be relevant to the report.	✗	✓
37	Number of hours of locally produced content on radio facilitated by the MVP.	Radio hours with locally produced content Unit: Number of hours		✓	✓	✓	Since the target for this indicator is "0" it appears not to be relevant to the report.	✗	If the project is not working on community radio this should be removed from the list of indicators.

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38	Average ISP business revenue generated, as facilitated by MVP.	Revenue generated by ISP businesses. Unit: Local currency to be specified	✓	✓	✓	Since the target for this indicator is "0" it appears not to be relevant to the report.	✗	✓
39	Number of ICT service providers trained by the MVP.	Number of ICT service providers. Unit: Number	✓	✓	✓	Since the target for this indicator is "0" it appears not to be relevant to the report.	✗	✓
40	Number of medical patients referred using the community wide emergency communication system.	Number of patients. Unit: Number	✓	✓	✓	Since the target for this indicator is "0" it appears not to be relevant to the report.	✗	✓
41	Number of seedlings/seeds distributed by project by purpose.	Purposes include: - Seedlings for Integrated Soil and Fertility Management - Soil erosion control - Woodlot establishment - Others Unit: Number	This indicator is defined as providing data by purpose however this is not reflected in the measurement level.	✓	✓	✓	✗	✓
42	Number of tree seedlings raised in nurseries.	Number of tree seedlings in nurseries. Unit: Number	✓	✓	✓	✓	✗	Consider added an indicator measuring the number of seedlings lost.
43	Type of tree seedlings raised in nurseries.	Types of tree seedlings Unit: Types of seedlings	✓	✓	✓	✓	✗	✓
44	Number of farmers and extension agents trained in conservation practices.	Includes grazing control, managing degraded areas and managing agricultural areas. Unit: Number	✓	Unclear if the number trained is equal to the number of participants or if "trained" is measured by competencies of the farmer following the training.	✓	✓	✗	✓
45	Numbers of farmers and extension agents trained in seed collection, nursery management and tree management.	Number of farmers being trained. Unit: Number	✓	✓	✓	✓	✗	✓



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46	Number of awareness creation activities for natural resource management by the MVP.	Training in natural resource management includes natural habitats, biodiversity, natural resource management and protection of biological corridors. Unit: Number of activities		✓	✓	✓	✓	x	✓
47	Number of gulley erosion control structures facilitated by the MVP.	Number of gulley structures put up. Unit: Number		✓	✓	✓	✓	x	✓
48	Areal coverage of gulley erosion control structures facilitated by the MVP.	Area serviced by gulley erosion control structures. Unit: Hectares		✓	✓	✓	✓	x	✓
49	Number of water storage facilities set up by the MVP.	Rainwater storage/harvesting structures/practices and micro dams. Unit: Number		✓	✓	✓	✓	x	✓
50	New area designated enclosed for natural resource management facilitated by the MVP.	Enclosure areas, grazing areas, woodlands with improved management. Unit: Hectares		✓	✓	✓	✓	x	✓
51	Number of environment-related visits by extension workers.	Visits by extension workers for capacity building, awareness, information gathering and information dissemination. Unit: Number of visits/trips		Unclear what is being "visited" by the agriculture extension worker.	✓	✓	✓	x	✓
52	Number of malaria cases treated.	Number of patients receiving malaria treatment. Unit: Number	Males Females	✓	✓	✓	✓	x	✓
53	Number of people dewormed.	People getting deworming treatment or medicine. Unit: Number	Males Females	✓	✓	✓	✓	x	✓
54	Number of pregnant women tested for HIV.	Pregnant women that tested for HIV. Unit: Number		Is this indicator measured for testing done within the cluster in general or specifically by the MVP?	✓	✓	Since the target for this indicator is "0" it appears not to be relevant to the report.	x	✓
55	Number of all people tested for HIV.	Total number of all people that were tested for HIV. Unit: Number	Males Females	✓	✓	✓	✓	x	✓
56	Number of people tested for TB.	Total number of people that were tested for TB. Unit: Number	Males Females	Is this indicator measured for	✓	✓	✓	x	✓

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				testing done within the cluster in general or specifica lly by the MVP?					
57	Number of health facilities that are functional 24 hours a day.	Health facilities that can provide services at any hour. Unit: Number		✓	✓	✓	✓	✗	✓
58	Number of trained health professionals currently providing services.	Nurses, doctors, lab technicians, other. Unit: Number		✓	✓	✓	✓	✗	✓
59	Number of community health workers hired and in post.	Number of community health workers. Unit: Number	Males  Females	✓	✓	✓	✓	✗	✓
60	Number of different households visited by community health workers.	Number of households visited by CHWs. Unit: Number		✓	✓	✓	✓	✗	✓
61	Number of health facilities constructed/renovated.	Health facilities constructed or renovated. Unit: Number		✓	✓	✓	✓	✗	✓
62	Number of health facilities that have functioning latrines and water sources.	Health facilities with sanitation services. Unit: Number		✓	✓	✓	✓	✗	The definition and description seem to be flipped.
63	Number of health facilities with primary and back-up energy sources currently in proper working condition.	Health facilities that are fully backed up with energy sources. Unit: Number		✓	✓	✓	✓	✗	The definition and description do not clearly match and it is unclear if this indicator is measuring backup energy sources or access to electricity.
64	Total number of consultations at cluster health facilities in last quarter Within cluster Outside cluster	Total number of consultations. Unit: Number		✓	Measurement level does not reflect the indicator description (which includes both in cluster and outside cluster).	✓	Consider removing "within cluster and outside cluster" in the indicator description.	✗	✓
65	Nearby referral hospitals currently providing surgeries.	Hospitals that provide surgical procedures. Unit: Number		✓	✓	✓	✓	✗	✓
66	Number of deaths.	Number of deaths due to any cause. Unit: Number	Boys under 5  Girls under 5  Boys (5-15)  Girls (5-15)  Males (16-24)  Females (16-24)  Males (25-49)	✓	✓	✓	✓	✗	✓

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			Females (25-49)						
			Males (more than 50)						
			Females (more than 50)						
67	Number of maternal deaths.	Maternal death is defined by the WHO as the death of a woman who is pregnant, or within 42 days of termination of pregnancy, from any cause related to or aggravated by the pregnancy, or its management but not from accidental or incidental causes. Unit: Percentage		✓		✓	✓	✗	✓
68	Number of total births in the cluster.	Births in the cluster. Unit: Number	✓	✓	✓	✓	✓	✗	✓
69	Number of deliveries attended by a skilled birth attendant in the cluster in last quarter.	Babies delivered with skilled birth attendants. Unit: Number	✓	✓	✓	✓	✓	✓	✓
70	Number of educational health sessions facilitated by the MVP, provided to community members.	Number of sessions organized for creating awareness about health related issues for community members. Unit: Number	✓	✓	✓	✓	✓	✗	✓
71	Number of facilities with functioning basic essential obstetric care currently providing services.	1. Parenteral (intravenous or by injection) antibiotics, 2. Parenteral oxytocic drugs, 3. Parenteral anticonvulsants, 4. Manual removal of placenta, 5. Removal of retained products, 6. Assisted vaginal delivery (vacuum extraction, forceps delivery) Number of health facilities with basic (all of items 1-6) obstetric care. Unit: Number	✓	✓	✓	✓	✓	✗	✓
72	Total number of mothers attending Antenatal Care (ANC).	Total number attending ANC sessions. Unit: Number	✓	✓	✓	✓	✓	✗	✓
73	Total number of new Antenatal Care visits.	Total number who attended ANC sessions, who had not previously. Unit: Number	✓	✓	✓	✓	✓	✗	✓

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74	Number of family planning commodities dispensed; by commodity.	Number of following commodities dispensed / procedures done: 1. Sterilization 2. IUD 3. Pill 4. Injectable/insertable 5. Male or female condom (number of boxes if number given out not possible) 6. Other Unit: Number		✓					
			Format measurement level to reflect the definition.		✓	✓	✗	✓	
75	Number of children immunized for measles.	Number of children immunized for measles in the last quarter. Unit: Number		✓		✓	✓	✗	✓
76	Number of children ages 6 months to five years receiving vitamin A supplementation.	Number of children ages 6 months to five years receiving Vitamin A supplements. Unit: Number		✓		✓	✓	✗	✓
77	Number of pregnant women receiving iron/folic acid supplementation.	Number of pregnant women receiving iron/folic acid supplements for 6 months prenatally. Unit: Number		✓		✓	✓	✗	✓
78	Number of MVP staff trained on gender sensitivity.	Number of staff trained on gender equality, opportunity, gender-based violence, other.		✓	✓	✓	✓	✗	✓
79	Number of recipients of age appropriate sexual and reproductive health (SRH) education. These include awareness campaigns, school curricula, recipients of educational materials distributed at schools, clinics and community centers.	Individuals benefiting from access to education and training services in sexual and reproductive health. Unit: Number	Boys under 5 Girls under 5 Boys (5-15) Girls (5-15) Males (16-24) Females (16-24) Males (25-49) Females (25-49) Males (more than 50) Females (more than 50)	✓	✓	✓	✓	✗	✓
80	Number of participants in financial service schemes and type of service.	These services include: savings accounts, credit, loans, agricultural input vouchers, other. Unit: Number	Males (15-24) Females (15-24) Males (25-64) Females (25-64)	✓	✓	✓	✓	✗	✓

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			Males (more than 65)						
			Females (more than 65)						
81	Frequency of meetings for girls and women's groups.	Girls and women's groups are those that have a specified mandate/goal.		It is unclear if the term "frequency" in the indicator description refers to the number of meetings or frequency of meetings per quarter.	✓	✓	✓	✗	✓
82	Attendance rates for girls and women's groups.	Total number attending women's groups meetings. Unit: Number		✓	✓	✓	✓	✗	✓
83	Proportion of current institutions with single-sex improved sanitation facilities sufficient to meet needs for men and women.	Number of institutions with single-sex sanitation facilities for both genders. Unit: Number	Men	The description and definition are not consistent because one says proportion while the other says number.	✓	✓	✓	✗	✓
			Women						
84	Number of awareness/sensitization activities on sharing of household duties and other ways to reduce women's and girls' time burden in last quarter.	Time burden while collecting fuel and firewood, gardening, doing household chores, other.	Men	The description and definition are not consistent because one says number of awareness activities while the other says time burden.	✓	✓	✓	✓	✓
			Women						
85	Participation in gender sensitization activity, in last quarter:	Gender sensitization activities include activities focusing on reducing time burdens, GBV, early marriages and inequalities between men and women.	Boys (5-15)	✓	✓	✓	Since the target for this indicator is "0" at all measurement levels, it appears not to be relevant to the report.	✓	✓
			Girls (5-15)						
			Males (15-24)						
			Females (15-24)						
			Males (25-64)						
			Females (25-64)						
			Males (more than 65)						
			Females (more than 65)						

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86	Number of capacity development programs for households to jointly manage income from agricultural activities undertaken.	Number of training and awareness creation activities for households to manage agricultural income. Unit: Number		✓	✓	✓	Since the target for this indicator is "0" it appears not to be relevant to the report.	✗	✓
87	Number of sectoral plans and community action plans that integrated preferences and needs of women and marginalized groups.	Number of plans that included women's preferences and those of marginalized groups. Unit: Number		✓	✓	✓	✓	✗	✓
88	Number of men and women in MVP local committees, by committees:		Men	✓	✓	✓	✓	✗	✓
			Women	✓	✓	✓	✓	✗	✓
89	Voucher system developed in last quarter: Yes/no.	Voucher system for agricultural inputs developed Unit: Yes/no		✓	✓	✓	✓	✓	✓
90	Number of drip irrigation systems installed by MVP.	Number of drip irrigation systems installed. Unit: Number		✓	✓	✓	Since the target for this indicator is "0" it appears not to be relevant to the report.	✓	✓
91	Average number of households served by drip irrigation systems, per system.	Average number of households served by drip irrigation systems. Unit: Average number		✓	✓	✓	Since the target for this indicator is "0" it appears not to be relevant to the report.	✓	✓
92	Number of credit or other financing schemes for agricultural inputs established by the MVP.	Number of credit and financing schemes. Unit: Number		✓	✓	✓	✓	✓	✓
93	Number of people using credit or financing schemes for agriculture/agricultural products established by the MVP.	Number of people using agricultural credit or financing schemes. Unit: Number		✓	✓	✓	✓	✓	✓
94	Number of institutions offering financial services for agriculture in the community	Number of institutions offering financial services for agriculture. Unit: Number		✓	✓	✓	✓	✓	✓
95	Number of food insecure households, having one or less meals a day, identified by the MVP.	Total number of households getting less than one meal for any member per day. Unit: Number		✓	How is this data collected exactly and how is the question formulated.	✓	✓	✗	✓
96	Number of agreements made with active restocking programs by the MVP.	Number of MOUs made with active restocking programs. Unit: Number		✓	✓	✓	✓	✗	✓

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97	Number of high-value agricultural commodities introduced and demonstrated by the MVP.	Number of different high-value agricultural commodities introduced and demonstrated. Unit: Number	✓	✓	✓	✓	x	✓
98	Number of information packages on market opportunities and marketing arrangements for value adding enterprises made available to men and women.	Number of information packages. Unit: Number	✓	✓	✓	✓	x	✓
99	Number of small-scale processing, post-harvest handling and value-added services promoted and developed by the MVP.	Number of small-scale processing, post-harvest handling and value added services promoted and developed. Unit: Number	✓	✓	✓	✓	x	✓
100	Number of buyer and processor visits to sites facilitated by the project.	Number of buyer and processor visits to sites facilitated by the project. Unit: Number	✓	✓	✓	✓	x	✓
101	Number of farmers selling food to local school feeding programs.	Number of farmers selling food to local school feeding programs. Unit: Number	✓	✓	✓	✓	x	✓
102	Number of transportation options developed to link with markets, facilitated by the MVP.	Number of vehicles provided and public routes serviced, to link with markets. Unit: Number	✓	✓	✓	✓	x	✓
103	Number of improved market trading centers in the cluster, facilitated by the MVP.	Number of improved market trading centers with better communication, infrastructure and information facilities. Unit: Number	✓	✓	✓	✓	x	✓
104	Number of community-based organizations trained on production business marketing and managerial skills for high-value commodities.	Number of community-based organizations trained on developing businesses related to high value commodities. Unit: Number	✓	✓	✓	✓	x	✓
105	Number of agro-dealers trained on providing improved inputs for agriculture.	Number of agro-dealers trained on providing improved inputs for agriculture. Unit: Number	✓	✓	✓	✓	x	✓

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106	Number of farmers and extension agents trained on improved agricultural practices including agricultural risk reduction, food storage, type and production of nutritious crops.	Number of farmers and extension agents trained on improved agricultural practices including agricultural risk reduction, food storage, type and production of nutritious crops. Unit: Number		✓	✓	✓	✓	✗	✓	
107	Number of farmers trained on financial management, production, business marketing and managerial skills for high-value commodities.	Number of farmers trained on financial management, production, business marketing and managerial skills for high-value commodities. Unit: Number		✓	✓	✓	✓	✗	✓	
108	Number of water points constructed, protected and rehabilitated by the project.	Number of water points constructed, protected and rehabilitated by the project. Unit: Number	For households							
			For schools							
			For clinics	✓	✓	✓	✓	✗	✓	
			Other public (Rehabilitation)							
109	Total number of people served by each newly constructed, protected and rehabilitated water point.	Total number of people served by each newly constructed, protected and rehabilitated water point, over the last quarter. Unit: Number	Water point 1							
			Water point 2							
			Water point 3	✓	✓	✓	✓	✗	✓	
			Water point 4							
			Water point 5							
110	Number and status of Requests for Proposals for water supply and sanitation projects submitted to the UNDP, where relevant.	Number and status of Requests for Proposals for water supply and sanitation projects submitted to the UNDP, where relevant. Unit: Number		✓	It may be difficult to include status in this indicator and is unclear how this would be measured.	✓	✓	✗	✓	
111	Number of agreements/MOUs with broader (e.g., municipal) water systems facilitated by the MVP.	Number of agreements/MOUs with broader (e.g., municipal) water systems facilitated by the MVP. Unit: Number		✓	✓	✓	✓	✗	✓	
112	Number of community capacity development activities in water supply management and maintenance.	Training and awareness creation activities on pump maintenance, water point hygiene, financial management training of public tap managers.		✓	✓	✓	✓	✗	✓	



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113	Participation rates in community development activities for water supply management and maintenance.	Participation in activities for water supply management and maintenance. Unit: Percentage		✓	✓	✓	✓	x	✓
114	Number of days that protected springs, hand pumps and public taps were non-functional.	Number of days that improved water sources were non-functional. Unit: Number	Water point 1						
			Water point 2	✓	✓	✓	✓	x	✓
			Water point 3						
			Water point 4						
115	Number of water points tested for water quality parameters.	Number of water points tested for water quality parameters (site-specific parameters as defined by the Water Quality sampling protocol for each cluster). Unit: Number		✓	✓	✓	✓	x	✓
116	Number of improved sanitation facilities constructed or rehabilitated.	Number of improved sanitation facilities constructed or rehabilitated. Unit: Number	For households	✓	✓	✓	✓	x	✓
			For schools						
			For clinics						
			Other public						
117	Number of hygiene education programs conducted in schools.	Number of hygiene education programs conducted in schools. Unit: Number		✓	✓	✓	✓	x	✓
118	Number of capacity building activities for child caregivers and food preparers, in appropriate hand washing and hygienic behaviors undertaken by project.	Number of capacity building activities for child caregivers and food preparers, in appropriate hand washing and hygienic behaviors undertaken. Unit: Number	For male youth (15 - 24)						
			For female youth (15 - 24)						
			For adult male (25 - 64)						
			For adult female (25 - 64)	✓	✓	✓	✓	x	✓
			For girls (5 - 15)						
			For boys (5 - 15)						
			For elderly females (more than 65)						
			For elderly males (more than 65)						

**APPENDIX 3: AGRICULTURE BUDGET ANALYSIS**

BUDGET ANALYSIS FOR AGRICULTURE

Objective 1: Eliminate Hunger and Malnutrition	Indicators	Total Budget allocated	Proportion of Total Budget	TOTAL %	Rank in funding Priority
1. Increased access to agro-inputs (seeds, fertilizers, seedlings, chemicals, etc.)	Voucher system developed		0,00%	41,76%	1
	Number of credit or other financing schemes for agricultural inputs established by the MVP	13.280	2,76%		
	Number of people using credit or financing schemes for agriculture/agricultural products established by the MVP	183.905	38,26%		
	Number of institutions offering financial / input support services for agriculture in the community	0	0,00%		
	1. Number of agro-dealers trained on providing improved inputs for agriculture. 2. Number of agro-dealers selling improved seeds and fertilizers to farmers 3. Number and % of farming households, disaggregated by gender of HH head, procuring/receiving improved seeds and fertilizers from the private sector 4. Number and % of farmers procuring inputs using vouchers, disaggregated by gender of HH head 5. Quantity and price of improved seeds and fertilizers purchased from the private sector.	3.500	0,73%		
2. Increased agricultural productivity and food production	Number of food insecure households, having one or less meals a day, identified by the MVP	4.100	0,85%	4,52%	5

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		12.800	2,66%		
		800	0,17%		
		3.208	0,67%		
	Quantity of pay-back collected from farmers	800	0,17%		
3. Improved agricultural extension services to farmers throughout the cluster	Number of information packages on market opportunities and marketing arrangements for value adding enterprises made available to men and women	1.000	0,21%	4,12%	6
		0	0,00%		
		800	0,17%		
		0	0,00%		
		1.200	0,25%		
		16.800	3,50%		
4. Improved agricultural production risk management	Number of farmers and extension agents trained on improved agricultural risk reduction techniques.	1.000	0,21%	1,10%	7
	Number and type of disease resitant crops introduced	2.000	0,42%		
	Number of livestock vaccinated against major diseases	1.300	0,27%		
	Number of farmers using meteorological forecasting information	1.000	0,21%		
5. Increased capacity of farmers and community institutions to manage and benefit from agricultural activities	Number of capacity development activities for extension agents, disaggregated by type of activity and gender of participants	300	0,06%	0,37%	10
	Number of meetings or discussions held for women farmers and number of attendees	1.000	0,21%		
	Number of activities to promote participation of women and vulnerable groups in agriculture planning	500	0,10%		

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6. Safety nets are improved for anticipating and coping with crop failures, post-harvest and livestock losses.	Number of farmers and extension agents trained on food storage techniques	300	0,06%	26,39%	2
	Number of storage facilities at the community and household level	113.263	23,57%		
	Number of community-based organizations trained on risk management strategies	700	0,15%		
	Enhanced access to drought insurance scheme	550	0,11%		
	Increased access to livestock restocking schemes	12.000	2,50%		
	Number of agreements made with active restocking programs by the MVP	0	0,00%		
7. Agricultural activities and incomes increased and diversified	Number of high-value agricultural commodities introduced and demonstrated by the MVP	3.500	0,73%	12,95%	3
		17.000	3,54%		
		3.363	0,70%		
		8.000	1,66%		
	Number of irrigation systems installed by MVP.	23.600	4,91%		
	Average number of households served by irrigation systems	2.800	0,58%		
		0	0,00%		
	Rice cultivation promoted and demonstrated	4.000	0,83%		
	Number of community-based organizations trained on production business marketing and managerial skills for high-value commodities	0	0,00%		
8. Improved Nutritional status of pregnant women, nursing mothers, and infants under two	TOT organised for MVP field staff	2.000	0,42%	0,42%	9
9. Timely and efficient delivery of programs and interventions		27.000	5,62%	7,54%	4
		9.250	1,92%		

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10. Proper documentation processes followed	Quarterly and annual reports properly filed	0	0,00%	0,00%	11
11. Monitoring and Evaluation of Project activities	Efficient monitoring system in place	4.000	0,83%	0,83%	8
Objective 1: Poverty reduction, hunger and Agriculture		480.619			

### **APPENDIX # 4 : FOR GLOBAL BEST PRACTICES**

The majority of the methods used in (P)M&E are fairly general and show little innovation or the use of conventional qualitative and quantitative methods. For example, individual interviews, group interviews, discussions, questionnaires. However, reflections on (P)M&E methodologies used in Latin America and elsewhere illustrate the use of narratives (Irrigation project in Ecuador and housing project in Argentina, 1989), problem solving exercise (Peru 1997), SARAR methodology and self-evaluation (Bolivia and Ecuador 1987) and the use of participatory and reflective analytical mapping (Colombia 2000) and "asamblea" for M&E (Colombia 1998 and 2000). These PRA-type techniques are detailed in annex##(#2 here)## for better understanding of their innovative characteristics. Drawn from these case studies, a list of (P)M&E tools is provided below and detailed procedures of those methods that exhibit innovative characteristics are provided in the annex. Annex##(#3 here)##.

Focus Group Discussions	Pair wise Ranking	Direct Observation	Key Informant	Sociogram
Matrix of Basic Needs and Satisfiers	Minimum basic Needs Assessment	Seasonal Calendars	Village Resources Maps	Role Play

#### **1. PM&E System for Local Development Project in Tanzania**

United Nations Capital Development Fund (UNCDF) has launched several initiatives to improve project quality and stakeholder participation in UNCDF's program cycle. One of these initiatives has focused on improving project evaluation and introducing participatory evaluation systems for selected UNCDF field projects. Social Impact conducted a two-day training for HQ staff to provide an overview of PME, and to map out a step-by-step approach for introducing PM&E systems to UNCDF projects. As part of the training UNCDF outlined next steps for pilot testing PM&E systems and introducing operational guidelines for integrating PME into its project cycle.

In Tanzania SI is working with UNCDF to design and implement a PM&E system for a local development fund project in Mwanza District. The SI facilitator met with a range of evaluation stakeholders at the village level up through district authorities to determine their information needs regarding the project and to assess monitoring and evaluation activities already in place at the local level. Roughly 35 reports were being generated by the District for central authorities with a good deal of redundancy. In a two day workshop the facilitator worked with local stakeholders to identify and prioritize practical indicators for the project. A local artist was contracted to animate how to use PRA methods, many of which were already in use at the district level, to support the project PM&E system. A simple operational guide was developed, training is being conducted for the PM&E team and a medium-term plan for the roll out of the PM&E system is being finalized. The project management team, local and District authorities and UNCDF HQ are all supportive of the effort at this stage.

Source: Social Impact

## **2. Performance Improvement Planning in Sri Lanka**

The British foreign aid program (DFID) recently conducted a mid-term review of its Relief Project for persons displaced by Sri Lanka's civil war. The approach that was used was called Performance Improvement Planning (PIP)--a participatory review method based on the Logical Framework Approach. A four-day workshop was held to help 30 participants from local and international NGOs and DFID in assessing the project and developing action plans to improve its performance.

Using a wall-sized visual depiction of the LogFrame, workshop participants first analyzed each of the project's main elements: Goal, Purpose, Outputs and Assumptions. Second, they clarified project objectives and measurable indicators. Some objectives and indicators were no longer relevant and were removed from the project design. Third, in group discussions participants identified "performance gaps" that were preventing the project from reaching planned levels of performance. Fourth, they developed strategies for improving project performance. Fifth, they developed action plans, with clear roles and responsibilities, to support each of the strategies.

The PIP process succeeded in refocusing project objectives, building partnerships among the implementing agencies, and leading partners to implement action plans to get the project back on track. The PIP techniques were adopted by the NGOs and, within a few months, PIP was adapted into local languages and applied in the local communities. Communities used the process to improve grassroots level project and non-project activities.

Source: Social Impact

## **3. Participatory Evaluation in Rose Place, St. Vincent and the Grenadines**

A community sanitation project in Rose Place, St. Vincent and the Grenadines used photography and simple written commentary from community members to monitor and evaluate project progress. Throughout the project photos have been taken at different stages. A cheap scrap book has been made into a photo album to tell the story of the project so far in chronological order. Photos have been stuck in by community members. Children and adults have written their comments to explain what is happening in Rose Place.

In many cases there are photos which can be compared--before and after photos. Some photos show the problem. Others show the solution. The visual difference has a strong impact and generates a lot of comments.

Newspaper articles, radio announcement (which community members helped write), as well as their goals and feedback have also gone into the book, giving a very good overview of everything that has been taking place. It is something that has generated a lot of interest because it is attractive, tangible and very immediate and accessible--and its the community's!

Source: DFID, Participatory Monitoring and Evaluation Guidelines, Dissemination Note No.1, SDD 1997

#### **4. Participatory Planning and M&E Systems for World Bank Supported Projects in Water Supply and Sanitation: Nepal and India**

Over the past six years, IDA/IBRD has worked with HMG Nepal and the State Government of Uttar Pradesh, India to develop a new generation of community-based water supply and sanitation programmes that rely heavily on the use of participatory methods for planning and M&E.

In the context of a pilot project in Nepal and a current National Rural Water Supply and Sanitation Programme (NRWSSP) begun in 1993, IDA tested methods and approaches for large-scale participatory programmes. While subproject water and sanitation schemes were designed and implemented by communities in a participatory manner, it was also decided that as “project managers” communities would also have to carryout their own situational analysis, planning, execution, O&M, and monitoring and evaluation. SARAR methods along with PRA methods were used systematically and to develop community planning and monitoring systems. These were combined with conventional M&E, and the system comprised performance, process, impact and strategic, or policy reform monitoring.

As part of community planning and monitoring, a set of 24 participatory tools were specifically developed and adapted to the needs of users in Nepal. These were tested over time, first in the pilot with about 24 NGOs in 113 communities spread across 12 Districts. One M&E technique was the PRA tool, Healthy Homes. This proved highly effective in village levels, where women gained status as they took charge of choosing indicators and monitoring personal hygiene, and domestic and environmental hygiene and sanitation practices in the households and public areas of their communities. This also enabled them to participate more actively in water and sanitation committees. The approach has now expanded in over 220 additional communities through several cycles and should reach 900 communities by the end of the NRWSSP.

In Uttar Pradesh India, the approach was replicated and adapted to the specific needs of the Uttar Pradesh Rural Water Supply and Environmental Sanitation Project. (UP-RWS-ES Project) This Project has been notably successful in systematic application of SARAR and PRA methods by NGOs in Project field areas. Participatory planning and M&E tools have been utilized as the Project expands its work in the UP Hills and Bundelkhand areas, attempting to reach 1000 communities with RWS-ES Services. Of particular note has been the use of public spaces to document the results of the participatory tools. Maps and project information are publicly displayed in a graphic manner on schools and clinics. The methods were found to be powerful animators of local will to design, build and monitor these community facilities. The initial success of the Project has led national authorities in India to call for replication of the approach in other states.

The two projects, and attempts to adapt the approach to Bangladesh, have demonstrated that participatory M&E can be part of large scale programmes and function effectively if supported and nurtured. There is a learning curve to develop capacities of support organizations such as the NGOs involved and to adapt the specific tools and methods needed for each project. But the effort has proven promising.

Source: Jacob Pfohl, Consultant

#2

#### **Box 2: The “Asamblea” Approach from Colombia (ACIN)**

This system for monitoring and evaluation works through a body known as the Assembly which is a large gathering of men and women, including the authorities. The Assembly makes important decisions and decides upon goals and indicators for measuring their achievement within the context of local development. Information is collected from and shared with the communities through their Assembly representatives, and their analysis of their own situation is fed back into the Assembly. Evaluation workshops are held for the design of indicators, design of surveys and the production of maps and models.

#### Box 4: Grassroots Development Framework, or “Cone”

The Grassroots Development Framework consists of a framework of indicators taking into account impacts at the individual, community and regional levels, and addressing impacts that are tangible, and those that are intangible. Indicators and methods for measurement are described in some detail for InterAmerican Foundation Grantees to evaluate their projects and programmes in such a manner that results can be regionally compared.

**Table 1. Methods Detailed in Literature on Methodology**

Author	Methodology/Tools
Abbot & Guijt, 1998	Visualisation techniques of PRA; oral testimony; adapting methods of ecological assessment
Abya Yala Fund, 1999	Questionnaire
Andrade <i>et al.</i> , 1987	Individual and group interviews; observation; case studies
Ashby, 1990	Individual and group interviews; ranking; pairwise comparison; group discussion
Blauert & Quintanar, 1999	Visualisation techniques of PRA; oral history; Grassroots Development Framework (the Cone); Social Audit Approach; Organisational Ethnography
CIAT, 1993	Interviews with open ended questions.
Davis-Case, 1992	23 tools – PRA type tools
Does & Arce, 1992	Development Narratives
Espinosa, 2000	Village assembly, indicators, questionnaires and adaptation of the Cone
Fanego, 1987	Narrative and reflection
Garaycochea, 1989	Structured interviews, with illustrations. Problem solving exercises.
Gohl & Germann, 1993	Joint reflection workshop; periodical reflection; indicators; observation; group analysis
Guerrero <i>et al.</i> 1993	Preference ranking
Guijt, 1988	20 participatory monitoring methods, incl. Diaries, photographs, maps, matrix, calendars, etc.
Guilfus, no date	80 tools including PRA tools, dialogue and observation
Hernández <i>et al.</i> , 1994	Observation, individual interviews, focus groups, affinity diagram, fish-skeleton diagram, drama, drawing
IUCN, 1998	Participatory and Reflective Analytical Mapping/PRAM; Systematic Analysis of Experience/SANE (narrative/discussion); Log Frame Analysis using ZOPP
Joseph, no date	Direct measurement, participant observation, role playing, case studies and surveys.

#3

(P)M&E TOOLS FOR GATHERING GENERAL INFORMATION ABOUT THE COMMUNITY



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Tool: Pair wise Ranking

Purpose: Pair wise Ranking is a tool that helps us to learn about the most important problems of different community members. It also allows for easy comparison of different people's priorities. Many people's priority problems are those related to the day-to-day struggle to meet basic needs, while others stem from hopes for the future. Some problems are related specifically to gender issues, such as women's lack of control over key resources or the gender-based division of labor. Pair wise Ranking highlights how the priority problems of women and men differ, youths and adults also differ and where they overlap. Similarly, the priority needs of members of different socio-economic groups are revealed. The results can be used to generate appropriate indicators to monitor and evaluate how a particular project in the community has helped solved the problems.

Process: Organize four separate focus groups: one of women (old and young) and one (old and young) of men. Make sure that a mix of socio-economic groups (as identified in the Social Map) is included in each. Ask the participants to think about their "problems", making reference to the key issues learnt from the PRA tools. In discussion among themselves, ask them to list the 6 problems (in any order) that are most important to them. Write the list of 6 problems on both the vertical and horizontal axis of the prepared blank Pair wise Ranking Matrix. Also write each of the 6 problems onto separate cards. Present a pair of cards (showing two different problems) to the group. Ask them to choose the more important one. Record their choice on the prepared matrix. Ask them also to explain the reasons for their choice. Repeat until all combinations of cards have been presented and decided upon. Looking at the completed Pair wise Ranking Matrix, count up the number of times each problem was selected and rank them. The three problems selected the highest number of times are the priority problems of the group. Organize a second set of focus groups — this time according to socio-economic group. Make sure that both women and men are in each. Repeat the exercise. Compare the learning's from the two sets of focus groups. Based on this process indicators for PM&E can be developed for each priority problem

Materials: Prepared blank Pair wise Ranking Matrix on flip chart paper, an easel or wall, masking tape, markers and A3 cards.

Tool: Direct Observation: There is nothing like seeing something first-hand. Observation is a key method for learning. During an RA, it is important to look carefully at the places, people, resources and conditions described by the participants. Direct observations help to support and cross-check the findings from other methods, and can reveal new details and raise new questions. For every observation made, remember to write down two things: (i) what was observed, and (ii) your interpretation of what it means. It is important to cross-check your interpretations with the findings from other methods and with other participants. The list of conditions that can be observed first-hand is endless. Observable indicators of poverty, for example, could include:

- \* variations in housing types (including walls, floors, roofing)
- \* variations in dress
- \* signs of under/malnutrition among children
- \* types, quantity and variety of food for sale in the market
- \* numbers and types of radios, TVs, bicycles, motorbikes and utensils
- \* age and proportion of girls in school
- \* distance to water and fuel sources.

Photographs could also be taken to document the observations.

(P)M&E TOOLS FOR ASSESING SATISFACTION OF BASIC NEEDS

Tool: Minimum Basic Needs Assessments (Use FGD) Another tool that could be used for this data need is to adapt one of the Minimum Basic Needs Assessment forms that are now being widely used by many organizations. This is just a checklist of what are considered as minimum needs which a household or the community must fulfill. This would be a simple survey that could be conducted in the community and since the forms are very simple, the members of the community can be trained to conduct this simple survey.

Tool: Seasonal Calendars: Seasonal Calendars are tools that help us to explore changes in livelihood systems taking place over the period of a year. They can be useful in counteracting time biases because they are used to find out what happens in different seasons. Otherwise there is a tendency to discuss only what is happening during the time the RA is taking place.

Purpose: Calendars can be used to study many things such as how much work people have at different times of year or how their incomes change in different periods. It can also be used to show the seasonality of other important aspects of livelihoods such as food and water availability.

Materials: Sticks, pebbles, leaves, dung or any other local materials may be used. Paper and markers also may be used.

Note: Additional issues for Seasonal Calendars may be added according to the needs and interests of the participants, such as poverty reduction fishing seasons, marketing opportunities, health problems and so on.

Example: Groups of women produced their own seasonal calendars during PRA exercises held in Akeyan Village, Egbeda Local Government of Oyo State, Nigeria. This example illustrates how Seasonal Calendars can be used to look at the linkages among several different patterns: rainfall, agriculture labor, other labor, food availability, etc. An expenditures calendar needs to be added here to evaluate poverty reduction.

(P)M&E TOOLS FOR ORGANIZATIONAL STRENGTHING AND BUILDING CAPACITIES

Tool: Trend Lines or Historical Maps

Purpose: Trend lines are tools that help us learn about changes in environmental, economic, social, institutional, demographic or political patterns. Trends can help us look at what is getting better and what is getting worse. A trend line is a simple graph depicting change over time.

Process: Trend lines can be compiled from existing data or created by people reporting their perceptions of what is happening. Participants can be asked to produce a trend line for each issue being considered in planning and M&E. If various trend lines are placed directly above one another it will be easier to facilitate discussions about interactions and linkages among the different trends.

Materials needed: Statistical reports, flipchart paper and markers.

(P)M&E TOOLS FOR ACCESS AND CONTROL OF RESOURCES

Tool: Resources Picture Cards

Purpose: The Resources Matrix helps us to learn about the gender-based use and control of resources within the household. Variation among the different socio-economic groups is included. Gender roles are a key aspect of how resources are managed and decisions made. Who in a household has access to resources such as land, livestock and food? Who makes decisions about the use of resources? Understanding the answers to these questions helps us to understand who is likely to lose and who is likely to gain because of a particular development activity. The Resources Matrix tool is particularly useful for facilitating frank

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discussions about a sensitive issue in a fun and non-threatening way. In a visually clear manner the resource-base of both women and men is shown, leading well to discussions about priorities and resource needs for development action plans.

Materials: Two sets of Resources Picture Cards, small stones to hold them in place if the exercise is carried out outdoors, or masking tape if using a wall.

Notes: This tool quickly generates a lot of discussion as people try to decide where to place a resource picture, whether under the drawing for women, men or both. Specify that only the resources used or controlled 50-50% by women and men are put under the drawing of both, otherwise they should put the pictures under either the woman or the man to indicate who has majority use or control. In their discussions the participants will reach consensus about what each picture card stands for. For example, they may decide that the picture of baskets represents baskets for sale or baskets of stored grain. Pictures of resources that are not relevant should be tossed out. The blank cards should be used to add relevant resources not already shown. There will be some variation among the different socio-economic groups and these should be noted.

Example: In the Kudu Village of Niger State in Nigeria livestock production is the primary source of livelihood. Despite the myth that women have little to do with cattle production, the reality revealed during PRA exercises is that women are responsible for calving, feeding and milking, and that women and men together are responsible for grazing, castration, deworming and vaccinations. In fact, the only livestock production activity women are truly excluded from is that of marketing. Nevertheless, the exercise with the Resource Picture Cards revealed that while men and women share access to the large stock and small stock animals, only men have control and decision-making power concerning the animals. In fact, women have no control over any resources whatsoever.

Tool: Village Resources Maps

Purpose: The Village Resources Map is a tool that helps us to learn about a community and its resource-base. The primary concern is not with cartographic precision, but with getting useful information about local perceptions of resources. Participants should determine the contents of the map focusing on what is important to them. Maps may include:

- \* infrastructure (roads, houses, buildings)
- \* water sites and sources
- \* agricultural lands (crop varieties and location)
- \* agro-ecological zones (soils, slopes, elevations)
- \* forest lands
- \* grazing areas
- \* shops; markets
- \* health clinics, schools and religious facilities
- \* special use places (bus stops, cemeteries, shrines)

Process: Plan and organize a meeting for the entire community. Make sure that it is scheduled for a time when both women and men can attend and that all socio-economic groups have been invited. The Village Resources Map is a good tool to begin with because it is an easy exercise that initiates dialogue among the community members and RA team members. A large open space should be found and the ground cleared. It is easiest to start by placing a rock or leaf to represent a central and important landmark. Participants are then asked to draw other things on the maps that are important in the village. Participants should not be interrupted unless they stop drawing, in which case questions can be asked such as whether there is anything else of importance that should be added. When the map is completed, facilitators should ask the participants to describe it and to discuss the features represented. Ask questions about anything that is unclear. Finally, the facilitator may want to ask participants to indicate some things they would like to see in their village that are not currently on the map -- in other words to draw a picture of what they would like the future to look like. This allows for some preliminary planning ideas and encourages people to begin contributing their thoughts at an early stage in the participatory process. Similarly indicators to monitor and evaluate these future outlooks can be developed.

Materials: Sticks, pebbles, leaves, sawdust, flour, dung or any other local material. Flip chart paper and markers may be used.

Note: All RA team members need to observe the mapping exercise because it provides an overall orientation to the spatial features of the community and its key resources and it is the first RA exercise and therefore the first opportunity for everyone to join the participatory process. Be sure that the final map includes direction indicators (North, South, East, West) and an outline of the village borders.

Tool: Role Play

Purpose: The tool can be used to access the community and to collect data from the community. Here the purpose is to use the tool to gain the much needed access into a community before the commencement of any study. This is an addition to other methods available. Also this is a tool that helps the community express or relate their experience in order to collect additional information. Success stories on livelihood initiatives are demonstrated by selected key actors involved. The idea being that as they play they will reveal various problems, issues, encountered in their development activities.

Process: Identify success stories and members involved. Given the possibility of large actors, there may be a need to select. Let the group select the actors they wish should participate in the role play. The actors would meet to cast their play. This would involve discussions on the scope of the role play and the time available.

Materials needed: Volunteers from the successful initiatives group; chairs, tables, some writing materials (where needed); etc.

### (P)M&E TOOLS FOR ASSESSMENT OF EXISTENT AND EMERGING SOCIAL INTERACTIONS, NETWORKS AND GROUPS

Tool: The Sociogram.

Purpose: Sociogram is a figure derived from sociometric technique. It is useful in assessing aspects of non-cognitive domains. In practical terms, sociometric techniques are methods of assessing social interaction/relationship in a group. The motive is to ascertain the extent to which individuals are acceptable or unacceptable to other members in the group in a given situation. This tool is equally useful to identify emerging groups within the community which might not have been directly involved in the planning and or implementation of project. This emerging group could have evolved, as it were, as a direct or indirect consequence of the success story.

Procedure: The simple procedure is to ask individual to nominate individual whom they will like to work with for a specific task. This is to identify those they will want to work with. Based on the information thus provided, we can then draw a two dimension table. With the table we can then draw a sociogram - a figure or maze showing the pattern of preference of individual to other individuals. Sociogram often shows the emergence of *stars* and *isolates*. Stars are those selected and the isolates are those who nobody and/or very few people want to associate with.

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### (P)M&E TOOLS FOR ESTABLISHING LINKAGES AND NETWORKS

Tool: Venn or Institutional Diagrams

Purpose: The Venn diagram of institutions is a tool that helps us understand who will be affected by proposed development activities. Stakeholders from within the community as well as outside have resources to invest in development activities. They will seek to invest those resources to minimize risk and maximize benefits. For this reason it is important to know who they are and where they stand before development plans are finalized and implemented. The Venn diagram of stakeholders can be used for any specific development issue, program, project or activity. It is necessary to specify which of these the focus on the analysis is. The analysis tool is useful in a variety of settings. It may be most useful to have groups at different levels complete the exercise, starting with a field level process. Persons from the macro, intermediate and field levels should be involved in each analysis. The Venn diagram of stakeholders is also useful in building network linkages. A stakeholder is anyone who or any group which has interest in or is affected by a development policy, program or activity. The extent of a stockholder's interest in an activity is determined by the size of the "stake" that she or he has in the activity. Stakeholders may be government, institutions, private sector groups, non-government organizations, community groups or individuals. Groups of stakeholders may have different stakes based on gender differences or differences based on other social or economic attributes.

Materials needed: Flip chart paper, markers, sticky paper for making circles and scissors. You may want to precut circles of various sizes.

### (P)M&E TOOLS FOR GENDER EQUITY

Tool: Gender-based Framework for Analysis

Purpose: To project potential differential impacts on women and men of policy options under consideration.

Procedure: For each policy option under consideration, complete the following checklist:

#### INTRA-HOUSEHOLD GENDER AUDIT: A CHECKLIST OF QUESTIONS FOR PROJECTING IMPACTS OF POLICIES ON INTRA-HOUSEHOLD DISTRIBUTION OF RESOURCES AND RESPONSIBILITIES

What are the goals of this intervention? Who decided upon them and who was consulted? Were women's voices and interests adequately represented in the formulation of goals?

Is the intervention directed at the household in general, or at women, or men specifically, or at both?

Is there adequate data on gendered intra-household differences in resources, responsibilities, and likely responses of men and women for the area where the intervention is targeted?

What are the assumptions embodied in the intervention about men's and women's resources and roles as producers, consumers, workers, household providers, or community-level change agents?

Are these assumptions supported or refuted by the data?

How does the intervention alter the distribution of resources (land, labour, credit, time, education, services and training, asset holdings, access to outside networks) between men and women in the household?

How does the intervention alter the mechanisms of control over resources between men and women within the household?

How does the intervention alter the sources, type, and regularity of income for men and women, and how does it affect who controls the income?

What are the projected implications of these changes for household food security, livelihood security and the welfare of other members of the household?

What are the implications of the intervention for women's time allocation between domestic tasks and outside work?

If the intervention aims at utilizing more of women's labor outside the household, what mechanisms have been envisaged for freeing some of her time from domestic responsibilities? Does the intervention simply result in greater total demands on women's time?

How do these intra-household changes alter the relations between the household and other intermediate-level institutions, such as community organizations, markets, state bureaucracies, etc.?

## **APPENDIX 5: Agricultural Case Study**

## Building Capacity for Monitoring & Evaluation: Agriculture Case Study



## Millennium Villages: Bonsaaso, Ghana

### PREPARED BY:

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**Millennium Villages Project Bonsaaso, Ghana  
Agricultural Case Study**

**Introduction:**

Millennium Villages Project (MVP) aims to provide 'proof of concept' of the Millennium Development Goals (MDGs). MVP integrates each of the eight MDG goals into a holistic, bottom-up approach. The eight MDGs are a set of quantifiable targets that act as a mechanism to lift millions of poor out of extreme poverty. Agriculture plays a key role in meeting the MDGs; as the majority of MDG's target group live in rural areas where agriculture as the key income-generating activity.

**Table 1: Links Between the Millennium Development Goals & Increased Crop Production<sup>33</sup>**

Millennium Development Goals	Effect of Agriculture Initiatives on MDGs
1. Eradicate extreme poverty and hunger	<ul style="list-style-type: none"><li>• Increase caloric consumption to combat nutritional deficiencies</li><li>• Increase wages</li></ul>
2. Achieve universal primary education	<ul style="list-style-type: none"><li>• Increase in wages frees time for children to attend school (vs. working in field)</li><li>• Provide food for school lunch programs</li></ul>
3. Promote gender equality and empower women	<ul style="list-style-type: none"><li>• Empowerment of women farmers</li><li>• Decrease the time burden of labor regarding household tasks.</li></ul>
4. Reduce child mortality	<ul style="list-style-type: none"><li>• Increases crop diversity, providing higher nutritional quality to reduce childhood diseases</li></ul>
5. Improve maternal health	<ul style="list-style-type: none"><li>• Increase crop diversity and nutritional quality</li><li>• Decrease time burden of domestic tasks</li></ul>
6. Combat HIV/AIDS, malaria and other diseases	<ul style="list-style-type: none"><li>• Improve diet quality</li><li>• Provide income for health-related expenses</li></ul>
7. Ensure environmental sustainability	<ul style="list-style-type: none"><li>• Minimize environmental degradation through types of inputs used (fertilizers, insecticides), resources used (water sources), and types of crops (decreasing erosion and soil run-off)</li></ul>
8. Develop a global partnership for development	<ul style="list-style-type: none"><li>• Increase agricultural trade, establish global partnership (increase development assistance)</li><li>• Invite international community</li></ul>

<sup>33</sup> Mark W. Rosegrant, Claudia Ringler, Todd Benson, et al. *Agriculture and Achieving The Millennium Development Goals*. The World Bank (Agriculture & Rural Development Department) 2006.

***Rationale for agriculture as case study:***

Agriculture is the cornerstone of the Bonsaaso village cluster's livelihood and culture; it plays an integral role in every aspect of a villager's daily lives. According to the agriculture sector coordinator, roughly 40 percent of Bonsaaso village cluster residents are farmers.<sup>34</sup> Before the inception of the project, most villagers depended exclusively on agricultural production and sales of cocoa and palm oil to purchase food, pay for household needs and to cover health and/or education expenses. Agriculture is therefore the foundation on which to base poverty alleviation in this community. Recognizing this importance, MVP's inaugural program involved strengthening various aspects of the agriculture sector, beginning in March, 2006. Parallel to the MVP agriculture initiatives, Ghana's national, regional and district level planning also focuses on agriculture as the key to increasing the standard of living, especially for those living in rural areas.

It is for these reasons that the SIPA team chose to conduct an in-depth case study specifically on the monitoring and evaluation initiatives occurring in the agriculture sector. The following analysis will outline the different layers of monitoring and evaluation (M&E) that are simultaneously, but independently, conducted by each of the project's various stakeholders: villagers, district, regional and national government, MVP Ghana staff members and Earth Institute staff. The case study will provide an overview of the organizational structure, the various stakeholders; PM&E at each stage of programming (planning, implementing, monitoring and evaluation) as well as key findings and recommendations.

***The Agriculture Sector: Roles and Responsibilities:***

The agriculture sector of MVP Ghana is comprised of nine core staff members five of whom have corresponding positions within the Ministry of Food and Agricultural District Development Unit, Amansie West. The MVP Ghana coordinator for agriculture and environment directs the planning, implementation and M&E of all project agriculture and environment initiatives. The coordinator interacts directly with Earth Institute staff, supervises Agriculture Extension Workers (AEWs) and acts as a liaison with district, regional and national Ministry of Food and Agriculture staff members. For the duration of the project, the Ministry of Food of Agriculture allocated six AEWs to conduct community outreach work in conjunction with MVP. The AEWs implement yearly goals from the central government to help farmers by improving agriculture technology, organizing demonstration plots and farmer forums as well as conducting farmer field schools. In addition to their district level responsibilities, AEWs also assist MVP with procurement of crops, distribution of inputs within the community and agricultural trainings. (Please refer to Table 5 in the Appendix for a complete list of staff members, their regional areas and their roles).

***Monitoring & Evaluation of Agriculture Activities: Project Stages***

***1.0 Planning:***

The planning stage of an effective PM&E system involves developing a comprehensive framework for monitoring and evaluation; providing guidance on how to develop a PM&E plan as well as criteria for selecting and planning evaluations.<sup>35</sup> A participatory process should be incorporated in decisions about addressing monitoring and evaluation, development of data collection instruments as well as analysis plans

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<sup>34</sup> As per interview conducted with Isaac Kankam-Boadu on January 11, 2008 at MVP office in Manso-Kwanta

<sup>35</sup> United Nations Development Programme (UNDP), 2002. *Handbook on Monitoring and Evaluating for Results*. United Nations Development Programme Evaluation Office, New York.

at this stage. This section highlights specific examples of participatory methods used during the planning stage of MVP programs, as well as key findings and recommendations.

### **1.1 Participatory M&E during planning stage:**

One of MVP's initial activities during the planning stage involved the collection of baseline data. Additionally, MVP successfully employed a participatory approach using activities such as wealth-ranking and formulation of community action plans (CAPs) through activities such as daily activity charts, seasonal calendars and the leaky pots. These activities were conducted in order to collect data regarding population, gender, socio-economic data, an assessment of community needs, as well as a way to generally expose villagers to the participatory framework. While the collection was extensive and complete, the subsequent data analysis and full integration of these approaches into programming, monitoring and evaluation has yet to occur. Both the CAPs and wealth ranking exercises, their use and effectiveness as well the findings for more complete incorporation into monitoring and evaluating processes will be explained below.

### **1.2 Wealth Ranking to Identify and Classification:**

Wealth ranking allows villagers to identify and analyze the different wealth groups in their community. It enables MVP to learn the socioeconomic stratification of project beneficiaries and their definition and indicators of wealth. Factors which constitute wealth include ownership of or use of rights to productive assets, life-style stage of the members of the household, the relationship of the productive unit to locally powerful people, availability of labor, indebtedness and so on. The wealth-ranking exercise is a straightforward and participatory approach that involves all villagers in research, planning and M&E, regardless of language and literacy barriers. Understanding how beneficiaries measure wealth is essential to the formation of strategies for poverty reduction. These exercises provide realistic indicators with which to measure poverty; address local conditions and identify target populations.<sup>36</sup>

Using this tool, villagers in approximately eighteen communities in the Bonsaaso village cluster generated criteria for wealth ranking. The results, categorized into number of bags of cocoa or maize and/or vegetables harvested, are almost exclusively related to the agriculture sector. As a result, three categories of wealth were defined for farmer household: rich, averagely rich and poor; though sometimes a fourth category of "core poor" was added. Here are two examples of wealth ranking criteria and farmer classification which show how each community defined numbers of bags of harvest appropriate to their own households:

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<sup>36</sup> See <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEV/0,,contentMDK:21233901~isCURL:Y~menuPK:3291499~pagePK:64168445~piPK:64168309~theSitePK:3177395,00.html>

**Table 2: Wealth-ranking per community as defined by bags of harvest<sup>37</sup>**

Community	Rich	Averagely Rich	Poor	Core Poor
<b>Manukrom</b>	30 bags of rice	10 bags of rice		
	30 bags of maize	5 bags of maize		
	30 bags of cocoa	10 bags of cocoa	½ bag of cocoa	
		2 acres of citrus farm		
		2 bags of vegetables	2 bags of vegetables	
<b>Dunwura</b>	20-25 bags of cocoa	10-15 bags of cocoa	5-7 bags of cocoa	½ bag cocoa
	15 bags of maize	8 bags of maize	4 bags of maize	1 bag of maize
	50 bags of cassava	15-20 bags of cassava	8-10 bags of cassava	5-7 bags cassava
	6 baskets of veg	4 baskets of veg	2 baskets of veg	½ basket of veg
	10 bags of rice	4 bags of rice	2 bags of rice	
	10 bags of plantain	5 bags of plantain	3 bags of plantain	
	Own a house, 6 acres of palm plantation	Own 3 acres of palm plantation	own 1 acre of palm plantation	

### **1.3 Formulation of Community Action Plans (CAPs):**

Community action plans, another PRA activity, are targets set by the local community specifying specific planned activities within a defined time frame. A list of planned activities is accumulated and arranged in terms of priority and dateline (pre-determined, currently being executed and to be conducted in the future). CAPs also define the goals and objectives in terms of resources required, needed and available as well as an identification and inventory of available community assets. This exercise is a coordinated effort to organize and solidify the communities in a participatory approach as well as identify target poor populations for additional support. Monitoring and evaluation takes place when CAPs are periodically reviewed (usually, monthly, quarterly, semi-annually or annually).

In addition to identifying community assets (natural, physical, financial, social and human), the MVP Ghana team worked with communities to identify key factors that pre-dispose people to vulnerability and exclusion.<sup>38</sup> Here are two examples of “natural/environmental barriers” and strategies identified that are relevant for agricultural production:

<sup>37</sup> Manukrom and Dunwura CAP

<sup>38</sup> Adagya and Dome CAP



**Table 3: Strategies for Addressing Environmental Barriers per Community**

Community	Environmental Barriers	Strategies
Adagya 1&2	Poor soil fertility	Provision of fertilizers & farm inputs; mass cocoa spraying; posting of AEO to assist farmers in improved management practices
Dome	80 % land used for coca and only 20% for food crops  Seasonal shortage of food (especially in rainy season)  Low soil fertility	Granting access to parcels of land to local peasants from forest reserves for food crops; replacement of poor-yielding cocoa trees with high-yield varieties (inter-cropping); provision of fertilizers at subsidized price

#### **1.4 Goal alignment of district, regional and national government with MVP:**

MVP is a time-bound project; the organization will only provide programming for a five-year period. Once MVP exits Bonsaaso, the programs will be forced to continue without the available inputs, knowledge and aid from MVP. It is therefore essential that the goals and targets set by MVP are fully aligned and harmonized with the goals set at the national, regional and district level of government. If these goals are misaligned, impediments to sustainability and scalability emerge. In order to create a seamless transition from current MVP-based programming to community-based programming, the government (at all levels) and other existing institutions need to be involved and able to perform management and execution strategies once MVP exits. This enables long-term sustainability resulting from pro-poor strategies.

SIPA team's finding is that a tight alignment of goals exists between MVP and district, regional and national government. At the inception of the project, MVP and the Ministry of Food and Agriculture collaborated with the Amansie West Agriculture District Unit and the community leaders to identify the needs of the community and to design a program that matched these needs. This close collaboration on agriculture objectives has continued throughout the project.

The program activities related to these goals are conducted concurrently and with the collaboration of all stakeholders. Although each stakeholder has its own unique goals, MVP takes great strides to integrate the goals of the CAPS with those of the Amansie West District into its programming. This alignment of goals and activities is one of the primary strengths of the agriculture sector. Villagers themselves pointed out during focus group meetings the importance of improving agriculture as one of their primary goals because of its connections to both the health and education of community members. This was evidenced by a member of the agriculture unit committee during a focus group meeting. When asked, "What is the most significant change you've witnessed since the initiation of MVP?" he replied, "There is more food for our family, so our children don't have to work in the fields as much; they now have time to attend school."<sup>39</sup>

#### **1.1 Community-led initiatives:**

One of the strongest aspects of the MVP agriculture sector is its persistent effort to create demand-led programs. At the beginning of each program initiative, community members are polled on what initiatives they would like to start or continue in their villages; a PRA activity called a needs assessment. This feedback is then used to create programming strategies. Meetings are held to discuss the different

<sup>39</sup> Focus group meeting with agriculture unit committee on March 19, 2008. Edwinase village

programs and understand the level of potential participation among farmers. Of the interested farmers, trainings were initiated related to their preferences.

## **2. Implementation & Monitoring: Formal vs. Informal Documentation:**

Both formal and informal monitoring is being conducted by the Agriculture Sector Coordinator, AEWs, Amansie West Agriculture District staff, agriculture committee members and villagers participating in the MVP programs. In preparing for the January and March 2008 site visits our team analyzed formalized monitoring processes being implemented by the Earth Institute and MVP Ghana staff. These included annual reports, quarterly quantitative reports, quarterly narrative reports and monthly reports. During the data collection stage of our site visits, we observed the wealth of informal monitoring taking place.

Formal monitoring refers to any program activities, inputs or outputs that are documented in written form where qualitative and/or quantitative records are kept and then utilized in program planning. Informal monitoring consists of verbal feedback and direct observations which are not documented. While it also includes some written documentation, none of the informal monitoring activities are being fully implemented in the formal M&E system.

### **2.1 Formal Documentation & Monitoring of Activities**

#### **2.1.1. Procurement & Distribution of Seeds:**

While MVP is supporting cocoa production (Ghana's largest produced cash crop), MVP has also introduced maize and cowpea in an effort to diversify the food supply and also to add to income generation. Other crops new to this region are being slowly introduced by MVP such as cabbage, carrots, oranges and watermelons. Many of the seeds and pods being introduced by MVP are new hybrid varieties which increase yields and decrease the time to maturity. These new seeds are hybrid cocoa seeds and hybrid maize seeds. Hybrid cocoa seeds are high-yielding, early-bearing and disease-tolerant; their growth to maturity takes fifteen months versus the three to four years of traditional cocoa seeds.<sup>40</sup> Quality Protein Maize (QPM), the hybrid maize introduced by MVP, is an improved grade of maize which contains "nearly twice as much usable protein as other maize grown in the tropics and yields 10 percent more grain than traditional varieties of maize."<sup>41</sup>

MVP's process of procuring seeds begins with a community needs assessment to determine villagers interested in planting particular crops. After this information is collected, MVP receives funding allocations for inputs from the MVP Finance and Administration Officer. Seeds are then procured from markets outside of the cluster. The distance to purchase seeds can be as far as four hours away from villages.

The procurement process is organized solely by the Agriculture Sector Coordinator who works with the AEWs and community members in distribution. We observed, during our site visit, that the AEWs had a limited role in the procurement process. For example, we observed the process of procuring cocoa pods for the farmers. To date, the agriculture sector coordinator has only trained one AEW in the process of advocacy and negotiation in this competitive process. When there is a need for cocoa procurement this one AEW now accompanies the MVP agriculture sector coordinator; however, none of the other five extension workers and none of the community members are yet trained in this process.

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<sup>40</sup> Stakeholder meeting, 19 March 2008

<sup>41</sup> FAO Data

After seeds are procured, AEWs distribute them (along with fertilizers and polybags needed for particular crops) through agriculture committee members using a *'Commodity Supplied Acknowledgement Form'* which is an itemized receipt that lists the items, waybill number (if applicable), the date and the quantity of the input. Distributions include:

- hybrid cocoa pods
- hybrid cocoa seedlings
- hybrid maize such as Obatanpa
- cowpea varieties of Adom, Nhyira, Asetenapa, Tona, and Asontem
- cabbage seeds
- carrots seeds
- watermelon seeds
- moringa tree seedlings
- orange tree seedlings such as Lake Valencia variety
- bags of fertilizers such as Sulphate of Ammonia and NPK
- insecticides such as Rimon and Deltapaz
- fungicides such as Funguran and Ridomil

During the distribution process Committee members use various forms to record the distributions given to villagers. These include *'Pods and Poly Bags Distribution and Payback Form'*, the *'Seedlings Distribution and Payback Form'* and the *'Inputs Distribution Form'*. Recorded on each form is the farmers' names, quantity of inputs given, amounts paid and either their signature or thumbprint to acknowledge receipt. The committee chairman, treasurer and secretary sign that they have received these inputs. One copy of the form is given to MVP staff to keep, one is kept by the AEW and one is kept by the committee secretary. The amounts of inputs distributed are then recorded by AEWs in their monthly reports and by the agriculture sector coordinator in his quarterly data reports, which are sent to the Earth Institute. These distributions are later used during field yield estimations to determine how successful the plantings and interventions have been.

***Finding 2.1.1 Recommendation:***

- MVP should train all six AEWs in addition to several community members in the process of procuring seeds. The current threat is that with only one AEW trained in this process, it is unclear how the responsibility will transition to the community once MVP leaves. Also, if this one trained AEW leaves then they take their expertise with them. This additional training will ensure that villagers have access to the new hybrid seeds being introduced.
- MVP should also establish a system to carefully monitor the use, access and output of improved seeds. This is important because although these seeds are producing more than traditional seeds they do not reproduce naturally nor can their yields be replanted. Therefore they can only be used for one planting and must be repurchased each year. MVP is currently providing these seeds at a reduced cost to villagers. They plan to reduce the subsidy on these inputs incrementally through the duration of the project. The risk is that if not fully successful (if the farmers do not generate enough income to continue purchasing these seeds each year) there will not be sustained use of these improved seeds.

***2.1.2 Trainings & Community Sensitization:***

One of the core activities of the agriculture sector involves training AEWs and the community. MVP uses training-of-trainers (TOT) of Agriculture Committee Members to assist the AEWs to conduct "downstream training" of farmers. This means that once trained, these members are then required to train other farmers in the new agro-techniques they have learned. Larger scale trainings include maize and cocoa

establishment and management trainings. Other sensitization topics include “conservation of natural forests, watershed management, and protection of water bodies, environmental sanitation and waste management. Farmers have also been educated not to burn their farms where the vegetation is not very thick but to allow the trash to dry and decompose in order to further improve upon the fertility of the soil.”<sup>42</sup>

AEWs also give technical advice to farmers through farmer field schools by using demonstration gardens. In most villages, these demonstration gardens are planted at the local elementary schools so that students can help with preparations and harvesting. The yields are then used in the school feeding programs. Since the inception of the project, over sixteen school gardens and orchards have been established. In other villages, these demonstrations may take place in community gardens or on agriculture committee member's plots in order for them to train other farmers in the techniques they have learned.

Training is also conducted on harvesting and post harvest handling of crops. For example in August 2007 MVP conducted a TOT workshop “to equip participants with skills and knowledge in identifying matured maize using various indicators, harvesting, treatment of produce and storage for them to train other farmers in their communities.”<sup>43</sup> At the conclusion of the downstream training, over 1,250 farmers were trained. In conjunction with these types of trainings, farmers are being trained on how to properly store new crops such as maize. The agriculture sector coordinator is working with the infrastructure coordinator in building cribs for maize which will allow proper storage and will reduce spoilage. In August 2007, over sixty local carpenters were trained on how to properly construct improved ventilated cribs. Thirty-four cribs were constructed in the cluster as part of the training. These cribs are meant to serve as “model cribs” and also store pay back maize from the farmers.<sup>44</sup> MVP is encouraging farmers to construct their own cribs by providing construction materials to these carpenters. MVP has also agreed to pay carpenters GH ¢ 20 for each of the cribs built.

Villagers who participate in these trainings are documented in sign-in sheets and their progress is tracked by AEWs in informal site-visit follow-ups. AEWs document these trainings in their monthly reports to both the Amansie West District Agriculture Unit and MVP.

### ***Finding 2.1.2 Recommendation:***

- MVP should monitor the quality of the trainings by providing some type of pre/post test to ensure that the farmers being trained understand the information they are learning. We also recommend that site visits be geared towards tracking whether farmers who participated in the trainings have implemented the techniques learned and that this progress be formally documented. At this time, follow-up is being conducted through direct observation but is not being formally documented. MVP and AEWs will then be able to review training materials and determine which methods are being successfully implemented.

### ***2.2. Formal Documentation of Monitoring Practices:***

Formal documentation of agriculture activities in the cluster includes: quarterly quantitative and narrative reports compiled and written by the agriculture sector coordinator, two monthly reports written by the AEWs and committee minutes taken by the secretary during monthly meetings. The agriculture sector coordinator creates a quantitative quarterly report that is sent to the Earth Institute and a quarterly narrative report that is given to the MVP Ghana team leader. There are nineteen data points which are calculated and

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<sup>42</sup> 2<sup>nd</sup> Quarterly Narrative Agriculture Report 2007

<sup>43</sup> 3<sup>rd</sup> Quarterly Narrative Agriculture Report 2007

<sup>44</sup> 3<sup>rd</sup> Quarterly Narrative Agriculture Report 2007

documented in the quarterly quantitative reports. For a complete list of tracked quantitative quarterly indicators please refer to the Appendix.

AEWs document their work in monthly reports which they submit to the Amansie District office. Concurrently, they also submit monthly reports to MVP, documenting the trainings and the activities they conduct. These monthly training duplicate some of the same information and differ on some of the data they provide.

***Finding 2.2 Recommendation:***

- Monthly reports written by the AEWs, should be streamlined into one report that can be simultaneously submitted to the Amansie West District Agriculture Unit and the MVP agriculture sector coordinator. This will cut down the time spent by AEWs in writing two similar reports and it will assist in the sustainability of the data being monitored by AEWs.

***2.3 Informal Monitoring of Activities***

***2.3.1. Direct Observation and Verbal Communication:***

MVP uses direct observation and verbal communication as one of the key tools in informal monitoring. Agriculture committee members, Chiefs and community members are in constant communication with MVP staff, especially MVP community development facilitators and AEWs. This two-way communication is one of the greatest strengths of the program because villagers feel comfortable voicing their opinions, seeking guidance and requesting informal trainings.

The AEWs conduct daily extension activities in their assigned areas. These activities include ongoing monitoring in the form of direct observations of nurseries, plantings and of farmers' plots to ensure good crop performance and optimum yields. Extension activities also include educating farmers on good agronomic practices. This work is typically conducted with the MVP agriculture committee members and leaders in the community that have invested in MVP inputs. For example, in the first quarter of 2007 "forty-four extension sessions were conducted during the period under review and 1,770 farmers (1,302 males and 468 females) participated in the sessions. The extension activities covered education in proper land preparation, maize production and the benefits of QPM, row planting, crop management, soil fertility improvement, nursery management, diseases and pests' identification and control, and agro-chemicals application."<sup>45</sup> Although some of these activities are documented in AEWs monthly reports, most are informal and undocumented.

***Finding 2.3.1. Recommendation:***

- The informal monitoring by community members is an essential participatory monitoring tool that empowers community members to track the progress of activities and to give feedback to staff members about aspects of the program that are problematic. SIPA team recommends that documentation be created to capture this type of informal monitoring of community members direct observations and verbal communication because it is key to the success of the agriculture initiatives. We also recommend that AEWs include these informal interactions in their monthly reports.

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<sup>45</sup> 1<sup>st</sup> Quarterly Narrative Agriculture Report 2007

### **2.3.2. Quarterly Narrative Reports:**

The agriculture sector coordinator also writes quarterly narrative reports which outline goals and objectives that are planned for the quarter and the activities conducted during this time. Photos of trainings and activities are included as well as statistics of inputs distributed, yield estimations of the harvest for the quarter and overall participation from villagers. These reports are submitted to the MVP Ghana team leader and other sector coordinators. The team leader extracts relevant information to submit to the Earth Institute and the Millennium Promise Foundation. These reports are not distributed to the district, Regional or National Government Ministries.

Multiple excel spreadsheets were created by the agriculture sector coordinator to track input distribution and yield estimations. Although these are useful for keeping records, they are not streamlined to highlight the entire lifecycle of crops: distribution per village and harvest per village (yield estimation).

### **Finding 2.3.2 Recommendation:**

- The quarterly narrative reports provide a rich, visual understanding of the activities being conducted in the agriculture sector. They are well-written and capture the energy and momentum of the activities taking place. Therefore, we recommend that these reports be distributed widely to the District, Regional and National Food and Agriculture Ministries, UNDP, relevant Ghanaian research institutes and NGOs because they provide information on externalities affecting the program such as weather patterns and they provide a subjective account of the progress of the program. For example, in the Q4 report the coordinator states: "In spite of erratic weather conditions during the year, maize yields were very good. Other field activities were on track. However, more needs to be done to whip up the interest and participation of community members in project activities."<sup>46</sup> These reports are essential to shedding light on other points that can not be documented quantitatively.
- Each of the activities planned for the quarter should be discussed and updated. While not every activity is conducted each quarter, updates for ongoing activities and reasons listed for the cancellation or delay in implementing the activity should be explained. We also recommend that the supporting excel spreadsheets be organized to include the progress for one input through its lifecycle.

### **Evaluation**

Program evaluation is a time-bound management tool used to systematically and objectively assess the relevance, efficiency, effectiveness and impact of ongoing and completed programs and projects. Based on the findings of an evaluation, decisions on policy or strategy should be informed and related to ongoing program interventions. Evaluation can also be used to demonstrate accountability to decision-makers, donors, beneficiaries and other key stakeholders.<sup>47</sup>

MVP has yet to begin the evaluation process; baseline data is still being collected as MVP project enters its third year; projects are yet to be fully implemented; monitoring systems that reflect PRA techniques are not yet initiated. Without baseline data to measure results against, evaluating and measuring impact of the project is impossible. Assessing the relevance, efficiency, effectiveness, impact and sustainability of the project can only be done once all stages of a PM&E system are fully implemented.

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<sup>46</sup> Quarterly report, December 2007.

<sup>47</sup> UNFPA, 2004. *Programme Manager's Planning, Monitoring and Evaluation Toolkit*. Division for Oversight Services.

### **Conclusion**

MVP Ghana is a “proof of concept” project based upon the targets delineated within the MDGs; it is a bottom-up approach also serving to localize the national and regional poverty reduction strategies. MVP aims to contribute to Ghana’s achievement of the MDGs by using a holistic, micro-level participatory approach to macro-level goals. MVP Ghana focuses on the agriculture sector in the Bonsaaso village cluster as a key to income-generating activity with the goal of reducing poverty. However, in all of the discussions, interviews and anecdotes gathered by the SIPA team from key stakeholders including, villagers, MVP staff and local government employees, one of the key factors that could not be teased out of the discussions were the specific indicators used to measure the results-based approach, the “how” of this poverty eradication strategy. While many villagers were able to verbalize the ultimate goal of the MDGs (i.e. to eradicate poverty), they were not able to explicitly verbalize targets of how to get there – Should they increase farm yields by 10 percent this year? Double outputs? Increase income by 25 percent next year?

These unanswered questions and confused expressions illustrate many of the findings and recommendations the SIPA team recommends. Participatory monitoring and evaluation is essential to the success of the project. Agriculture is an obvious expression of these goals; it is an important economic, social and cultural component of the Bonsaaso village cluster. Our recommendations center on monitoring activities that assess progress and can identify weakness. Implementing a formal M&E system allows for lessons learned at each level of stakeholders, local level (villagers, district and regional government, MVP staff) through national and international levels (national government, Earth Institute, UNDP).

Since MVP Ghana aims to eradicate poverty by achieving the MDGs, success will be determined based on the progress towards these goals at the end of five years. Currently, mid-way through the project, participatory monitoring and evaluation have yet to be fully implemented. Realizing the success of the project and its effect, impact, scalability and sustainability are in jeopardy unless the project can be fully monitored and evaluated. Donors, government officials, civil society, skeptics and, most importantly, villagers themselves, may observe the tangible improvements in livelihoods but will be unable to quantify and measure whether these changes directly result from the project interventions. MVP’s contribution to all stakeholders – from each individual all the way to each MDG – can not be fully realized or reflected until PM&E are fully systemized and operationalized.

### Appendix Agriculture Case Study:

**Table 4: Agriculture staff, operational area and roles & responsibilities relevant to MVP Ghana**

Staff Member and Title	Operational Area	Roles & Responsibilities
Isaac Kankam-Boadn, MVP Agriculture and Environment Coordinator	MVP Ghana – Bonsaaso Cluster	<ul style="list-style-type: none"> <li>Oversees planning, implementation, M&amp;E evaluation of MVP agriculture and environment initiatives</li> <li>Interacts directly with EI staff and supervises six agriculture extension workers</li> <li>Liaison with district, regional and national Ministry of Food and Agriculture</li> </ul>
Abas Mohummad, District Director of the Agricultural Development Unit in Amansie West	Ministry of Agriculture and Environment	<ul style="list-style-type: none"> <li>Oversees agriculture initiatives (Amansie West)</li> <li>Reports progress to regional and national government officials</li> </ul>
Akanji Gyimah Ajani	<u>Datano Area :</u> Villages of Takorase, Afraso, Datano, Dadease	<ul style="list-style-type: none"> <li>Implements yearly goals from the central government to help farmers by improving agriculture technology, organizing demonstration plots and farmer forums and conducting farmer field schools.</li> <li>Assists MVP with procurement of crops, community distribution and trainings. All activities are weaved into district responsibilities listed above.</li> <li>Involved with community debriefing sessions</li> </ul>
Augustine Annorbaah	<u>Ayiem Area:</u> Villages of Essienkyem, Dome Asaman, Ayiem, Edwinase	
Victor Ayamga, Agriculture Extension Worker	<u>Keniago Area:</u> Villages of Keniago, Gyegyetroso-Dawusaso, Fahiakobo, Kobriso, Hiamankwa	
Ben Benim	<u>Bonsaaso Area:</u> Villages of Kojonsiakrom, Tontokrom, Yawkasakrom, Aboaboso, Apenamadi	
Paul Lekawaa Bonir	<u>Watreso Area:</u> Villages of Watreso, Wonnipanindue, Adagya 1&2, Nyamebekyere, Jumakro/Britcherkrom	
Mac-Pat Boateng	<u>Akyerekrekrom:</u> Villages of Taabosere Akyerekrekrom, Dunwura, Nkrumakrom, Groso, Manukrom	



**Table 5: Indicators**

Agriculture Quarterly Quantitative Report Indicators
<ul style="list-style-type: none"> <li>• Voucher system developed in last quarter (Yes/No)</li> <li>• Number of drip irrigation systems installed by MVP</li> <li>• Average number of households served by drip irrigation systems</li> <li>• Number of credit or other financing schemes for agricultural inputs established by MVP</li> <li>• Number of people using credit or financing schemes for agriculture/agricultural products established by MVP</li> <li>• Number of institutions offering financial services for agriculture in the community</li> <li>• Number of food insecure households, having one or less meals a day, identified by MVP</li> <li>• Number of agreements made with active restocking programs by the MVP</li> <li>• Number of high-value agriculture commodities introduced and demonstrated by the MVP</li> <li>• Number of information packages on market opportunities and marketing arrangements for value adding enterprises made available to men and women</li> <li>• Number of small-scale processing, post-harvest handling and value-added services promoted and developed by the MVP</li> <li>• Number of buyer and processing visits to sites facilitated by the project</li> <li>• Number of farmers selling food to local school feeding programs</li> <li>• Number of transport options developed to link with markets, facilitated by the MVP</li> <li>• Number of improved market trading centers in the cluster, facilitated by MVP</li> <li>• Number of community-based organizations trained on production business marketing and managerial skills for high-value commodities</li> <li>• Number of agro-dealers trained on providing improved inputs for agriculture</li> <li>• Number of farmers and extension agents trained on improved agriculture practices including agricultural risk reduction, food storage, type and production of nutritious crops</li> <li>• Number of farmers trained on financial management, production, business marketing and managerial skills for high-value commodities</li> </ul>