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Research Article

Role of Community Capacity Building in Ensuring Sustainability of Food Security Project: A Case of the Millennium Villages Project in Bar Sauri, Gem- Kenya

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Community capacity building, sustainability, Millennium Villages Project, Food security projects This study explored the functional role of community capacity building in ensuring sustainability of Bar-Sauri Millennium Villages Project beyond the five years funding period. The study used descriptive survey research design, an interview schedule and questionnaires to establish the sustainability of tangible benefits of MVP. The questionnaire was administered to 380 respondents selected by simple random sampling. A response rate of 79% was obtained. Descriptive statistical techniques were used to present the findings. Data was analyzed using SPSS version 19. The findings indicate that there were trained community leaders to help villagers understand the MVP goals however, the residents of Bar-Sauri were not competent enough in sustaining the MVP if the donor funding ends. The MVP has introduced several sustainability interventions; most effective strategy being financial literacy. From the study, the following strategies for capacity building for new projects similar to MVP were found out: Training in marketing, involving the community in the conception stage of the project and in the decision making stages concerning the project, Training in farm management and post harvesting practices such as storage, diversification of agricultural activities, improvement of educational institutions in the millennium village. The study recommended that further research should be carried out in Bar-Sauri encompassing other variables not included in this study. A similar research should be conducted in other MVP sites in Africa: That is Ruhiira in Uganda, Pampaida in Nigeria, Bonsaaso in Ghana, Mwandana in Malawi. Studies that relate to the effective implementation of programs and support policies for MVPs in Kenya and Africa should be carried out. Studies should cover strategies used by successful MVPs in sustaining the project beyond the donor funded period to scale up to other local, national and international food security programs.

INTRODUCTION

The Millennium Villages Project aims to demonstrate that the Millennium Development Goals (MDGs) are achievable, even in rural parts of Africa. This has been done through advanced design and implementation of community led practical investments in essential infrastructure. The Millennium Villages initiatives builds on the appropriate Science and Technology available; the research carried out by the Earth Institute at Columbia University under the auspices of the United Nation development Programme (UNDP); and the best practices of like- minded organizations working in rural parts of sub-Saharan Africa; The initiative actively promotes partnerships with civil society groups. NGOs. governments and it encourages implementations of activities with those groups (UNDP, Millennium Research Villages Annual Report, 2007).

The origin of MVP dates back to the Millennium summit, the largest gathering of heads of states and heads of governments in New York City in the year 2000. In this gathering, 147 presidents, prime ministers and monarchs pledged to meet eight general development targets - the Millennium Development Goals (MDGs), such as halving the global poverty and achieving universal primary school completion by the year 2015. In the year 2002, the secretary-general of the United Nations Commissioned the Millennium Project to devise a global plan of action to achieve the MDGs. Professor Jeffrey Sachs, one of the world's leading economists and who is the secretary-general's advisor on the MDGs spun off the Millennium Villages Project (MVP) in five clusters of small and very poor rural villages across Africa: Barsauri in Kenya, Ruhiira in Uganda, Pampaida in Nigeria, Bonsaaso in Ghana and Mwandama in Malawi. The Bar-Sauri MVP began in the year 2004 and was to be funded for five years after which the project will be self-sustaining (MVP, 2008a). The MVP deploys broad package of intervention in village including distribution of fertilizers and insecticide treated bed nets, schools construction, HIV testing, microfinance, roads, irrigation and clean water provision and other vital infrastructure construction. The total cost of the MVP intervention is one hundred and ten United States dollars (US\$110) per villager per year for five years (MVP, 2008a). A villager is given \$50 from donor funding through MVP, \$30 from local and national governments (this includes funding for interventions and through provision of agricultural and health extension workers in the villages, \$20 from donor organizations, for example existing program supported by official bilateral donors and \$10 is village member's contribution typically through in- kind contributions.

Governments around the world are introducing a number of strategies aimed at improving lives and eradicating poverty, improving equitable distribution of opportunities and resources between men and women that lead more directly to higher economic growth and productivity. Recently, they have been laying emphasis on improving enrollment rates in schools because education is a vital tool in achieving greater autonomy, empowerment and resources; however, poverty in Africa has greatly affected school enrollment (Muganda, 2000).

The governments have incorporated feeding programs in the school system as a way of addressing low school enrollment (Lamber, 2009). Providing food acts as a motivation for children to stay in school (Birdscall et al, 2006).

Rapid population growth in Kenya has not been matched with infrastructure development and economic growth; this poses challenges to the improvement of environmental health in Kenya, (KDHS, preliminary report 2003). In connection with this, there is a sanitation policy which gives guidance in the delivery of services in sanitation (Kenya Flash Appeal, 2004).

Before the intervention of MVP, Bar-Sauri sublocation in Gem district suffered the conditions described above of dire poverty and ill-health. The inhabitants lived below the poverty level and had scarce economic resources. About 60%-70% of the population lived on less than a dollar per day (The Earth Institute, 2009). Schools in the area had a high number of dropouts, low performance and students had chronic malnutrition. Hunger and malnutrition are common in most developing countries as most households lack enough food, children in those households usually go to school on empty stomachs. According to Del Rosso (1949), children affected by hunger and malnutrition coupled with ill health do not have the same potential to do well at school in comparison with nourished and healthy children.

Millennium villages Project aimed to bring to an end the poverty in a five year time, and in June 2010, the project released its first public evaluation on the impacts of the interventions (MVP, 2010). The report showed that the villagers had completely broken away from the chronic poverty. Lessons learned in Bar-Sauri and the other four sites in Africa are used by the Kenyan government to scale up the MVP model to the county level and beyond.

Translating the success seen in Bar Sauri is a crucial step being taken by the government of Kenya, it is critical to the national effort for meeting the Millennium Development Goals and lifting millions of Kenya out of poverty. There is need to emphasize that such gains should be sustainable, realistic and achievable elsewhere. This can be realized when the community is well endowed with knowledge and skills. There is an argument which states: Community capacity building is necessary for community development and participatory process at the community level (Reid & Gibb, 2004). Community capacity building can be defined as the characteristic of a community that enables it to mobilize resources, identify and solve problems. It is the

interaction of community capitals and organizational resources existing within a given community that can be leveraged to solve collective problems and improve the community's well-being (Chaskin et al. 2001). Community Capacity building is vital in empowering local people to take advantage of the opportunities provided by food security programs (Laverack Thangphet, 2007). Noting from previous researches that community capacity building is key to sustainability of food security projects such as the MVP in Bar-Sauri and basing on the MVP evaluation report of June 2010 that revealed positive changes made in alleviating rampart poverty in Gem as a result of MVP intervention and the Kenyan government adoption of positive lessons learned from the project to address challenges of extreme poverty, hunger and disease, the big question still is; whether there is in place sufficient capacity building to ensure sustainability of these tangible benefits. This research focused on establishing whether sufficient capacity building is in place to ensure sustainability of the Bar-Sauri MVP beyond the funded period which is five years and also to suggest other strategies for community capacity building. The questionnaires addressed the demographic characteristics of the respondents by gender, age and levels of education, also the competence of the residents of Bar-Sauri in sustaining the MVP goals beyond the duration of the funded project. It also sought to project the sustainability of interventions introduced by the MVP and which are these interventions. Finally, it sought to establish other strategies for capacity building for new projects similar to MVP. Data are presented using tables, pie-charts and bar graphs to show proportions.

RESEARCH METHODOLOGY

A descriptive survey design was adopted. The study was carried out in Bar-Sauri sub-location, Yala division, Gem district of Kenya with a population of over 8,000 people, 970 households and covers 132 square kilometers.

The target population was 970 households actively involved in MVP activities in all the 11 villages of Bar-Sauri. The sample consisted of 380 households which is about 40% of the total households in the area. Households were selected through simple random sampling method from a list of 970 households using the excel spreadsheet random numbers table and formula provided by Mugenda and Mugenda (2003). The research used questionnaires, interview as well as focus group discussions for primary data collection. Data are presented using tables, pie-charts and bar graphs to show proportions.

RESULTS AND DISCUSSION

Competence of the residents of Bar-Sauri in sustaining the MVP goals beyond the duration of the funded project

The study sought to access the competence of the residence of Bar-Sauri in sustaining the MVP goals beyond the duration of the funded project by the donor.

The study verified that there were trained community leaders whose major task was to help the community understand the MVP goals, and to assist them in capacity building. This research finding is in agreement with (Ife, 2002), who states that community capacity is achieved through developing community leadership and decision making skills among community members. The respondents were in agreement of the existence of such community leaders as shown in table below

Table1: There were trained community leaders to help community understand MVP

There are trained community leaders to help community understand MVP						
	Frequency	Percent	Valid Percent	Cumulative Percent		
SA	118	38.8	39.3	39.3		
Α	182	59.9	60.7	100.0		
Total	150	98.7	100.0			

There was evidence that community leaders were well trained in modern agricultural techniques, through workshops and demonstrations farms, this is in line with (Bopp et al., 2000) observation that the concept of community skills and knowledge is regarded as a tool to assist in development. Through the training, the community leaders help in organizing and structuring local civil society and also create new social assets in

communities (Gervais, 2004). The skills acquired by the community leaders in the modern agricultural training helped in building new capacities, (UNDP, 1997) that when put to use contribute to the sustainability of food security in the study area over the long term. The training received by the community leaders impacted positively in the crop yields in the study area as shown in table below.

Table 2: Crop yields have continued to increase in Bar-Sauri and are expected to rise				
even further in coming years				

Crop yields has continued to increase in Bar-Sauri and it is expected to rise even further in coming years					
	Frequency	Percent	Cumulative Percent		
SA	6	2.0	2.0		
DK	6	2.0	4.0		
Α	288	96.0	100.0		
Total	300	100.0			

From table 2, 2% and 96% of the respondents strongly agreed and agreed respectively that, since the inception of the MVP, the crop yields have improved and is expected to improve further.

Community leadership was identified as a key factor in developing agriculture in local communities (Brent, 2004). The study however, found that the community leaders are not yet economically

independent and so are unable to sustain the program. 236 of the respondents strongly disagreed and 38 disagreed that the community leaders can now stand on their own and even do better in agriculture should the MVP funding end. 12 and 14 respondents strongly agreed and agreed respectively. As shown in figure below.

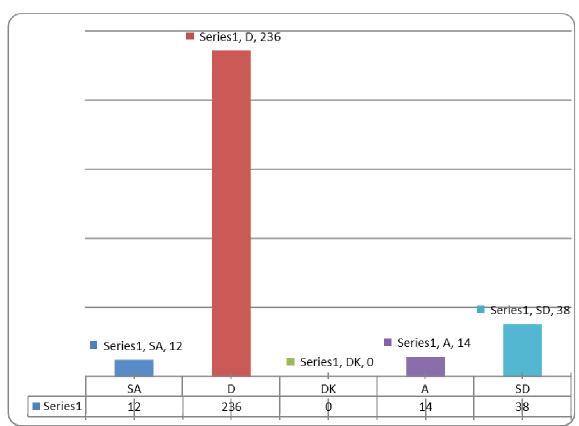


Figure 1: Community leader can stand on their own and even do better in agriculture should MVP funding end

This could be that probably, the community leaders were still in need of various training pertaining to modern agricultural methods and technology.

It is important to note that, 4% of the respondents strongly agreed that the residence of Bar-Sauri have the skills and competency to sustain the MVP

goals beyond the duration of the funded project. 166 forming 53.3% disagreed, 12 that is 4% did not know, 72

(24%) of the respondents agreed as 38 that is 12.7% strongly disagreed as shown in table below

	Frequency	Valid Percent	Cumulative Percent
SA	12	4.0	4.0
D	166	55.3	59.3
DK	12	4.0	63.3
Α	72	24.0	87.3
SD	38	12.7	100.0
Total	300	100.0	

Only 24% of the respondents believe in the sustainability of the project after the donor funding ends, as articulated by one of the male respondent, "...we get the trainings from our community leaders on ways of sustainability of this project, but some of the issues here are complex and require technical understandings that we may not have, as you can see most of us have only primary education, but we will try our best to keep it going even if

the donors go...." (Focus Group Discussion, Male respondent, 05/11/2012).

The sustainability of interventions introduced by MVP

The study found out that the MVP has introduced several sustainability interventions in the study area which include:

- > Financial literacy
- Managerial skills
- Marketing skills
- Bee keeping
- > Fish farming
- > Environmental conservations

The respondents were trained in modern farming techniques and showed that they can use these skills in farming to date (5/11/2012, day of interview).

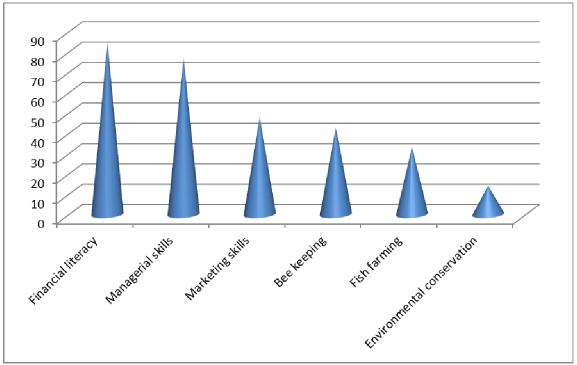


Figure 2: sustainability intervetions introduced by MVP

Financial literacy especially saving skills was the most effective intervention strategy employed to sustain the MVP goals as shown if figure 2. "...the main challenge here is finances to buy farm inputs and other requirements for farming, labour is also a challenge since we may not afford the desired labour, we therefore need saving skills and tips that can help sustain us when eventually the donors pull out as this will help in building our capacity...." (Focus group discussion, female respondent, 05/11/2012). This observation was in line with (Laverack & Thangphet, 2007) that observed that community capacity building is vital in empowering local people to take advantage of the opportunities provided by food security programs.

From figure 2, managerial (25.7 %.) and marketing skills (16.0 %) were found to be important as an intervention and strategies to sustain the MVP, this observation is in line with (Bopp et al., 2000) who labeled skills and knowledge as one dimension of community capacity. "....we really needed managerial skills and marketing knowledge to market our farm produce, thanks to MVP, their training on managerial skills has enabled us manage our funds and produce and search new markets. Some of ours nowadays sell

the farm produce to as far as Kisumu town in Kisumu County". (Focus group discussion, female respondent, 05/11/2012).

Knowledge is paramount for development purpose and lack of it may derail development. UN social and economic council (2003) also argues that a lack of knowledge in agriculture has been used in many developing countries to justify the exclusion of local residents and other community stakeholders from involvement in marketing decision. Diversification on the activities carried out by the community covered bee keeping (14.3%) and fish farming (11.0 %) as alternative to crop production in the study area. Environmental conservation was as well found out to be an intervention strategy in sustaining the MVP in the study area (4.7%) though it was the least in terms of effectiveness.

Strategy for capacity building for new projects similar to MVP

The study highlighted the following to be the strategies for capacity building as essential and should be taken into account for new projects similar to MVP:

- Training in marketing.
- Involving the community in the conception stage of the project and in the decision making stages concerning the project.
- Training in farm management and post harvesting practices such as storage.
- Diversification of agricultural activities.
- Improvement of educational institutions in the millennium village.

Training in marketing

The study found out that market of the firm produce was a major challenge in the area; the respondents identified training in marketing strategies as a way of capacity building and recommended it for similar projects. From the study, is was found out that, most of the agricultural products lacked ready market since they are perishable, they go to waste it is therefore important to get ready market for these produce during their economic life. The respondents reported that, training them in marketing would help them search for the best prices of their products in time so as to avoid wastage.

Involving the community in the conception stage of the project and in the decision making stages concerning the project

The study found out that just as it is important to involve the local community in the conception stage of the project and in major decision making stages of the same. The respondents reported that involving them in the conception stage of the project gives them an opportunity to put across their areas of priority and of concern to be addressed by the MVP. They noted that at times the donors of the said projects pursue their own interest to fulfill the objectives of the researches to the detriment of the needs, feeling and priority of the local community. This was observed in one of the focus group discussions "... in some cases these donors and academicians come here to do their own things without involving us, like you now, they do not even ask what are our area of priority in the said projects and after achieving their objectives they disappear, write reports about us which are not true.... " (Focus Group Discussion, Community leader Respondent, 05/11/2012).

The study also found out that if the local community and its leadership are involved in the process of making major decision making, it will instill the sense of ownership of the project. It was noted, in many cases, the decisions concerning the project are made by the donors and the local community are required just to know what is going on, their opinion is not sought, this demotivates them and can easily lead to the failure of the project.

Training in farm management and post harvesting practices such as storage.

The study found out that, the primary beneficiaries of the project should be trained in farm management and post harvesting practices such as storage and preservation measures. It was reported in one of the focus group discussions that, after harvesting the farm produce, most of it would go to waste due to lack of proper storage facilities and poor storage practices. The respondents also noted that they needed training in farm management practices including but not limited to crop rotation, good farm chemical usage, animal husbandry among others. Generally, the respondents needed and comprehensive training thorough in farm management.

Diversification of agricultural activities.

From the study, it was found out that, there was need for diversification of agricultural activities in the area and other areas to be covered under MVP. The diversification activities identified in the area were bee keeping, poultry farming, and introduction of other form of agricultural activities that are not rain fed. It was also noted that, these diversification areas should be coupled with intensive training and back up capital for the same.

Improvement of educational institutions in the millennium village.

The study found out that for the MVP to be successful, the education standards in the village needs to be improved, though this may come as a secondary objective, it is of paramount since most of the trainings were technical and required education, in this scenario, it may come as a form of adult education due to the limited economic life of donor funds. It was noted that, some of the primary beneficiaries with at least secondary education should be sponsored in areas such as entrepreneurship, information technology, a community resource management or any other course deemed necessary to the project completion and sustainability.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions here are drawn objectively as follows.

The residents of Bar-Sauri are not capable of sustaining the MVP goals beyond the duration of the funded project. 236 (78.7%) of the respondents strongly disagreed and 38 (12.7%) disagreed that the community leaders can now stand on their own and even do better in agriculture should the MVP funding end with only 12 (4%) and 14, (4.7%) respondents strongly agreed and agreed respectively. And to the entire community, 4% of the respondents strongly agreed that the residence of Bar-Sauri has the competency to sustain the MVP goals beyond the duration of the funded project. 166 forming 53.3% disagreed, 12 that is 4 % did not know, 72 (24%) of the respondents agreed as 38 that is 12.7% strongly disagreed. The study therefore concludes that despite the training and efforts made by the MVP, the residence of Bar-Sauri are not competent in sustaining the MVP goals.

The study found out that the MVP has introduced several sustainability interventions in the study area which include: Financial literacy, Managerial skills, marketing skills, Bee keeping, Fish farming and Environmental conservations. The study therefore concludes that, there were intervention strategies to sustain the MVP with the most effective strategy being financial literacy.

Strategy for capacity building for new projects similar to MVP

From the study, the following strategies for capacity building for new projects similar to MVP were found out: Training in marketing, Involving the community in the conception stage of the project and in the decision making stages concerning the project, Training in farm management and post harvesting practices such as storage, Diversification of agricultural activities, Improvement of educational institutions in the millennium village.

RECOMMENDATIONS FOR FURTHER RESEARCH

Further research should be carried out in the following areas:

- i. A similar study could be carried out in Bar-Sauri encompassing other variables not included in this study.
- ii. A similar research should be conducted in other MVP sites in Africa: That is Ruhiira in Uganda, Pampaida in Nigeria, Bonsaaso in Ghana, Mwandana in Malawi.
- iii. Studies that relate to the effective implementation of programs and support policies for MVPs in Kenya and Africa.
- iv. Strategies used by successful MVP in sustaining the project beyond the donor funded period.

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