RURAL POVERTY REDUCTION IN KENYA: IMPLEMENTATION OF THE MILLENNIUM VILLAGES PROJECT IN Sauri VILLAGE IN SIAYA COUNTY

BY:
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November 2012
DECLARATION

I, the undersigned, declare that this thesis is my original work and has never been presented to any other university for any academic credit.

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This thesis has been submitted for examination with my approval as university supervisor.

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SIGNATURE:
DEDICATION

This study is dedicated to my husband Prof. Gilbert Onyango Kokwaro who supported me throughout.
ACKNOWLEDGEMENT

The realization of this thesis is a result of the collective efforts and assistance of a number of people, without whom it would have been impossible to complete. First of all I am intellectually indebted to all those mentioned below, not necessarily in order of importance, but as a token of appreciation.

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Last of all, I wish to state that while the contributions of all those mentioned above is acknowledged, I take full responsibility for the contents herein.

Thank you.
Margaret Athulu kokwaro
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<td>ASPS</td>
<td>Agricultural Sector Programme Support</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>IPRSP</td>
<td>Interim Poverty Reduction Strategy Paper</td>
</tr>
<tr>
<td>KARI</td>
<td>Kenya Agricultural Research Institute</td>
</tr>
<tr>
<td>KNBS</td>
<td>Kenya National Bureau of Statistics</td>
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<tr>
<td>PEU/PEC</td>
<td>Poverty Eradication Unit</td>
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<tr>
<td>PRSP</td>
<td>Poverty Reduction Strategy Paper</td>
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<tr>
<td>SFRA</td>
<td>Strategy for Revitalizing Agriculture</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNECA</td>
<td>United Nations Economic Commission for Africa</td>
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<td>UNESCO</td>
<td>United Nations Educational Scientific and Cultural Organization</td>
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<td>UNRISD</td>
<td>United Nations Research Institute for Social Development</td>
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ABSTRACT

The Millennium villages Project (MVP) is an organization whose broad mandate is to alleviate rural based on the Millennium Development Goals. To alleviate poverty in Sauri village the MVP developed an agricultural strategy in order to increase productivity. Farmers were provided with improved seeds, fertilizers, horticultural seedlings, as well as agricultural extension services. The MVP also invested in the following sectors; health, education, roads, markets, energy, water, sanitation and environment.

This study sought to discover if the MVP agricultural interventions had alleviated poverty in Sauri village. The objectives of the study were: a) To review how the MVP agricultural strategy has been conceptualized and implemented to alleviate poverty in Sauri village, b) To examine how the local people have been engaged in the conceptualization and implementation of the MVP and how they perceive the project, c) To establish the extent to which the MVP has contributed in reducing poverty among the local people in Sauri village and d) To establish the appropriateness of the MVP agricultural strategy in Kenya and its sustainability.

This study attempted an experimental design in survey research. Sauri village was the experimental group and Lundha village was used as the control group. This was to enable the researcher to assess the impact of the MVP interventions on poverty in Sauri village. The researcher collected quantitative data from respondents by administering questionnaires using structured interviews. The probability sampling methods that were used in this study were cluster sampling and simple random sampling. The total sample size of both these villages was 243. That is, 142 and 101 households in Sauri and Lundha village respectively. Qualitative data was collected through unstructured interviews with Key Informants as well as in Focus Group discussions. An interview guide was used to keep the interview in line with the research objectives. Non-probability sampling technique that was used to select Key Informants in this study was purposive sampling. Non-participant observation was also used by the researcher to collect observational data. This was done using an observation checklist. The raw data was "processed using xii
Statistical Package for Social Sciences (SPSS). Descriptive statistics were used to univariate data.

Findings from the study revealed that Sauri community was not actively involved in problem identification, monitoring and evaluation of the MVP agricultural interventions. However, the community mostly participated in the implementation of the MVP activities. The MVP achieved its goal of increasing agricultural productivity (95%) and alleviating poverty (94%) in Sauri village. Respondents reported the leading key achievements of the MVP as improving access to health care, improvement of roads, increased agricultural productivity and improvement of education sector. This indicates that besides improving agricultural productivity, the MVP promoted access to basic services. However, the MVP was not successful in promoting access to electricity in the village (83%). This indicates that Sauri farmers cannot engage in value addition for their produce which is crucial to increasing farmers’ incomes.

Study findings revealed that the MVP promoted gender balance in Sauri village (70%). Women were elected to leadership positions in various committees and were allowed to participate in all MVP activities indiscriminately. According to 97% of respondents, the MVP was a suitable model for promoting agriculture in Sauri village. Note that, 60% of respondents reported that the MVP was not sustainable due to corruption among the MVP leaders, lack of people's participation, poor phasing out, lack of capacity building and farm inputs. This study advocates for full participation of target communities in the following stages of the MVP; project identification, project design, preparation of budgets and timetables, implementation and evaluation. This would improve the MVP's operations and also tackle the problem of lack of sustainability.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Poverty remains a serious problem in Sub-Saharan Africa today. Approximately 75 per cent of the world's poor reside in rural areas. At current trends the global percentage of the poor in rural areas will not fall below 50 per cent before 2035 (World Bank, 2002). Compared to other regions, a greater proportion of people in Sub-Saharan Africa (SSA) live in rural areas. Of these people, a large proportion is poor. Poverty has been rising in Sub-Saharan Africa over the last decade, while it declined in most parts of the world (ILO, 2004). In 2003, about 46 percent of the Sub-Saharan Africa population lived on less than one dollar a day - slightly more than in 1980 (43%) and 1990 (45%). At the global level, however, the share of the population living on a dollar a day declined from 40 percent in 1980 to 20 percent in 2003. Thus, while East, South-East and South Asia and North Africa are broadly on track to meet the Millennium Development Goals (MDGs) of halving poverty by 2015, there has been no progress in Sub-Saharan Africa towards achieving this goal (United Nations, 2004).

Available data, points to a rapidly deteriorating poverty situation in Kenya. Collier and Lai (1980) show that, by 1980 about 4.2 million Kenyans (29.4 per cent) out of a total population of 14.3 million were living below the poverty line (Kshs.2000 per annum for rural households and Kshs.2150 per annum for urban households). The proportion of the Kenyan population living below the poverty line increased from 52.3% in 1997 to an estimated 56% between 2000-2002 (Republic of Kenya, 2008b). The UNDP report (2006) indicates that 50 percent of Kenyans are living below poverty line. These are Kenyans without access to healthcare, education, shelter, water and proper nutrition among others.

In Kenya, restoring high agricultural growth is a prerequisite condition for achieving poverty reduction (Republic of Kenya, 2004). This is because, Kenya is predominantly an agricultural economy. Majority of Kenyans (80%) depend on agriculture as their source of livelihood (Republic of Kenya, 2000a).
In addition to this, 70% of Kenya's employment is in agriculture. Agricultural growth has however been well below potential in recent years. For example, between 1963—1980, the agricultural sector grew at a rate of 6% (Republic of Kenya, 2004). However, the growth of the agricultural sector declined at annual rate of 1.3 % between 1990 -2000. This has been attributed to traditional farming methods, low fertility, unpredictable weather conditions (drought and floods), poor and inadequate extension services, high cost of inputs, low quality of seeds and lack of credit facilities (Republic of Kenya, 2001). This has in turn led to food shortages, underemployment, low incomes from cash crops and poor nutritional status, which has increased poverty in Kenya. Therefore, quality farming stands out as one of the interventions, which will result in the highest reduction of poverty in rural areas (Kimenyi, 2002).

1.2 Millennium Villages Project (MVP) in Sauri

The Millennium village's concept was developed by a team of science experts at the Earth Institute at Columbia University and the UN Millennium Village Project (The MVP, 2005). The MVP aims to end rural poverty based on the Millennium Development goals. The core idea is that impoverished villages can escape from poverty if they are empowered with proven and powerful technologies to improve their farm productivity, health, education and access to markets. These investments are tailored to the specific conditions of a particular community like Sauri. In addition to this, they are designed to achieve the Millennium Development Goals within 5 years, and to bring about economic growth in a community within a period of ten years. At the same time, experts from the UN Millennium Project work closely with the government at the national level to ensure that the lessons and successes of the Millennium Village Project are fully incorporated into national - scale strategies.

Jeffrey Sachs (the Director of the Earth Institute at Columbia University and Special Advisor to the United Nations Secretary-General Kofi Annan on the MDGs) and colleagues from the UN Millennium project and the Earth Institute at Columbia village

Sauri is located in East Gem location, Yala Division, Siaya County.
met with Sauri residents in 2004 (Sachs, 2005). Sauri community and UN Millennium Project identified five interventions that would alleviate poverty in Sauri village. Jeffrey Sachs refers to these interventions as 'Sauri's Big Five' and they include; a) access to agricultural inputs, b) investments in basic health, c) investments in education, d) investments in power, transport and communications, and e) access to safe drinking water and sanitation.

In Kenya, two development strategies have been used in addressing issues of rural development since independence (Mbithi, 1974). These are commonly referred to as "Top - Down' and 'bottom - up' approach to development. The MVP is conceptually regarded as a bottom - up* development strategy. In this strategy, the development agency channels resources directly to the community in question. It also aims to reach and involve the vast majority of the rural population in the development process, by ensuring for example, local involvement of diverse community interest groups in rural development planning and implementation. On the other hand, the 'Top-Down' approach tends to ignore the community's needs, perceptions, resource constraints (Mbithi, 1974). In addition to this, it neglects special local characteristics such as unique resource endowments and diversity of physical, geographic, economic and social conditions. It views rural population as homogenous and does not devise programmes for specific categories within rural areas thus hindering penetration to the lower and greater strata of the society. This has limited the effectiveness of this strategy.

Funding for MVP comes from three major donors namely, Yara international. Millennium promise and Lenfest International. This external funding makes the model unduly dependent on foreign aid, a common complaint of Africans about western - inspired development projects (Jaizairy et al, 1992). This is because, such projects often collapse once donors withdraw funding.

The first Millennium Villages were started in Sauri, Kenya in June 2004 and Koraro, Ethiopia in February 2005 (MVP, 2005). Sauri, a rural community of 5,521 people is located in Siaya County. Information derived from the baseline survey, which was
conducted by the MVP from August 2004 to July 2005, indicated that, the area was characterized by hunger periods that occurred for 3-7 months annually. Further, it was found that, 64 per cent of the population was living in conditions below poverty line (income less than $ 1 per day). An estimated 25 per cent or more of the population was infected with HIV. The survey also showed that, malaria was a constant burden (over 43 per cent prevalence) and there was no health clinic or electricity. Residents were drinking water from unprotected springs and waterways. In addition to that, 42 per cent of children were underweight, signifying under-nutrition and chronic hunger. Only a small proportion of children attending school were provided with school lunches. This was the only meal that many children living in Sauri village could rely on each day. This was a clear indication that poverty was a serious problem in Sauri which needed to be addressed urgently.

1.3 Problem Statement
The MVP is an organization which has a broad mandate of restoring high agricultural growth that is crucial to poverty reduction in Sauri and other similar villages in Africa. To achieve this goal, the MVP has developed an agricultural strategy in Sauri. This strategy entails, providing farmers with fertilizer, seeds, extension services, storage facilities and market for their produce. In addition to this, the MVP with the help of Sauri residents has also improved the existing infrastructure (such as roads, health facilities, schools and electricity) in the area with an aim of increasing agricultural production. The community has made contribution in form of materials, skilled and unskilled labour, volunteer management as well as cash. It is important to note that, farmers access to infrastructure such as electricity makes investment in cold storage facilities, irrigation and processing of farm produce possible thus increasing their incomes and well-being. This study was guided by the following research questions:

1. How has the MVP agricultural strategy been conceptualized and implemented to alleviate poverty in Sauri Village?
2. To what extent have the local people been engaged in conceptualization and implementation of the MVP and how do they perceive the project?
3. What are the contributions of the MVP agricultural strategy in reducing poverty in Sauri village?
4. To what extent is the MVP appropriate in Kenya and is it sustainable?

1.4 Research Objectives
The main goal of this study was to understand the contributions of the MVP agricultural strategy to poverty reduction in Sauri village.

The specific objectives of this study were as follows;
1. To review how the MVP agricultural strategy has been conceptualized and implemented to alleviate poverty in Sauri village.
2. To examine how the local people have been engaged in the conceptualization and implementation of the MVP and how they perceive the project.
3. To establish the extent to which the MVP has contributed in reducing poverty among the local people in Sauri village.
4. To establish the appropriateness of the MVP agricultural strategy in Kenya and its sustainability.

1.5 Justification of the study
The MVP is an organization which holds that, restoring high agricultural growth is crucial to poverty reduction in Sauri and Africa at large. It has therefore, developed an agricultural strategy in Sauri in order to achieve this goal. The MVP provides farmers with fertilizer, seeds, extension services, storage facilities and market for their produce. The organization has also improved the existing infrastructure in the area with the aim on increasing agricultural production. Through this study the researcher was able to establish the contribution of the MVP agricultural strategy in increasing agricultural productivity and thus alleviating poverty in Sauri village.

Majority of Kenyan population is food insecure (Republic of Kenya, 2004). Estimates available indicate that about 50.6% of the population lacks access to adequate food and even the little they get, is of poor nutritional value and quality. The MVP Annual Report
of 2005 indicated that, Sauri was characterized by hunger periods that occurred for 3-7 months annually prior to the initiation of the MVP. The MVP has initiated various agricultural interventions in order to improve food security and nutrition among Sauri residents. Therefore, it was imperative for this study to establish the extent to which the MVP is an appropriate model for promoting agricultural output in Kenya.

In Kenya, over 80% of women live in rural areas and it is estimated that women contribute 70% of the labour force in the agricultural sector (ASPS, 2005). In many areas in the country, male migration has left women in charge of small scale farm activities. Typically, these women have less access to land, credit and extension services (Republic of Kenya, 2009). This has greatly lowered agricultural productivity in rural areas. Therefore, the release of women's productive potential is pivotal to breaking the cycle of poverty so that they can share fully in the benefits of development and in the products of their own labour. This study attempted to understand how the MVP strategy addressed the challenges faced by women to increase their agricultural productivity in Sauri.

The Government has identified agriculture as an important tool in creating employment (Republic of Kenya, 2000a). This is because, agriculture is the dominant sector of the economy. Therefore, the promotion of farming as a business is crucial in the creation of self-employment in rural areas. This can be achieved through the commercialization of the small scale agriculture and establishment of agribusiness development centres (Republic of Kenya, 2008a). Through this study the researcher, established the extent to which the MVP agricultural interventions contributed to employment creation in Sauri.

The lessons or successes learnt from this study could be useful to the MVP, Government and other development agencies determined to alleviate poverty in rural areas. The study's findings will inform all development agencies that attempt to promote rural development through expansion of agriculture.
1.6 Scope of the study and Limitations

Poverty is a broad area of study which cannot be exhausted within such a single study. Therefore, we have limited our study to one specific aspect of poverty. That is, the alleviation of poverty in Sauri through the MVP agricultural interventions.

The researcher is not fluent in Luo language which is spoken in Sauri village. To overcome this limitation, the researcher employed Luo speaking research assistants from Sauri village.

1.7 Definition of key terms

Poverty
This study adopted the material well being perception of poverty. According to this approach, the poor are defined as those members of society who are unable to afford minimum basic needs comprised of food and non-food items such as health, education, water, clothing and sanitation (UNESCO, 1998). Sauri residents can be termed as poor because they lacked both food and non-food items such as food, clothing, shelter, water, sanitation among others before the initiation of the MVP (MVP, 2005).

Poverty Reduction
This means improving the living conditions of poor people in Sauri village through various MVP agricultural interventions such as provision of fertilizer, improved seeds and improvement of infrastructure such as roads, health facilities, schools, storage facilities, market and energy.

Implementation
This refers to the carrying out or execution of various MVP agricultural interventions in Sauri village. Participation of the target community in the implementation of development projects such as the MVP ensures successful outcome of the activities undertaken as well as its sustainability (Oakley, 1995)
Millennium Villages Project

The Millennium Villages Project is an organization whose goal is to alleviate poverty in rural villages by investing in various sectors such as health, agriculture, education, roads, energy, storage facilities, markets, water, sanitation and the environment.
CHAPTER TWO
LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction
The main objective of this chapter is to review the available literature on poverty and agriculture in Kenya. The literature reviewed in this study has been presented thematically with the aim of drawing from other studies and where necessary identify gaps for further research needs. The chapter has been organized as follows; Definition of poverty; Historical context of Agriculture in Kenya; Constraints facing agricultural growth in rural areas; Participation of people in development activities; Theoretical framework.

2.2 Definition of poverty
No single definition can exhaustively capture all aspects of poverty. This is because poverty is perceived differently by different people, some limiting the term to mean a lack of material well being and others arguing that a lack of things like freedom, spiritual well-being, civil rights and nutrition must also contribute to the definition of poverty (Republic of Kenya, 2000b). However, Giddens (2001) identifies two different approaches to poverty which have been favoured by sociologists and researchers. These are namely "absolute poverty" and "relative poverty". The concept of absolute poverty is grounded in the idea of subsistence. This means that the poor lack fundamental requirements for human existence such as food, clothing, shelter, clothing and water. Those who use the concept of absolute poverty usually limit poverty to material deprivation. The concept of absolute poverty is also seen as universally applicable by its proponents. They argue that, any individual, anywhere in the world, can be said to live in poverty if he/she lacks food, clothing, shelter and water. One common technique for measuring absolute poverty is to determine a poverty line. At the global level, people who live on less than one dollar a day are said to live below poverty line (ILO, 2004).
Relative poverty relates poverty to the overall standard of living that prevails in a particular society. Relative poverty means that some people are poorer than others. It becomes recognized as a real problem when the difference between the richest and poorest is intolerable in the sense that the poor, while not actually destitute or starving, are nevertheless deprived of many of the goods and services which others take for granted (Kiros, 1985). Advocates of the concept of relative poverty hold that poverty is culturally defined and should not be measured according to some universal standard of deprivation (Haralambos and Holborn, 2000). They argue that it is wrong to assume that human needs are everywhere identical. This is because human needs differ both within and across societies. For example, in most industrialized countries running water, flush toilets and the regular consumption of fruits and vegetables are regarded as basic necessities for a healthy life. Therefore people who live without them could be said to live in poverty. However, in developed countries, such items are not standard among the bulk of the population and it would not make sense to measure poverty according to their absence or presence.

This study adopted the material well being perception of poverty. According to this approach, the poor are defined as those members of society who are unable to afford minimum basic human needs, comprised of food and non-food items (UNESCO, 1998). Non-food items include, clothing, shelter, education, water and sanitation. However, there are several complications in determining the minimum requirements and the amounts of money necessary to meet these requirements.

2.3 Historical context of Agriculture in Kenya
The agricultural sector is a key contributory factor to the economic growth as reflected by its share in the Gross Domestic Product (GDP), job creation, food security, and industrial development. It directly contributes 26% of the GDP and a further 27% through linkages with manufacturing, distribution and other service related sectors (Republic of Kenya, 2010). It is estimated that 45% of Government revenue is derived from agriculture, while the sub-sector contributes over 75% of industrial raw materials and 60% of the export earnings. The sector is also the largest employer in the economy, accounting for 60% of
the total employment. Furthermore, about 80% of the Kenyan population live in rural areas and they derive their livelihoods mainly from agricultural activities (Republic of Kenya, 2004). Therefore, the agricultural sector plays an important role in ensuring food security, employment creation, poverty reduction, and linkages with other sectors. In this regard the sector is expected to play a significant role towards achievement of the targets in the vision 2030.

The agricultural sector in Kenya achieved remarkable growth of 6% per annum in the first two decades after independence (Republic of Kenya, 2009). This resulted to 7% growth in the national economy. During this period, small-scale agriculture grew rapidly due to factors such as ample land, better use of technology and the Government's support of extension and research. Many institutions such as farmers' cooperatives, agricultural inputs, marketing, credit and agro-processing were established and supported by the Government. Nyagito (1999) argues that, this tremendous progress was achieved by the Government through increasing its participation in agricultural production. This was facilitated by various existing policies as contained in the Swynerton Plan of 1974 that allowed the government to directly control and dominate agricultural production, marketing and investment activities. Other policies were those that allowed private investors and other organizations to play a major role in production, marketing and investment in the agricultural sector. These policies also removed restrictions which had hindered Africans to grow cash crops.

At independence, the existing agricultural research system was mainly catering for the needs of the large-scale farmers. However, after independence, it started addressing needs of small-scale farmers' thus contributing to high agricultural productivity. This led to a corresponding increase in research facilities through establishment of a countrywide network of laboratories and field stations. The functions of research were also transferred from what was formerly East African Community, then to the Ministry of Agriculture and Rural Development and later to KARI. This consolidation aimed to increase the research systems ability to respond to the changing needs of the agricultural sector and improve the agricultural productivity.
From the period 1980-1990, agricultural production started to decrease despite the increase in population. This is because the sector recorded an average annual growth rate of 3.5%. The main reasons for this decline were mismanagement and collapse of agricultural institutions, negligence of agricultural extension and research as well as the Government's low budgetary allocations in agriculture. The allocations declined from 5.9% in the total annual budget of the first two decades of independence to 1.9% in the 2003/2004 financial year (Republic of Kenya, 2004). Structural Adjustment Programmes (SAPS) prescribed by the Bretton Woods Institutions also lowered the Government's budget in agriculture to only 2% (Republic of Kenya, 2009). Since 1963, the extension services were provided largely by the Government, until 1980's when extension services started being decentralized (Nyambiro et al., 2005). In this decentralization the Government allowed other institutions to provide extension services. Despite the decentralization of extension services by the government, little has been seen in terms of increased production. This is because extension services continue to face problems such as poor supervision, declining budgetary allocations, poor infrastructure, inadequate extension workers and poor linkages between extension systems and research stations.

The Agricultural sector performed poorly in the 1990's, registering one of the lowest growth in the world. During 1990-2000, the growth in the agricultural sector further declined at annual average rate of 1.3%, compared with 3.2% for Tanzania and 3.7% for Uganda, 4.1% China and 3.1% India (Republic of Kenya, 2004). The NARC Government developed and launched the ERS (Economy Recovery Strategy for Employment and Wealth creation). This was a five-year plan which elaborated the role of agriculture and recognized that for the economy to grow and create wealth and employment, agriculture has to grow even faster. Based on this, the NARC Government revived agricultural extension services and institutions. The Government also increased agricultural budgetary allocation to an average of 4.5% of the national budget in 2003. In 2004, the Government developed and launched SRA (Strategy for Revitalizing Agriculture to build and elaborate on the ERS with respect to agriculture). The SRA set the target of agricultural growth at an average annual rate of 3.1%. However, agricultural growth surpassed the SRA target at an average of 5.2% reaching a high of 6.4% in 2006.
However, in 2008 the agricultural sector grew by negative 2.5%. This was due to post-election violence following the disputed 2007 general elections and increased food and fuel prices worldwide. This performance was extremely poor compared to other periods in the history of agriculture in Kenya. This low agricultural productivity has contributed to food insecurity, unemployment and poverty among Kenyans.

2.4 Constraints facing Agricultural growth in Kenya

Factors that continue to constrain the growth of agriculture are many and varied but the main ones are identified and discussed here:

Rural infrastructure has suffered from decades of under-investment (Republic of Kenya, 2010). Poor road network, inadequate rural electrification, limited telecommunications systems and other key physical infrastructure have affected farming by increasing the cost of production, transportation and marketing of farm produce (Republic of Kenya, 2009). This increases the cost of agricultural inputs and products thus reducing the farmer's ability to compete in both the local and international markets. Agricultural production is particularly affected during the wet seasons when increased output is accompanied by reduced access to markets due to poor transport systems. This leads to on-farm wastage thus impoverishing the farmers.

Access to education is crucial if high agricultural growth is to be realized in rural areas. This is because illiteracy limits farmers from using modern science and technology in agricultural production (Narayan et al, 2000). However, majority of small-scale farmers in Kenya are semi-literate and lack capacities to engage in commercialized farming (Republic of Kenya, 2007). This has constrained efforts for increasing agricultural productivity.

The main factor which small-scale farmers, point out as causing low productivity in agriculture is inadequate credit to finance farm inputs and capital investment (Republic of Kenya, 2004). Farming is deemed highly risky by the formal banking sector and as a
result of this, it receives little attention. Without credit, most poor farmers are unable to finance inputs and capital investment because the cost tends to be high. This has lead to low application and adulteration of the inputs thus reducing agricultural productivity. Although the government has put in place the Agricultural Finance Corporation as a government institution to provide farmers with credit facilities, the institution lacks capacity for sufficient funding to serve majority of the poor rural farmers (Republic of Kenya, 2003). A number of micro-finance institutions are operating, but they tend to charge high interest rates, reach only a small proportion of smallholder farmers, and provide short-term credit (Republic of Kenya, 2009). Access to inputs and credit are very critical to increasing productivity and promoting farming as a business.

Human health is important in the agricultural sector, as it affects the labour force involved in agricultural activities. Diseases such as malaria and HIV/AIDS have contributed greatly to low agricultural productivity in Kenya (Republic of Kenya, 2010). The rapid spread of these diseases and the corresponding deaths have resulted in the loss of productive agricultural personnel and manual labour force required in the farms (Republic of Kenya, 2008b).

Frequent droughts and floods have increased in Kenya thus resulting in failure of crops and loss of livestock (Republic of Kenya, 2004). This is mainly due to deforestation which has reduced Kenya’s national Forest cover from 16% to less than 2% (Forests and Development, 2003). Deforestation is a major threat to the environment because forests act as catchment areas. Without rain no farming can take place because Kenya depends on rain-fed agriculture for production of most crops (Republic of Kenya, 2007).

Gender imbalance is another constraint to high agricultural growth (PEU/PEC, 2001). Women in Kenya face discrimination before the law and suffer from lack of legal protection, notably in their rights and control over productive assets such as land. For example, widowed and married women have traditional rights to inherit land largely for use but they do not have any legal title deeds over such land and in many cases loose access to it in circumstances of family disputes. This denies them access to credit which
is required for buying farm inputs and thus increasing agricultural productivity. Despite the fact women perform that 50% of all agricultural activities and all domestic tasks, men still control women's labour through marriage (Republic of Kenya, 2001). This is because, men carry out decision making on household expenditures. This constrains women's ability to make strategic investment decisions which can increase agricultural productivity. This study investigated the impact of the MVP on Gender imbalance in Sauri.

Poor governance and corruption in key institutions supporting agriculture has contributed greatly to low agricultural productivity. Mismanagement and collapse of agro-industries such as Kenya Creameries Co-operative, Kenya Meat Commission, National Cereals and Produce Board and Agricultural Institutions (such as Agricultural Finance Corporation, Agricultural Development Corporations among others) have contributed to poor marketing of agricultural produce as well as lack of credit for farmers thus leading to low incomes. This has therefore acted as a disincentive to farmers thus impoverishing many households.

Inadequate markets and marketing infrastructure has contributed greatly to low agricultural productivity (PEU/PEC, 2001). Majority of small-scale farmers do not have well-functioning marketing channels for most of their farm produce. Many farmers lack organized farmer-lead organizations to take care of marketing of their produce due to the mismanagement and collapse of agricultural institutions (Republic of Kenya, 2001). Most Kenyan farmers also lack skills and investment support to undertake value addition of their farm produce (Republic of Kenya, 2007). Consequently, most of the produce is sold in raw form leading to low margins and opportunity for middlemen to exploit the poor farmers. In this regard, the marketing of agricultural produce and products is critical to increasing agricultural productivity and commercialization of the enterprise so that farming is perceived as a business.
Fertility in Kenya has been declining since the mid 1980s but still stands at a high rate of about 4.2 children per woman (Republic of Kenya, 2001). The rising population density has contributed to the subdivision of land to uneconomically small units, the reduction of the fallow periods and continuous cultivation (Republic of Kenya, 2008b). This has resulted to rapid depletion of soil nutrients, declining of yields and environmental degradation (Republic of Kenya, 2004). Therefore, farmers must adopt environmental conservation and farming practices that helps to restore soil fertility in order to increase agricultural productivity.

In Kenya, 76% of poor households have little or no extension services of any kind (Republic of Kenya, 2003). Through extension services farmers acquire adequate knowledge on contemporary technology and farming techniques which are crucial for increasing agricultural productivity. The decline of extension services has been due to both budgetary constraints coupled with widespread misuse of even the little resources that were available. For example, in the first two decades after independence (1963-1983) resources allocated to extension services were about 5.9 % of the total government annual budget. This declined steadily to about 1.7 % in financial year 2003 - 2004 (Republic of Kenya, 2004). With the exception of a few, most agricultural training institutions (such as tertiary and farmers training colleges) have been run down and some are not operational, largely because of budgetary constraints and mismanagement (Republic of Kenya, 2009). This has contributed to incompetent and poor quality of extension staff that generally lacks adequate knowledge on contemporary technology, farming practices and research information.

2.5 People's Participation in Development Projects

Participation has been variously defined to mean different things in different contexts by different organizations and scholars, based on their experiences and policies. The World Bank defines participation as "a process through which stakeholder's influence and share control over their own development initiatives, decisions, and resources which affects them" (World Bank, 1994). Chitere (1999:3) defines what he terms as popular participation in development as "the active involvement of a broad mass of people in the
choice, execution and evaluation of programmes designed to bring about a significant upward movement in their levels of living. UNRISD’s Popular Participation Programmes in the early 1980s defined participation as "the organized effort to increase control over resources and regulative institutions in a given social situation on the part of groups or movements hitherto excluded from such control" (Berger 1996 cited in Rudqvist and Wooford:11). These definitions imply that whatever the purpose or ultimate goal of the project, people's interests, needs and wishes must be allowed to underpin the key decisions and actions relating to the project.

According to various scholars there are many benefits associated with people's participation in development activities. For Oakley (1995) participation implies greater chance that resources available for development will be used more efficiently. It also minimizes possible misunderstanding between members of various groups thus less time and energy is wasted in convincing people about projects. Participation makes projects more effective as instruments of development. Often projects are externally driven, but participation allows people to have a voice in determining objectives, contribute resources and knowledge, and help in administration. This is crucial because, people tend to resist innovations or measures that are imposed on them. Mulwa (2010) argues that, community participation also enhances people’s political awareness as they learn to voice their views and concerns. It is therefore, a training ground for democratic practices in society.

Oakley's views are also supported by Chitere (1999) who argues that local participation is needed because it permits mobilization of local resources and their use in development. Locally available material resources such as oxen power, tones, bricks, local labour and skills can be mobilized and used in improving conditions of the community. These resources supplement the contribution made by change agents which are often scarce. Apart from mobilization and use of their own resources, people need to have a say on the allocation and use of resources of change agents in their community. Peter Oakley also argues that, participation ensures ownership and sustainability of projects. When
participation is high, communities will ensure continuity of projects even" after the project has ended since they have invested in it.

Participation permits growth in local capacity, which develops out of the establishment of a partnership between development agencies and the community (Mulwa, 2010:161). Eade and Williams (1995:9-24) defines capacity building as 'the process of strengthening people's ability and capability to determine their own values and priorities, to organize themselves to action on these priorities in life. It is about women and men becoming empowered to bring about positive changes in their lives. It is about personal growth, nourished by public action. It is about both the process and outcome of challenging poverty, oppression and discrimination, and about the realization of human potential to cause justice. Above all, it is about enabling people to engage in the process of transforming their own lives and transforming their own societies'. This definition clearly indicates that deciding and doing things for people deprives them of the chance to learn and gain experience by making such decisions.

Participation can lead to better targeting of benefits to the poorest via the identification of key stakeholders who will be most affected by the activities. The MVP identified vulnerable community members through Sauri residents during its initial meeting in 2005. These vulnerable community members were given things such as toilet slabs and ventilation pipes, water tanks, iron sheets and nails for constructing houses. The MVP continued giving these vulnerable residents farm subsidies long after it had stopped giving other community members in 2007.

Participation can often help to improve the status of women by providing the opportunity for them to play a part in development. Through participation in the MVP, women were elected to leadership positions, trained various skills, included in various committees and houses build for widows (MVP, 2008). Mulwa (2010) argues that, a weakened sense of community solidarity is restored through participatory development practices. Modernization and urbanization processes have tended to break down social bonding among families replacing them with competition and individualism. Community
responsibility over its own destiny creates an opportunity to restore social fabric that makes a community such as kinship and extended family values.

Community participation checks on the damaging effects of handout delivery approach whereby 'things' are done for people. For example, the MVP protected springs, murramed roads, build a health clinic among others. Without community participation, this is likely to go to waste as people will soon resign from responsibility over what has been imposed on them (Mulwa, 2010). He further argues that, there is better sectoral coordination where communities determine their priorities. The demand-driven approach ensures that no sector is viewed to be more important than the other. Chances are minimized for the overlap of services from various agencies as dialogue is optimized. Furthermore, as communities take control over the services rendered by outsiders, there is bound to be better coordination and harmony.

According to Mulwa (2010), arguments repeatedly given by change agents for failure to fully involve beneficiary communities in the planning and management of programmes include; the assumption that the illiterate beneficiary communities cannot possibly follow the proceedings of participatory planning because they are 'too technical' and therefore cannot possibly make any meaningful contribution. Change agents also argue that, initial programme allocations do not normally cater for the participation of beneficiary communities therefore, it would be practically impossible to accommodate them throughout all stages of participatory development process. However Mulwa (2010:162) argues that, community participation is crucial in development activities because it instills local responsibility over the future of projects beyond the funding cycle. Sustainability is assured where there is true local participation building a strong sense of local ownership.

In Kenya, two approaches namely directive and non-directive approaches are often used in agricultural programmes. In the directive approach a change agent formulates programmes which he perceives to benefit the recipients (Mbithi, 1974). There is often no participation by the target group in the formulation of the programmes. This is
because their views are rarely taken into account (Gwyne and John, 1982). This fact tends to mean that such programmes are not always fully adapted to the local conditions of their recipients. The agent assumes a dominant role not only in the formulation of the programmes but also in their implementation, and tends to be relatively formal in the way he relates to the intended recipients of his programmes. According to Ravallion and Chen (2003), this is likely to lead to disinterest in project activity on the part of communities hence the high failure of such development projects.

The non-directive approach seeks to develop the capacity of the target group permitting them to actively participate in identifying their problems and solving them (Gwyne and John, 1982). Conceptually, the MVP is regarded as a 'bottom-up' development strategy (MVP, 2005). In this strategy, the development agency channels resources directly to the community in question. It also aims to reach and involve the vast majority of the rural population in the development process, by ensuring for example, local involvement of diverse community interest groups in rural development planning and implementation.

Therefore this study investigated the approach used by the MVP in the planning and implementing of its agricultural strategy.

It is important to note that, these approaches are not mutually exclusive. This is because, an agent may rely on one approach in one situation, but may find it exceedingly difficult to achieve his aim in a different one if he does not move forward toward the other method. A move from directive to non-directive approach is unavoidable in a situation where there is apathy or resistance to programmes.

2.6 Theoretical Framework

The following theories have been used to guide this study. These theories are;

1) The Situational Constraints (1967)/Culture of Poverty 1951
2) piffusion Model of innovation approach/Communication process model.
The Situational Constraints and the Culture of Poverty are theories which explain the causes of poverty among members of a society. Note that, the Situational Constraints theory is regarded as a major criticism of the culture of poverty theory. Liebow (1967) argues that, situational constraints such as age, lack of skills, poor health, low income, disability, lack of employment, underemployment contribute to poverty among the poor. However, Lewis contradicts him by citing the 'culture of poverty' as a factor which tends to perpetuate poverty among the poor. He argues that this culture consists of values and attitudes which hinder the poor from taking full advantage of changing conditions or increased opportunities which may occur in their lifetime.

On the other hand, the diffusion model shows the way social change could be brought about in a given community through adoption of innovations by the members of the community. The model emphasizes adoption of innovations by individual members of communities. The discussion of the model is justified in view of the fact that community work calls for assistance not only of groups and communities, but also their individual members. The communication model helps us to understand communication process. The way messages are designed and delivered is vital if the required changes or impacts are to be realized. Considering the nature of the audience and their needs is also key if communication must be effective. The communication model in this study has been used to help us understand how individual members of Sauri community adopted the MVP interventions which were crucial to bringing about the required change.

2.6.1 Situational constraints by Elliot Liebow (1967)/Culture of Poverty (1951)

In his classic study, *Tally's corner*, Elliot Liebow strongly supported situational constraints thesis (Haralambos and Horlbon, 2000: 321). He argued that, the poor are constrained by the facts of their situation such as low income, unemployment, working part-time, employed in low-paid, unskilled, dead-end jobs such as manual labourers, bus boys, janitors etc. This is because they lack necessary skills, qualifications and work experience, which would enable them to get a higher pay and status. Liebow's view is consistent with that of Kiros (19'85) who argues that, the major cause of poverty in rural areas is the absence of lucrative employment. This is especially so in Africa where
agriculture is organized in *family units* and agricultural productivity is low. He argues that small-scale farmers constitute about 75% of the agriculture as well as rural population. These small-scale farmers are not normally hirers of labour on a significant scale. This is because they largely depend on family labour thus, making wage employment in agriculture very limited in many rural areas like Sauri village. Therefore, lack of employment implies lack of income necessary for meeting the basic needs such as food, shelter, clothing, education and medical services. Note that, industrial location and investment strategy by governments and private investors are and have always been urban-biased due to poor infrastructure (Kiros, 1985). As a result of this, employment generation in rural areas like Sauri village is likely to be low. This implies that, those who wish to supplement their limited farm income with off-farm employment are unable to do so. This contributes to poverty in their households.

According to the Republic of Kenya (2001), unemployment and low wages were singled out by communities in both urban and rural areas as a cause of poverty. Communities explained that although their children had completed schooling, many had failed to secure meaningful employment due to lack of opportunities and skills for gainful employment and lack of crucial resources for production such as electricity. Lack of value addition is another factor which has contributed to low wages in Sauri village as the researcher observed during the study. In Agriculture, value addition is important in determining the competitiveness of the agricultural produce in the local as well as international markets. Value addition includes processing, branding, quality certification, as well as farm level quality improvements that the market can value. However, most Sauri farmers lack skills and investment support to undertake value addition of their farm produce. In addition to this, majority of these respondents do not have access to electricity hence failure to engage in value addition. As a result of this, most of the produce is sold in raw form leading to low incomes (Republic of Kenya, 2009)

Lewis disagrees with Liebow's theory to a large extent. He argues that the culture of poverty is a design for living which is transmitted from one generation to the next. As such, the culture of poverty tends to perpetuate poverty, since its characteristics can be
Lewis further argues that, the culture of poverty is largely insulated from norms and values of the mainstream culture of society (Hughes et al, 2002:189). The poor, to a large degree, therefore live in a world of their own. However, the Situational Constraints thesis attacks this argument by suggesting that, the poor share the values of society as a whole, the only difference being that they are unable to translate many of those values into reality due to poverty. The Situational Constraints argument suggests that once the constraints of poverty are removed, the poor will have no difficulty adopting mainstream behavior patterns and seizing available opportunities.

Once established, the culture of poverty tends to perpetuate itself from generation to generation because of its effects on children. Children of poor people tend to absorb the basic values and attitudes of their subculture thus being unable to change their condition. However in Sauri village, the MVP directed poverty alleviation efforts towards the improvement of people's material well-being not culture. This approach is inconsistent with Lewis theory of the Culture of poverty, where the poor develop a poverty oriented culture which hinders them from changing their circumstances.

According to Lewis the poor unlike the middle class are unable to defer gratification and this has contributed greatly to poverty among them (Haralambos and Holborn, 2000). However, Liebow argues that, the inability of the poor to defer gratification is not due to their culture but simply the fact that they have no resources to defer. On the other hand, the middle-class individuals are able to save and invest in the future because they have resources. In Sauri village, the poor were unable to save and invest prior to the MVP due to their low incomes. Lack farm inputs such as fertilizer and improved seeds had contributed to low agricultural productivity and low incomes in the area.

Lewis argues that the culture of poverty theory best describes and explains the situation of the poor in many developing countries. He further states that, despite the fact that the culture of poverty is common in these societies not everyone adopts it. He states that, in developed countries, the culture of poverty is non-existent, weakly developed or affects a fairly small minority. Harrington (1963) contradicts Lewis by arguing that, the culture of
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poverty can be applied to most of the poor industrial societies. Lewis further argues that the poor do join trade unions and other organizations due to their 'culture'. Therefore this has weakened the potential power of the poor. However, research conducted in Blackston (a pseudonym for a low-income Black American Community) by Charles and Valentine (1970) indicated a great deal of participation of poor people in the local government, welfare institutions, block associations and community council thus contradicting Lewis views.

A compromise between the extremes of Liebow and Lewis is provided by Ulf Hannerz (1969). Hannerz argues that situational constraints are more powerful in directing the behaviour of the poor than cultural patterns. However, the behaviour of the poor contains a cultural component which may hinder change once the situational constraints are removed. Hannerz argues that this hindrance might be temporary. In Kenya, negative and destructive cultural values such polygamy, witchcraft, gender imbalance, wife inheritance and child labour are some of factors which hamper poverty alleviation (PEU/PEC, 2001). Therefore, apart from situational constraints, negative and destructive cultural values might hamper the alleviation of poverty in Sauri village despite the MVP interventions. The Republic of Kenya (2000) also cite factors such bad governance, land issues, inadequate infrastructure and HIV/AIDS as the causes of poverty in Kenya (Republic of Kenya, 2000). Unless these factors are addressed poverty will continue to be a serious challenge in many rural areas like Sauri village.

2.6.2 Diffusion of Innovations Model/Communication Process Model
An innovation "is an idea, method or object which is regarded as new by an individual but which is not always the result of recent research" (Hawkins and Ban 1998:96). The Diffusion Innovations model emphasizes adoption of innovations by individual members of communities. According to this model as noted by Schonherr and Mbugua (1973), innovations could be introduced to a few members of a social unit. In our study a social unit is Sauri village where the MyP introduced various interventions with the aim of increasing agricultural productivity in the area. From various committee members, Hage elders MVP staff and the chief, innovations diffused, trickled down or were
communicated to the other members in the community. Factors which influence the diffusion process include, the innovation decision process, personal characteristics of adopters, attributes of an innovation, and the process of communication of innovations to their would be adopters (Rogers and Shoemaker, 1971, and Lionberger and Gwin, 1982).

**Innovation decision process** is a series of mental stages through which an individual passes from becoming aware of a new idea to the time it is adopted (Hawkins and Ban, 1998). The stages are: "awareness" during which an individual has heard of the new idea; "interest" stage during which he or she seeks more information about the new idea; "persuasion" stage during which the individual compares the pros and cons of the idea based on information collected at the second stage; "trial" stage during which he or she tries out the idea on a small scale where possible. Finally, "adoption" stage during which the individual opts to use the new idea as part and parcel of his or her ongoing operations. An idea which is adopted can also be discontinued depending on the individual's experiences with it. This is called discontinuance.

Sauri community became aware of the MVP interventions during the initial meeting with MVP officials at a Chief's Baraza in the village. Residents were provided with free farm inputs and training in modern farm techniques which were in accessible prior to initiation of the MVP. This widely led to the adoption of the agricultural interventions without any persuasion from the MVP. The MVP did not allow Sauri farmers to try these agricultural interventions on a small scale thus hindering them from passing through the trial stage. Note that, Sauri residents are likely to discontinue the interventions once the MVP phases out due to lack of funds. The study concluded that the adoption of the MVP interventions in Sauri village did not follow Hawkins and Ban sequence. Research studies in the United States of America (U.S.A.) have demonstrated clearly that the adoption process may not always follow this sequence in practice. For example, interest may precede awareness when farmers are looking for a method to control what for them is a new and unknown crop disease. Research studies in the U.S.A also indicate that, it takes four
years on average for majority of Mid-Western farmers to adopt recommended practices. Therefore, it is crucial for research workers to find out why this happens.

**Personal characteristics of adopters** also influence adoption as some individuals are found to adopt innovations faster than others. They may be willing to take risks and are more open to new ideas. Rogers and Shoemaker (1971) note that at one end of the scale are "innovators" (2.5%) anxious to try out new ideas. They are often willing to take risk and have resources that enable them to adopt new ideas. They would often travel far to look for new ideas. The next and more important category is that of "early adopters" (13.5%) who usually have more education and resources to enable them adopt new ideas introduced. At the other hand end of the scale are the "laggards" (16.0%) who are the last members of a community to adopt a new idea. They are usually less educated with fewer resources for adoption of new ideas. In between these polar categories are the "early majority" (34.0%) and "late majority" (34.0%).

In Sauri village, majority of residents adopted the MVP interventions almost at the same pace regardless of their social attributes such as age, education, marital status and economic status. This is in agreement with Hawkins and Ban (1998) who indicated that, social attributes such as age, education, health status among others appears to make little difference in the adoption of innovation in industrialized and less industrialized countries. These studies further indicate that people who have adopted many innovations have frequent contact with change agents (Hawkins and Ban, 1998). Sauri residents adopted modern farming techniques because they were often in frequent contact with the MVP agricultural extension officers who visited them in their farms. The MVP also established demonstration plots where Sauri residents were taught modern farming techniques.

Attributes of an innovation are "relative advantage" which is the degree to which an idea is perceived as being better than the old idea it replaces, for example, in terms of economic profitability or savings in labour. "Compatibility" refers to the degree to which the innovation is consistent with the old idea. "Divisibility" has to do with the extent to which the new idea can be split in smaller packages which can be easily tried. Lastly,
"observability" which refers to the degree to which the results of an innovation can be easier to demonstrate. Rogers and Shoemaker indicate that innovations which are perceived as relatively advantageous, are compatible with known practices, are divisible, and whose results can be observed embody a high likelihood of adoption. Agriculture is the source of livelihood of Sauri residents. The modern farming methods introduced by the MVP were viewed by Sauri farmers to be better than the traditional farming techniques they were using in terms of economic profitability. Through the MVP Sauri farmers could access farm inputs and extension officers thus increasing agricultural productivity and incomes. This widely led to the adoption of the MVP interventions in Sauri village.

The process of communication of innovations is crucial to involving more people in agricultural programmes. In this study the researcher discusses the Education Fora as a communication process Model. Roling and Ascroft (1971) argue that communication is the transmission of information or messages from a given source to a given receiver. In our study, the source is the MVP and the farmers in Sauri are the receiver. Communication of information from the MVP to Sauri farmers was crucial to the adoption of the MVP's agricultural interventions in Sauri. The process of communication of information is affected by factors which include; the type of media used, target population, opinion leadership, channels used, language used and the outlook of the agent (Chitere, 1999). The type of media used could be mass or interpersonal. Mass media (impersonal media) include radio, television, Printed matter and films. Mass media sources permit many receivers to be reached at a time and at a lower cost per receiver. However, its disadvantage is that it permits only one way flow of information. Feedback is realized after a time of lapse or it is not realized. For example, people may switch off the radio or talk while the radio is on thus failing to receive the message on time.

According to Hawkins and Ban (1998), radio is a more important mass media than television for farmers in third world countries. For example, in Sauri village, majority of respondents own small radios but not television. However, agricultural radio programmes
should be broadcaster at times, to the \( f_{ic} \), \( o_i \), \( jH \) printed in the language. Impersonal media to \( c_0 \) been due to the fact, to communicate with the mass people to adopt innovations. (Hawk and *

Interpersonal media is face-to-face. This could be informal group discussions of interpersonal sources, that they permit two-way, higher cost in terms of that they permit two-way, and clarify issues to tww clients through demonstrations of interpersonal sources, mainly in formal, to mass people to adopt innovations. (Hawk and *

Target Papuan

This would permit \( f_{in} \), Elation of friendship and referents, which resources are crucial in every group, because they widely led to adoption. MVP these situational factors

Opinion leaders to be identified to members of community influence other members to
should be broadcasted at times when farmers can listen. This is usually early in the morning before going to the fields or in the evenings after work. Leaflets should be printed in the language that the target group understands. The MVP did not use impersonal media to communicate its interventions to Sauri community. This could have been due to the fact that, the mass media sources merely create awareness and rarely lead people to adopt innovations (Hawkins and Ban, 1998).

Interpersonal media is face-to-face communication between change agent and their clients. This could be mainly in the form of agents visits to clients and vice versa, informal group discussions, demonstrations and lectures among others. The disadvantage of interpersonal sources is that they permit a few clients to be reached at a time and at a higher cost in terms of manpower and travel. The advantage of interpersonal sources is that they permit two-way flow of information. This enables sources to persuade, explain and clarify issues to their clients thus making feedback possible. The MVP mainly used Chief barazas which is an interpersonal media to communicate its agricultural interventions to Sauri residents. Others interpersonal media used included visiting farmers in their farms and using demonstration plots. Interpersonal media was effective because it widely led to the adoption of agricultural interventions in Sauri village.

**Target Population** is another factor which affects the process of communication. In both mass and interpersonal sources of information the target population needs to be known. This would permit formulation of appropriate messages for each affected group. Lionberger and Gwin (1982) argues that situational factors such as family background, friendship and reference groups, religious affiliation, belief system, and physical resources are crucial because they influence the ability of local people to adopt innovations. However, the MVP interventions targeted all Sauri residents regardless of these situational factors.

**Opinion leaders** need to be identified and made use of in the introduction of innovations to members of communities. Opinion leaders are members of small social groups who influence other members of their group (Hawkins and Ban, 1998:107). Formal leaders,
such as a village headman or tribal chief, religious leaders, politicians, musicians among
others also can have considerable influence. Messages are usually received by the
opinion leaders and passed on to other members of the community. The leaders could
distort and misinterpret the messages if they are by-passed. In Sauri, the MVP used the
chief, assistant chief, village elders, and committee leaders who had been elected by the
community to pass messages to community members. Some of the MVP messages were
distorted and misinterpreted leading to anger and bitterness among members of Sauri
village. For example, residents accused the MVP of giving them farm inputs for 2 years
instead of 5 years as they had been told by opinion leaders.

Language used in transmission of information may hamper communication. The source
and receiver need to communicate in a language they both understand. Communication
becomes difficult if they do not speak the same language. This makes the adoption of
innovations difficult because the change agent will not be able to persuade, explain and
clarify issues to their clients. The MVP staff used to communicate in Luo which is the
local language in Sauri as well as Kiswahili.

Outlook of the agent especially in interpersonal communication needs to be appropriate
to the situation. For example, communication may not be effective in situation where
the female agent has put on a short dress which hinders her from demonstrating the desired
actions on a clients' farm.

The communication model is widely used in extension programmes in Third World
countries (Chitere, 1999). However, the model has been criticized for failing to involve
more people in programmes. This is because innovations rarely diffuse to the rest of the
members of a community. Schonherr and Mbugua (1973) voice the tendency of agents
relying on the model as a guide to concentrate on a few literate and economically 'well
of members of communities. This is presumably so owing to the fact that such agents
tend to be directive rather than non-directive. Sauri residents accused the MVP of
favouring rich and literate farmers as well as committee leaders at the expense other
community members. This had contributed greatly to division within Sauri village.
2.7 Conceptual model

A conceptual model is an illustration of key variables and their interconnection. A model therefore is an abstraction from reality that orders and simplifies our view of a reality by representing its essential characteristics.

The conceptual model in figure 1.0 indicates the role of the MVP in the alleviation of poverty in Sauri through its agricultural interventions. Prior to the initiation of the MVP, social, political, economic and cultural constraints were contributing to low agricultural productivity in Sauri village. To increase agricultural productivity, the MVP introduced various interventions in Sauri such as providing farmers with agricultural extension services, capacity building, provision of farm inputs, improvement of infrastructure (such as roads, water, sanitation, education and health facilities, sanitation,"energy, storage facilities) and establishing cooperatives. The participation of Sauri Community was crucial to the achievement of the MVP objectives. The MVP desired change in Sauri village entailed; increased agricultural productivity, improved livelihoods and capacity building.
MVP agricultural interventions activities

- Provision of agricultural extension services
- Provision of farm inputs
- Capacity building
- Linkage to NCPB
- Linkage to financial institutions
- Formation of cooperatives
- Improvement of infrastructure
- Marketing of farm produce

Source: (Researcher 2012)
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
In this section, the study's research design has been discussed. Research design provides a framework for the collection and analysis of data and subsequently indicates which research methods are appropriate (Nachmias and Nachmias, 1996). There are two different strategies in research, the one using quantitative methodology and the other using qualitative methodology. Quantitative research uses a language of variables, hypothesis, units of analysis, statistics and causal explanations (Neuman, 1994). On the other hand qualitative research tends to be in form of words, sentences, paragraphs rather than numbers.

This study attempted an experimental design in a survey research which is a quantitative research methodology. The experimental design which has been adopted is known as the static group comparison (Singleton, 1998). A static group comparison consists of two comparable groups: an experimental group and a control group. Sauri was the experimental group which had been subjected to the MVP interventions. Lundha was the control group which had not been subjected to the MVP interventions.

Qualitative research was also conducted through Key informants and Focus Group Discussions to complement quantitative research. The components of this chapter include: the research site, sources of data, units of analysis and units of observation, sampling design and data analysis which have been discussed.

3.2 Research site
The proposed study was conducted in Sauri and Lundha village. Sauri village is located in East Gem location, Yala division and in Siaya County. Sauri village is the experimental group which has been subjected to the MVP interventions. A baseline survey that was conducted by the MVP before its initiation in 2005 indicated that Sauri Ullage had an estimated population of 5521 (MVP, 2005). This survey further revealed
that, Sauri village was characterized by low agricultural productivity prior to the
initiation of the MVP in 2005. Hunger periods used to occur for 3-7 months annually.
Villagers had limited access to medical care and could not afford to buy medicines.
Springs were not easily accessible to the majority because residents had to walk an
average of 300 meters to a water source. Some springs were surrounded by very steep
slopes which was a burden to reach while carrying a 20 litre container. The dirt roads
accessing the village were impassible during the rainy reason. This was a hindrance to the
transportation of agricultural production thus denying farmers' income.

To assess the impact of the MVP interventions in Sauri village the researcher chose
Lundha village as the control group. Lundha village is located in North Gem location,
Yala division and in Siaya County. It is situated 15km from Sauri and it has a population
of 3000. The researcher chose Lundha village because it was comparable to Sauri village
in terms of its socio-economic characteristics. Lundha village had also not benefited from
the MVP interventions like the other villages neighbouring Sauri village. In Kenya there
are two Millennium Villages that is Sauri in Siaya County and Dertu in Garissa County.
The researcher chose to study Sauri village and establish the MVP contribution in
poverty alleviation because of convenience. Sauri unlike Dertu village is easily accessible
to the researcher. This study assumed that five years in the programme was significant
enough to realize tangible benefits of the program.

3.3 Sources of data
Data is a piece of information that helps to analyse and appraise the given problem in a
research study (Doodley, 2004). There are two main sources of information in research.
Primary sources of information consist of data collected by researchers themselves during
the course of their work (Haralambos and Holborn, 2000). Secondary sources consist of
data that already exist. To obtain primary data the researcher conducted fieldwork at
Sauri and Lundha village through holding structured interviews with relevant respondents
(female and male farmers) and unstructured interviews with Key Informants (such as
chiefs, teachers, elders, MVP staff, and Millennium coordinators). In addition, more
primary data was obtained through Focus Group Discussions with Kalanyo Youth Group
and Tego Od Dayo Women's group and non-participant observation periods. Secondary
data was obtained through review of relevant literature such as annual reports from MVP
and Government, books, papers, journal articles and websites.

3.4 Units of analysis and Units of Observation
Singleton (1998:69) defines units of analysis as "the entities (objects or events) under
study in social research". The primary unit of analysis in this study is poverty among the
Sauri and Lundha farmers. The units of observation are the objects, entity or subject from
which data required for the study are obtained. In this study, the units of observation are
the Sauri and Lundha farmers. However secondary units of observation include Key
Informants such as the MVP staff, committee members, chief, elders, teachers and
millennium village coordinators.

3.5 Sampling Design
Sampling is the process of selecting a number of individuals for a study in such a way
that the individual selected represents the large group from which they are selected
(Dooley, 1995). Studies that try to describe success of programs like MVP within a
population require a well representative sample in order to make sound inferences about
the entire population. According to Walliman (2006:232) a population is a collective term
used to describe the total quantity of cases or type which is the subject of the study. It can
consist of people, organizations, events, customers among others. In this study, the target
population will consist of Sauri and Lundha farmers. A sample is usually drawn from a
sampling frame. A sampling frame is "a complete or partial listing of items comprising of
the population (Neuman, 1994:196). A sample was drawn from the 1400 households in
Sauri village and from 1000 households in Lundha village. This is because the researcher
was studying poverty at household level.

This study adopted both probability and non-probability sampling techniques. Two
probability sampling techniques were used in this study. These were cluster sampling and
simple random sampling (Singleton, 1998). The researcher divided Sauri village into
eleven clusters. This is because Sauri village consists of eleven areas namely; Kosoro,
Simple random sampling was used to select five clusters. The researcher wrote the names of these clusters on different pieces of paper. Randomly the researcher selected clusters which were to be included in the sample. These included; Kosoro, Luero, Yala A, Sauri A and Sauri B. Simple random sampling was also used to pick respondents from these clusters. The researcher assigned each household a number and randomly selected the respondents who would be included in the sample. Respondents selected in each cluster were as follows; **Kosoro** 28, **Luero** 28, **Yala** A 28, **Sauri** A 28, and **Sauri B** 30. The sample size in Sauri village was 142 households. Due to limited resources and time the researcher was able to cover 10% of the target population (1400 households).

Lundha was divided into eight clusters. The researcher assigned alphabetical letters (between A-H) on each of these clusters. Using simple random sampling the researcher picked four clusters which were C, D, F, G. The researcher also used simple random sampling to select respondents from these clusters. Respondents selected in each cluster were as follows; **cluster number C** 25, **cluster number D** 25, **cluster number F** 25 and **cluster number G** 26. The sample size in Lundha village was 101 households. The researcher was able to cover 10% of the target population (1000 households). The total sample size in Sauri and Lundha villages was 243.

Non-probability sampling was used when selecting respondents among the Key Informants. Purposive sampling was used to achieve this. Purposive sampling is "a sampling method where the researcher selects what he/she thinks is a typical sample based on specialist knowledge on selection criteria"(Walliman:212). The researcher chose seven Key Informants from Sauri village.

### 3.6 Techniques of Data collection

This study attempted an experimental design in a survey research which is a quantitative research methodology. The experimental design which has been adopted is known as the static group comparison (Singleton, 1998). A static group comparison consists of two comparable groups: an experimental group and a control group. Sauri was the
experimental group which had been subjected to the MVP interventions. Lundha was the control group which had not been subjected to the MVP interventions.

To assess the effect of the MVP on poverty alleviation in Sauri village the researcher conducted a survey. Through this survey quantitative data was obtained. Using a questionnaire the researcher conducted structured interviews with Sauri farmers and obtained Socio-demographic/economic data of Sauri village before and after the MVP interventions. These data was on relevant issues such as age, gender, land size, food security, education, access to medical services, state of roads, access to water and sanitation, monthly income among others. The collection of data on Sauri village before and after the MVP enabled the researcher to take a pretest and posttest measurement of the poverty situation in Sauri village. A pretest measurement is taken prior to the introduction of the independent variable in the experimental group. A posttest measurement is taken after the experimental group has been exposed to the independent variable. Note that, the researcher collected quantitative data from respondents by administering questionnaires to respondents using structured interviews. These questionnaires consisted of both open and closed questions which were principal instruments of collecting data. The researcher compared the difference in the Socio-economic status of Sauri village before the MVP (pretest) and after the MVP (posttest).

To assess the current state of poverty in Lundha village, the researcher conducted a survey. Using a questionnaire the researcher conducted structured interviews with Lundha respondents. Socio-demographic/economic data on Lundha was collected. These included age, gender, household income, food security, access to medical services etc. The researcher compared the difference in Socio-economic status between Sauri village (after the MVP) and the current situation in Lundha village. According to Nachmias and Nachmias (1996), if the difference in the socio-economic status of experimental group (Sauri village) is significantly larger than the control group (Lundha village), it is inferred that the independent variable (MVP interventions) is casually related to the dependent variable (poverty alleviation).
Qualitative data was collected through unstructured interviews with Key Informants as well as in Focus Group discussions. An interview guide was used to keep the interview in line with the research objectives. In addition to this, the interview guide ensured that relevant topics and important issues to the study were not left out. Non-participant observation was also used by the researcher to collect more data. This was done using an observation checklist. Some of the things observed included food in the granary, clothing, shelter, roads, health facilities and type of fuel used. The researcher trained three research assistants who assisted in data collection. The researcher conducted fieldwork for one month.

3.7 Data analysis
In this section, the researcher discusses quantitative and qualitative techniques of data analysis. The purpose of data analysis is ".........to summarize the research data in such manner that these data produce answers to questions that you initially asked when you articulated your research problem" (Kinoti, 1998:8). Prior to quantitative analysis, the researcher processed the data collected. Data processing entails five steps: coding, editing, data entry, cleaning, and data modification (Singleton et al; 1988). This was followed by data analysis, which was carried out using a computer package known as Statistical Package for Social Sciences (SPSS). Descriptive statistics were used in this study. Descriptive statistics is concerned with organizing and summarizing data in an effective and meaningful way (Singleton et al; 1998). Univariate analysis was also used in this study. Univariate analysis of data entails examining one variable at a time such as level of education, respondents gender, marital status among others. These data was presented through the use of descriptive statistics such as frequency distribution tables and percentages.

Qualitative data collected is often difficult to understand because it is bulky, dispersed and sequential rather than concurrent (Walliman, 2006). As a result of this, the researcher edited and clean qualitative data before analyzing it. This data was coded in various categories in order to help the researcher to organize the piles of data. The researcher
looked for emerging patterns and themes and gave explanations why occurred. These qualitative data has been presented in narrative form-

3.8 Field work experience

Fieldwork was conducted from 15th of March 2011 to 20th of April encountered various challenges though the experience was quite enrich conducted during the planting season in both Sauri and Lundha vill\^ researcher to conduct interviews from eleven o’clock after responded\^ \^eason in both their farms thus causing delay in the field. It was also during the villages and this made conducting interviews difficult due to the respondents' mabati roofs. There were times when the researcher and had to stop interviews until the rain stopped or came back the the interviews. Some roads in Sauri and all roads in Lundha were also this rainy season due to mud. This slowed down the walking pace of\^ research assistants in these villages. During market days on Tuesdays \^ researcher in impossible to get respondents at home until one o’clock further delaying the field.

In Sauri village, some respondents were reluctant to be interviewed by * to fear of victimization by the MVP. These respondents were ang\^ because they blamed the MVP officials of failing to give them thing\^ such as tree seedlings, fish fingerlings, horticultural seedlings, latert\^ The researcher managed to convince some of them to be interviewe\^ them that she was a student and their contribution was required in or\^ thought that her exams. Most respondents were willing to be interviewed because \^searcher due \^searcher an \^searcher in Sauri village, some respondents were reluctant to be interviewed by * to fear of victimization by the MVP. These respondents were ang\^ because they blamed the MVP officials of failing to give them thing\^ such as tree seedlings, fish fingerlings, horticultural seedlings, latert\^ The researcher managed to convince some of them to be interviewe\^ them that she was a student and their contribution was required in or\^ thought that her exams. Most respondents were willing to be interviewed because \^searcher due \^searcher an \^searcher in Sauri village, some respondents were reluctant to be interviewed by * to fear of victimization by the MVP. These respondents were ang\^ because they blamed the MVP officials of failing to give them thing\^ such as tree seedlings, fish fingerlings, horticultural seedlings, latert\^ The researcher managed to convince some of them to be interviewe\^ them that she was a student and their contribution was required in or\^ thought that her exams. Most respondents were willing to be interviewed because \^searcher due \^searcher an \^searcher in Sauri village, some respondents were reluctant to be interviewed by * to fear of victimization by the MVP. These respondents were ang\^ because they blamed the MVP officials of failing to give them thing\^ such as tree seedlings, fish fingerlings, horticultural seedlings, latert\^ The researcher managed to convince some of them to be interviewe\^ them that she was a student and their contribution was required in or\^ thought that her exams. Most respondents were willing to be interviewed because \^searcher due \^searcher an \^searcher in Sauri village, some respondents were reluctant to be interviewed by * to fear of victimization by the MVP. These respondents were ang\^ because they blamed the MVP officials of failing to give them thing\^ such as tree seedlings, fish fingerlings, horticultural seedlings, latert\^ The researcher managed to convince some of them to be interviewe\^ them that she was a student and their contribution was required in or\^ thought that her exams. Most respondents were willing to be interviewed because \^searcher due \^searcher an \^searcher in Sauri village, some respondents were reluctant to be interviewed by * to fear of victimization by the MVP. These respondents were ang\^ because they blamed the MVP officials of failing to give them thing\^ such as tree seedlings, fish fingerlings, horticultural seedlings, latert\^ The researcher managed to convince some of them to be interviewe\^ them that she was a student and their contribution was required in or\^ thought that her exams. Most respondents were willing to be interviewed because
looked for emerging patterns and themes and gave explanations why and how these have occurred. These qualitative data has been presented in narrative form.

### 3.8 Field work experience

Fieldwork was conducted from 15\textsuperscript{th} of March 2011 to 20th of April 2011. The researcher encountered various challenges though the experience was quite enriching. The study was conducted during the planting season in both Sauri and Lundha village. This forced the researcher to conduct interviews from eleven o'clock after respondents had attended to their farms thus causing delay in the field. It was also during the rainy season in both villages and this made conducting interviews difficult due to the loud noise from the respondents' mabati roofs. There were times when the researcher and research assistants had to stop interviews until the rain stopped or came back the following day to complete the interviews. Some roads in Sauri and all roads in Lundha were also impassable during this rainy season due to mud. This slowed down the walking pace of the researcher and research assistants in these villages. During market days on Tuesdays and Fridays it was impossible to get respondents at home until one o'clock further delaying the researcher in the field.

In Sauri village, some respondents were reluctant to be interviewed by the researcher due to fear of victimization by the MVP. These respondents were angry with the MVP because they blamed the MVP officials of failing to give them things meant for them such as tree seedlings, fish fingerlings, horticultural seedlings, lanterns among others. The researcher managed to convince some of them to be interviewed. She explained to them that she was a student and their contribution was required in order for her to pass her exams. Most respondents were willing to be interviewed because they thought that the researcher was a donor who had come to assist them. This indicates that dependency syndrome had developed among Sauri people due to the MVP interventions. The researcher managed to convince them that she was a student and their contribution was required in order for her to pass her exams. Residents of Sauri had also been subjected to Numerous interviews from researchers all over the world. This is because Sauri is a Millennium village and many teams had visited there before to assess the MVP. As a
result of this some of them were reluctant to be interviewed because they felt that these interviews were consuming a lot of their time and yet they were not benefiting from them. The researcher explained to them that without their contribution she will not pass her exams. Some of these respondents eventually obliged to be interviewed. Despite these challenges the researcher was able to conduct research in both Sauri and Lundha village with the assistance of youths from both villages who are well known by the local people.
CHAPTER FOUR
DATA PRESENTATION, INTERPRETATION AND ANALYSIS

4.1 Introduction
In this section, the survey data that was collected in Sauri village and Lundha village has been presented, interpreted and analyzed. Sauri village is the experimental group while Lundha is the control village. Univariate analysis of data was used in this study. Univariate analysis entails examining one variable at a time. Descriptive statistics such as frequency distribution tables have been used to describe Socio-demographic characteristics of respondents such as gender, age, marital status, size of household, education, religion, occupation and land.

4.2 Background information of Sauri and Lundha residents
The Socio-demographic information of the respondents which has been presented in this section gives insightful background information that would help interpret the findings of the study on the MVP. Under the univariate analysis the variables examined include; gender, age, marital status, household size, size of land, level of education, sources of income, monthly income, major expenditures, land ownership, awareness of the MVP, participation in the MVP activities and the Socio-economic status of Sauri and Lundha village. This is to establish the extent to which the MVP interventions have been successful in alleviating poverty in Sauri village.

4.2.1 Distribution of respondents by gender and age
According to the study carried out by Chabenda (2001), agriculture in Africa is gender-based. This is because, women are the majority of the small-scale farmers. In this study, there were more female than male respondents in both Sauri and Lundha villages. In Sauri village, 44% of men and 54% of women participated in this study, while in Lundha village the percentages were 40% of men and 58% of women. Table 4.1 indicates respondents’ engaged in farming by age.
Table 4.1 Respondents engaged in farming by age

<table>
<thead>
<tr>
<th>Respondents age distribution</th>
<th>Sauri village</th>
<th>Lundha village</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>Below 25</td>
<td>5</td>
<td>3.5</td>
<td>6</td>
</tr>
<tr>
<td>26-35</td>
<td>48</td>
<td>34</td>
<td>16</td>
</tr>
<tr>
<td>36-45</td>
<td>32</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>46-55</td>
<td>26</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>56-65</td>
<td>16</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Above 65</td>
<td>15</td>
<td>10.5</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>142</td>
<td>100</td>
<td>99</td>
</tr>
</tbody>
</table>

In Sauri and Lundha village, respondents below age 25 years who engaged in farming were only 4% and 6% respectively. This could be attributed to the fact that many people in this age category are either still schooling or have migrated to urban areas in search of employment. Generally, young people in Kenya are not attracted to farming at all. Sauri village had relatively more younger farmers than Lundha. The MVP had probably succeeded to attract more young people to engage in farming. Respondents in age category 26-35 years who were engaged in farming were 34% in Sauri and 16% in Lundha. Lundha had older farmers than Sauri village. Note that 20% of farmers in Lundha were over 65 years and the figure for Sauri was only 11%.

4.2.2 Marital Status

Marriage is highly valued in traditional African societies for procreation. According to Oyeneye and Peil (1998), children are regarded as a source of labour in farms and extending the family lineage. Study findings indicated that 70% and 66% of respondents in Sauri and Lundha village respectively were married. However, 21% and 30% of respondents in Sauri and Lundha are respectively widowed respectively. According to the
Republic of Kenya (2008b), this could be attributed to the fact that majority of Kenyan communities and especially in rural areas lack adequate health facilities and means to control a wide range of common infectious diseases such as HIV/AIDS, Malaria, T.B among others, thus resulting to early and untimely death.

4.2.3 Household size of respondents

According to the KNBS (2010), large households are a cause of poverty in Kenya. This is because they strain household resources such as food, income and land. Kenya National Bureau of Statistics (2010) further indicates that the mean size of a Kenyan household is 4.2 persons. As expected, rural households are larger on average (4.6 persons) than are urban households (3.1). However, the mean size of Sauri and Lundha was large at 6 and 8 members per household, respectively. These large households indicate little or lack of knowledge on family planning in these villages.

4.2.4 Distribution of respondents by their level of education

According to the PEU/PEC (2001), rural education is especially beneficial to rural farmers when new technologies are introduced into agriculture. Therefore, it is crucial to improve rural education in order to raise agricultural productivity and farm incomes. Results of the respondent's level of education are shown in Table 4.2.
Table 4.2 Distribution of respondents by their level of education

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Sauri village</th>
<th>Lundha village</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>Never been to school</td>
<td>16</td>
<td>11.3</td>
<td>23</td>
</tr>
<tr>
<td>Lower Primary (Std 1-4)</td>
<td>92</td>
<td>64.8</td>
<td>11</td>
</tr>
<tr>
<td>Upper Primary (Std 5-8)</td>
<td>30</td>
<td>21.1</td>
<td>50</td>
</tr>
<tr>
<td>Secondary</td>
<td>4</td>
<td>2.8</td>
<td>13</td>
</tr>
<tr>
<td>College</td>
<td>None</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>142</td>
<td>100.1</td>
<td>101</td>
</tr>
</tbody>
</table>

Study findings indicated that 11% and 23% of respondents in Sauri and Lundha respectively did not have any formal schooling. Overall, 16% of respondents from the two villages had no formal schooling. The main reason for not attending primary and secondary school is the high cost of education as reported by UNESCO (1998). Despite the introduction of free primary school education, most parents cannot afford miscellaneous primary school expenses. Notably, in Sauri, 65% of respondents had attained lower primary level education (class 1-4) compared to 11% in Lundha village. However, the percentage of respondents who have attained upper primary level of education (class 5-8) is higher in Lundha at 50% compared to Sauri at 21.1%. This probably indicates that there was a lower transition rate from primary to secondary school in Sauri than in Lundha.

Overall, it is only 3% and 13% of respondents who had attained Secondary education in Sauri and Lundha village respectively, while none of the respondents in Sauri and a paltry 4% in Lundha had attained college education. Generally, education achievement is low in these two villages. Indeed, only 7% of the respondents from the two villages had
However, earnings from non-farm employment was at 8% in Sauri and 4% in Lundha village. Sauri village probably had a slightly higher percentage of employment opportunities due the MVP interventions. Engagement in non-farm business in both Sauri and Lundha was also quite low at 12% and 15%, respectively. This could be due to the people's over-reliance on farm-produce hence their reluctance to engage in non-farm business. According to the Republic of Kenya (2004), over-reliance on farm produce has contributed greatly to poverty among farmers. This is because, Kenya depends on rain-fed agriculture for production of most crops. However, rainfall in Kenya is unpredictable and inadequate thus contributing to low agricultural productivity.

4.2.6 Monthly income of respondents

The Republic of Kenya (2007) indicates that 63% of the population in Nyanza earn less than one dollar per day thus living below poverty line. Study findings in Sauri and Lundha indicate that income in these villages varies widely among respondents as shown in Table 4.4.

<table>
<thead>
<tr>
<th>Respondents monthly income</th>
<th>Sauri village</th>
<th>Lundha village</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>Below 2000</td>
<td>39</td>
<td>27.5</td>
<td>43</td>
</tr>
<tr>
<td>2001-4000</td>
<td>40</td>
<td>28.2</td>
<td>26</td>
</tr>
<tr>
<td>4001-6000</td>
<td>25</td>
<td>17.6</td>
<td>13</td>
</tr>
<tr>
<td>6001-8000</td>
<td>7</td>
<td>4.9</td>
<td>4</td>
</tr>
<tr>
<td>8001-10000</td>
<td>4</td>
<td>2.8</td>
<td>3</td>
</tr>
<tr>
<td>Over 10000</td>
<td>14</td>
<td>9.9</td>
<td>3</td>
</tr>
<tr>
<td>missing in system</td>
<td>13</td>
<td>9.2</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>142</td>
<td>100</td>
<td>101</td>
</tr>
</tbody>
</table>

Overall, about one third of the respondents (33.7%) earn less than Kshs 2000 per month in the two villages i.e. about Kshs 67 per day which is less that 1 USD per day for a household. The percentage of people earning below Kshs 2000 is more in Lundha village.
(43%) than Sauri village (28%). The MVP appears to have succeeded in promoting household income in Sauri village. Respondents earning below Kshs 2000 reported that they get their income by selling farm produce. These respondents could not access basic necessities such as food, clothing and shelter due to their low income. In addition, the study observed that, slightly half of Sauri residents (56%) were earning less than Kshs 4000 while the corresponding figure for Lundha was 68%. This shows that poverty was more concentrated in Lundha than in Sauri village.

Respondents earning more than Ksh 4000 reported that they were engaged in more than one income generating activity such as farming, employment (such teacher, community health worker etc) and business. The percentage of respondents earning between Kshs 8001-10000 is the same in both Sauri (3%) and Lundha (3%). However, respondents earning over Kshs 10,000 are more in Sauri (10%) than Lundha village (3%). This could probably be attributed to the MVP interventions which increased their incomes. The percentage of respondents who could not quantify their monthly income in both Sauri and Lundha village was 9%. This can be attributed to illiteracy or failure to view farming as a business hence lack of farm records or refusal to disclose income.

4.2.7 Reported major household expenditures of respondents in Sauri and Lundha

According to the Republic of Kenya (2000b) household expenditure patterns can give indications of household welfare. Generally, households that allocate a large share of their income to food are considered to be poor. Based on this report we can argue that many rural households in Kenya are poor. This is because, according to this report, food share was higher in rural areas (72%) than in urban areas (45%). However, non-food expenditure was high in urban areas (55%) than rural areas (28%). This could be due to addition of non-food items such as house rent, transport, hospital bills, school fees in urban areas. Table 4.5 shows the reported distribution of respondents' major expenditures which supports the cited report.
Table 4.5 Reported major expenditures by Sauri and Lundha residents

<table>
<thead>
<tr>
<th>Major expenditures</th>
<th>Sauri village</th>
<th>Lundha village</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Basic needs(food, clothing, shelter and water)</td>
<td>129</td>
<td>90.8</td>
</tr>
<tr>
<td>School fees/expenses</td>
<td>100</td>
<td>70.4</td>
</tr>
<tr>
<td>Farming</td>
<td>47</td>
<td>33.1</td>
</tr>
<tr>
<td>Medication</td>
<td>26</td>
<td>18.3</td>
</tr>
</tbody>
</table>

Study findings indicated that, major expenditures of majority of respondents in Sauri (91%) and Lundha (98%) was on basic necessities such as food, clothing and shelter. Other reported expenditures in Sauri and Lundha included; School fees (Sauri 70%, Lundha (67%), farming (Sauri 33%, Lundha 30%) and buying medication (Sauri 18%, Lundha 18%). There was very little difference in patterns of expenditures between the two villages despite the MVP interventions in Sauri village. The high expenditure on school fees in both villages can be attributed to miscellaneous expenses (such as school uniform, registration for national exams, school trips, school feeding programme etc) incurred by parents despite the introduction of free primary school.

During the study, the MVP was providing farm inputs to only a few people that they categorised as 'vulnerables' (very poor people and widows). This had forced majority of residents from Sauri to buy farm inputs just like their counterparts in Lundha village. Despite the MVP interventions in Sauri, the percentage of respondents in Sauri as well as those in Lundha village who spent their income on medication was the same (18%). Respondents attributed this to shortage of drugs in public health facilities available in these two villages.

4-2.8 Land ownership/ Size of land owned by respondents

In the Republic of Kenya (2001), landlessness has been identified by many communities as a major cause of poverty in rural areas. This is because many rural communities depend on land for production. However, study findings in Sauri and Lundha village
indicated that 97% and 100% of respondents respectively had access to land. However, it is only a paltry 23% of respondents in Sauri and 39% in Lundha who had title deeds. Respondents reported that, land is jointly owned by family members and the name on the title deed was of a male member such as a grandfather, uncle, husband etc. In this regard, the study observed that, credit was inaccessible to 77% of respondents in Sauri and 61% in Lundha due to lack of collateral. This is despite the fact that, the MVP had linked Sauri community to institutions which could offer them credit to purchase agricultural inputs such as Equity bank, Faulu Kenya and K-Rep.

According to Republic of Kenya (2009), agricultural production in Kenya is carried on farms averaging 0.2-3 hectares. This report is in agreement with study findings in Sauri and Lundha village in which respondents reported that, the average land for farming per household was 1.4 and 3 acres respectively. The small pieces of land owned by these respondents pose a serious problem in relying on the same to boost farm incomes. Unless efforts are made to improve productivity, it will be a challenge to alleviate poverty in these villages.

4.3. Awareness of the MVP among the residents of Sauri and Lundha village

Respondents in Sauri and Lundha village were asked to report the medium through which they got to know about the MVP. According to Rogers (1986), the type of media used play a crucial role in the adoption and diffusion of innovations in the target population. There are many media for generating awareness of an innovation in a social set up. The type of media used could be mass or interpersonal. Mass media include radio, television, printed matter and films. Interpersonal medium is face to face communication between agents and clients mainly inform of agent visits to clients, clients visits to agents, informal group discussions among others.

The study observed that the MVP mainly used interpersonal media such as chiefs **barazas** (96%) which were quite effective in creating its awareness in Sauri village. Through chiefs **barazas** the MVP reached a large number of people and farmers who were also able to interact among themselves and provide feedback. Other sources of
interpersonal media which were least used by the MVP included: door to door visit by the MVP staff (2.8%), seminars (0.7%) and church (2.8%). Key informants (who included teachers, village elders, committee members, community health workers and MVP staff) reported that seminars and church medium were used to emphasize on what was discussed in the Chiefs barazas. Door to door visits were for respondents who were too old or sick to attend Chiefs barazas. Lundha respondents heard of the MVP through interpersonal medium which were quite different from Sauri village such as friends and family members (40%), school activities (4%), farming groups (5%), other villagers (12%) and market place (4%). In short and as expected, no formal meetings/barazas were organized and held at Lundha to disseminate the information about the MVP.

4.3.1 Participation of Sauri community in the MVP

Key Informants reported that Sauri community did not participate in the conceptualization of the MVP. This is because, the Millennium village's concept was developed by a team of science experts at the Earth Institute at Columbia University and the UN Millennium Village Project. Project identification is crucial because it enables the community to identify its needs, problems and rank them according to priority. Key Informants also reported that the community did not participate in the planning of budgets and timetables as well as in the evaluation of the MVP interventions. Oakley (1995) argues that the target community needs to have a say on the allocation and use of resources by change agents in their community. This ensures that available resources are used efficiently.

As expected, Sauri community mainly participated in the implementation of the MVP interventions in the agricultural, health, environmental, water, sanitation, education and roads sector. This was by providing skilled and unskilled labour, volunteering to be committee members, contributing stones and Ksh 200 for the protection of springs and constructing of health clinic as well as clearing bushy roads. Women cooked for labourers who were constructing roads and protecting springs. According to Mulwa (2010), full participation of the target community in the development project ensures ownership and sustainability of development project.
4.3.2 The MVP implementation strategy

Key Informants reported that the MVP implemented its interventions in various sectors (agriculture, health, water, sanitation, roads, energy, environment and education) almost at the same time not systematically. This is because the MVP wanted to achieve all the 8 MDGs in a period of five years which is impossible. This led to failure or haphazard completion of some projects. Key Informants reported that, roads like that of Kosoro were just graded not murramed as the MVP had promised. Farm inputs were given for only 2 years not 5 as the MVP had promised. During the study, Sauri residents had to pay Kshs 20 for treatment at the health facility and there was also shortage of drugs. The MVP withdrew its support for the school feeding programme and it no longer sponsors bright and needy students. Some of the water springs had broken down as the researcher observed during fieldwork and were letting out little or no water thus leading to overcrowding in the springs. Key Informants also reported that some of the residents who were promised toilet slabs and ventilation pipes by the MVP were not given. However, most of those who got them reported that their toilet slabs got broken because they were poorly constructed. Most residents reported that the MVP had not connected electricity to their homes as it had promised in the initial meeting with the community in 2005.

Through Focus Group Discussions with women and youth groups the researcher was informed that, things meant for farmers such as tree seedlings, horticultural seedlings, slabs and ventilation pipes among others were embezzled by some of the committee members. This indicates that the MVP had not established proper mechanisms for monitoring and protecting its assets from being stolen.

Key Informants also reported the MVP showed favoritism towards some farmers and committee leaders. The MVP greatly influenced the election of committee members rather than leaving the community to choose leaders of their own choice. The community was against leaders favoured by the MVP because they were illiterate while others were 'tired retirees'. This had led to division and conflict within the community which needs to be addressed urgently.
Through Focus Group Discussions with women and the youth the researcher was informed that, the MVP gave Sauri community a lot of free things such as free treatment, farm inputs, bed nets, horticultural and tree seedlings, lanterns, free treatment thus creating dependency syndrome among them. As a result of this, most community members became angry and bitter with the MVP when it stopped providing them with free things. This is because they believed that it was their right to be provided with these things.

4.3.3 Levels of participation in the MVP activities

According to Cohen and UPhoff (1977: 3), 'Participation includes people's involvement in decision-making process, in implementing programmes, their sharing in the benefits of development programmes and their involvement in efforts to evaluate such programmes'. This definition implies that, 'outside-generated' growth results in lack of localized ownership, and hence lack of sustainability of development initiatives. In regard to this, respondents of Sauri were asked to report the extent to which they had participated in the MVP activities. Levels of participation varied from "great deal" to "not at all" as indicated in Table 4.6.
Data captured in Table 4.6 highlights the leading MVP activities associated with high levels of participation among the respondents. These activities included school feeding programme (71%), training in farming (70%), improvement of health facilities (65%), and improvement of water (63%). The study observed that about 70% of Sauri respondents participated actively in farm training. This indicates that, there was quite an emphasis in the MVP on training farmers. Therefore, the MVP could be viewed as a pro-agriculture intervention. Sauri respondents participated actively in the improvement of access to basic services such as education (school feeding programme), health and water.

On the other hand, there were low levels of participation in the following activities: livestock keeping (6%), looking for markets for their produce (17%), improvement of schools (19%) and training in business management (20%). According to Key informants in Sauri village, low levels of participation in livestock keeping was due to failure of the MVP to provide majority of residents with dairy goats and cows as it had promised.
during the MVP initiation. It is only a few residents who formed interest groups as per the demand of the MVP who were given dairy goats. The MVP also promised to look for markets for the farmers produce hence the low level of participation. However, this was never achieved because most respondents sold their produce at low prices to middle men after a bumper harvest of maize in 2005 due to lack of market. Further, the MVP, with the assistance of the Government through CDF, also improved infrastructure in Sauri village hence the low participation of respondents in improvement of schools.

4.4 Socio-economic status of Sauri and Lundha village

In this section, the researcher presents and analyses data on the Socio-economic status of Sauri and Lundha in regard to the following: poverty situation, food security, involvement in business, state of roads, environmental conservation, access to agricultural extension services, access to medical services, water, sanitation, market and storage facilities. The value added by the MVP interventions in Sauri and farming in Lundha on the respondents' livelihoods are discussed in section 4.5 and 4.6

4.4.1 Poverty situation in Sauri and Lundha villages

The UNDP (2006) indicates that 50% of Kenyans are living below poverty line. These are Kenyans without access to healthcare, education, shelter, water and proper nutrition among others. Majority of Sauri residents (85%) reported that they were poor prior to the interventions of the MVP. They attributed this to inability access basic necessities and pay miscellaneous primary school expenses for their children as well as low/irregular income. After the MVP interventions, 94% of Sauri respondents reported that the MVP had reduced poverty in their households. However, majority of Lundha respondents (70%) reported that they were poor. This indicates that there was a higher concentration of poverty in Lundha than Sauri village after the MVP interventions. Reasons given by Lundha respondents as to why they were poor are similar to those given by Sauri respondents before the MVP interventions. However study data also affirm that Lundha was relatively better off economically than Sauri village before the MVP interventions.
The high poverty reduction in Sauri village could probably be attributed to the MVP interventions which led to increased agricultural productivity and income. The average bags of maize per farmer increased from 3 sacks\(^2\) (270kg) in 2004 before the MVP interventions to 10 sacks (900Kg) in 2005, after the MVP interventions. However currently in Lundha, the average bags of maize per farmer are 4 sacks (360kg) which is lower than that of Sauri respondents.

The MVP also appears to have promoted household income in Sauri village. This is because the percentage of people earning below Ksh 4000 were more in Lundha (68%) than Sauri (56%). This probably indicates that there were more people in Lundha than Sauri who could not afford basic necessities. Respondents earning more than Ksh 4000 were more in Sauri (34%) than Lundha (23%). Generally incomes in Lundha and Sauri village appear to be low despite the MVP interventions. However, the MVP appears to have achieved its goal of reducing poverty in Sauri village.

### 4.4.2 Food Security in Sauri and Lundha village

According to the Republic of Kenya (2007:8) food security is defined as 'access by all people at all times to enough nutritionally high food that is produced in a sustainable environment'. The source of food could be through production by households in a farm setting or through purchase or both. Food Security is Key to poverty alleviation in Kenya. However, the Republic of Kenya (2004) indicates that about 50.6% of the Kenyan population lacks access to adequate food and, even the little they get is of poor nutritional value and quality. Lack of effective early warning systems, lack of adequate strategic reserves, high post-harvest losses and lack of effective control of crop and livestock diseases have also compounded the problem food insecurity.

Findings of the study show that, majority of respondents in Sauri acknowledged that there was food insecurity in their community before the MVP interventions. They attributed this to low agricultural production (59%), lack of farm inputs (21%), poor

\*\*One sack is equivalent to 90kg of maize/beans.\*\*
farming skills (82%) and soil erosion (0.7%). After the MVP interventions, 95% of Sauri respondents reported that their agricultural productivity had increased. The MVP appears to have promoted food security in Sauri village.

Compared to Sauri village, majority of Lundha respondents acknowledged they were currently food insecure. Study data affirm that increase in agricultural productivity in Lundha (55%) was lower than that of Sauri village (95%) after the MVP interventions. Respondents who were food insecure attributed this low agricultural production (75%), lack of farm inputs (8%), poor farming skills (20%), less land for cultivation (11%), old age (1%), and drunkenness (1%). These reasons were mainly agricultural related and were similar to those given by Sauri respondents before the MVP interventions in Sauri village. This suggests that, food insecurity in these villages can be successfully addressed by transforming subsistence farming into commercial production. However, Key Informants reported that Sauri community started reverting back to low agricultural productivity in 2007 due to lack of farm inputs. The MVP stopped giving farmers free farm inputs. This is likely to lead to food insecurity in Sauri village.

### 4.4.3 Access to medical services among residents of Sauri and Lundha

According to the Ministry of Planning and National Development and UNICEF (1990), the measure of health access in a given area is a combination of several factors. The most obvious and readily available measures include the distance to a health facility and travel time taken to reach it, the number of people served by one health facility, health manpower population ratios, the degree of population contact with primary health care workers and the literacy level of the population. The Republic of Kenya (2001) indicates that 57% of the rural poor do not have access to medical services. This corroborates study findings in both Sauri and Lundha village.

Majority of Sauri residents reported that they could not access medical services prior to the initiation of the MVP. Reasons cited by these respondents included: high cost (71%), long distance to the health facility (49%), shortage of drugs (24%), corruption (2%) and poor service delivery (5.6%). After the MVP interventions, access to medical services
was cited by respondents as one of the key achievements (90%). The MVP improved the dilapidated and understaffed Yala District Hospital by equipping it with a modern maternity wing, mortuary, theatre, drugs, medical equipments and even an ambulance. The MVP also constructed a health centre in Sauri village and equipped it with medical personnel, drugs, medical equipment. These health facilities provide maternal and child health, dental services, HIV/AIDS testing and therapy and basic health care. The MVP also employed community health workers who conduct home visits to test malaria in children under 5 years. Residents of Sauri were also given free bed nets to curb malaria in the area.

Majority of respondents in Lundha reported that they were currently unable to access medical services due to the following reasons: high cost (50%), long distance to the health facility (70%), shortage of drugs (23%), corruption (1%) and poor service delivery (2%). Study data affirm that Sauri residents can access medical services more than their Lundha counterparts due to the MVP interventions. However, Key Informants reported that access to medical services is not sustainable in Sauri village. They suggested that the Government should take over the running of the health facility when the MVP phases out because the community does not have funds to run it.

**4.4.4 State of roads in Sauri and Lundha villages**

UNESCO (1998) report that, poor rural roads and other key physical infrastructure contribute to poverty in Kenya. This is because farmers cannot access markets for their farm produce leading to extreme loss of income. In this regard, respondents were asked to explain the state of roads in Sauri before the introduction of the MVP.

Majority of Sauri residents reported that, the state of roads in Sauri was pathetic. They attributed this to impassability of roads during the rainy season (82%), roads being bushy (51%) and narrow (25%). Improvement of roads was reported by majority of respondents (94%) to be one of the key achievements of the MVP. This is because the MVP graded put murram on most roads in Sauri village thus making them passable. Sauri residents participated by clearing bushes along the road, removing stones and women
cooked for laboures. However, study findings show that the current state of roads in Lundha is pathetic. Lundha respondents attributed this to impassability of roads during the rainy season (89%), roads being bushy (25%) and narrow roads (15%). During fieldwork the researcher observed that all roads in Lundha were impassable during the rainy season. The MVP appears to have achieved its goal of improving the state of roads in Sauri village. Key Informants reported that Sauri community will not be able to maintain these roads when the MVP phases out due to lack of funds.

4.4.5 Access to water in Sauri and Lundha villages

The KNBS (2010) indicates that the source of drinking water is an indicator of whether it is suitable for drinking. Sources that are likely to provide water suitable for drinking include piped water source within the dwelling or plot, public tap, borehole, protected spring or well and rainwater. The time taken to collect water is a good measurement of the distributional aspects and the adequacy of the water supply. Study findings show that, clean water was accessible to a paltry 34% of Sauri residents before the introduction of the MVP. These respondents reported that they could not access safe drinking water because they were drawing water from unprotected springs, walking for long distances to the springs and lacked tap water in their homes.

One of the notable success of the MVP was improving access to water in Sauri village (88%). Key Informants reported that the MVP achieved this by protecting springs and constructing tanks for vulnerable people. The MVP also trained Sauri community on household water treatment and gave them water chemicals known as 'pur'. The community participated in the protection of springs by contributing Ksh 200 per homestead, stones and cooking for labourers. The MVP bought cement and paid workers from the community to protect these springs. The MVP put main water pipes in some of the areas in Sauri village. However, majority of Sauri residents have no 'tap water due to lack of these main pipes in their area or funds to connect water to their homes. During the study, the researcher observed that some of the protected springs were already spoilt. These springs had either dried up or were letting out very little water due to poor construction. This had led to overcrowding in some of these springs. Most respondents
reported that it was the responsibility of the MVP to repair these springs. This indicates lack of a sense of ownership of these springs hence their sustainability.

Study findings indicated that water was more accessible to Sauri than Lundha respondents as a result of the MVP interventions. However, before the MVP water was more accessible to Lunda than Sauri residents. Respondents who could not access clean water in Lundha attributed it to: long distance to the spring and lack of money to buy water from vendors (who have boreholes). According to the Republic of Kenya (2000), water scarcity accentuates poverty by directly limiting peoples' access to a basic necessity and indirectly limiting access to food and employment. From a gender perspective, the burden of inadequate and unsafe water is borne by women and girls who have to fetch water for domestic use, irrigation and livestock. This reduces the opportunity for women to participate in the labour markets as girls are unable to attend school.

4.4.6 **Access to agricultural extension services**

According to Hawkins and Ban (1998:1), agricultural extension service is an essential tool through which the country can achieve agricultural productivity. This is through using relevant and effective means to transfer the information from research centers to the farmers who then implement the technologies and information. In Kenya, extension services are scarce and do not reach many poor people in the community. This is in agreement with the study findings in Sauri and Lundha village.

Access to agricultural extension services was a problem in Sauri prior to the initiation of the MVP. This is because majority of respondents in Sauri (91%) reported that they could not access agricultural services then. They attributed this to lack of agricultural extension services in these villages, high cost of extension services and traditional farming techniques. After the MVP initiation, agricultural extension services were accessible to all Sauri residents between the years 2005-2007. Sauri farmers were trained by these agricultural extension officers on land preparation, planting, weeding, harvesting, using modern preservation techniques and storage of their crops. Note that, training in farming
was reported by Sauri respondents as one of the MVP activities which had high levels of participation (70%).

Currently, 93% of Lundha respondents are unable to access agricultural extension services due to lack of agricultural extension services in their village, high cost of extension services and their preference to use traditional farming techniques. The MVP stopped providing Sauri farmers with extension services in 2007. Key Informants reported that majority of Sauri residents were unable to access agricultural extension services due to high cost. Lack of access to extension services in both these villages is likely to contribute to food insecurity.

4.4.7 Access to market for your agricultural produce

Republic of Kenya (2009) indicates that market access is critical to increasing agricultural productivity and commercialization of enterprises so that farming is perceived as a business. However, most rural farmers do not have well-functioning marketing channels for most of their farm produce. Study findings observed that, market accessibility was a challenge to farmers in Sauri prior to the initiation of the MVP. In Sauri, 45% of respondents reported that they were selling their produce at a low price due to saturation of the market with similar produce such as maize and beans after harvesting. Long distance to market was also a challenge to 22% a respondents in Sauri. The MVP was least successful in promoting access to market.

Key Informants reported that most Sauri farmers were forced to sell their maize at a throw away price to middle men during the bumper harvests of 2005/2006 due to lack of market. Most farmers also reported that they did not engage in diversification of crops such as soya, chilies, tomatoes, tissue culture bananas due to lack of market. This indicates why only 27% of Lundha respondents reported that access to market had changed their quality of life to the highest level. During the study, the researcher observed that the MVP had built a market centre for Sauri residents in Yala town.
had negotiated with NCPB to charge Sauri farmers only Ksh 1 per month per bag as storage charge after the bumper harvest of 2005. However, most respondents were storing their produce in their houses because they lacked money to pay for the storage charges. The MVP also trained farmers on modern preservation techniques.

Currently, 22% of Lundha respondents store their produce in the house using traditional preservation techniques (wood ash). However, 40% of Lundha respondents store their produce in sacks in the house without using traditional or modern preservation techniques. The National Cereals and Produce Board (NCPB) was not accessible to 37% Lundha respondents. Residents reported that it was expensive to travel 10 km to Yala town to access storage facilities. Despite the MVP interventions in improving access to storage facilities most Sauri respondents just like their Lundha counterparts prefer storing their produce in their houses.

4.4.9 Access to credit facilities

According to the Republic of Kenya (2010), access to bank credit by farmers is still a major problem despite the fact that Kenya has a relatively well developed banking system. Access to credit is very critical to increasing agricultural productivity and farming as a business. This is because credit facilities enable farmers to access key inputs such as fertilizer, agrochemicals, seeds, capital investment such as farm machinery, irrigation infrastructure, value addition technologies among others. However, high interest rates coupled with the limited number of banks in rural areas and lack of collateral are some of the factors that make it difficult for farmers to access bank credit.

Data from the study show that, 87% of respondents in Sauri could not access credit prior to the initiation of the MVP. Respondents attributed this to high interest rate charged, lack of title deeds and ignorance of the existence of credit facilities. The MVP began transition from farm subsidies to purchase of farm inputs in 2007. To achieve this, the MVP introduced a farm inputs credit system in order to sustain high agricultural yields. The MVP linked farmers to Saga Micro-Finance Institution which was to provide them with these services. Key Informants reported that the introduction of credit facilities in
2008 was a 'new thing' in Sauri village. However, the MVP introduced credit facilities abruptly without thoroughly educating farmers about the interest rates. As a result of this, most farmers defaulted on repayment of loans from Saga micro finance thus leading to its collapse. Without credit facilities, farmers will not be able to access farm inputs which are crucial to increasing agricultural productivity. The MVP also linked Sauri community to financial institutions such as Equity Bank. However, majority (77%) of Sauri respondents cannot access credit due to lack of title deeds. In Lundha, 86% of respondents reported that they cannot access credit due to high interest rates charged, lack of title deeds and ignorance of existence of credit facilities. Access to credit facilities is a serious challenge in both these villages despite the MVP interventions.

4.4.10 Access sanitation facilities

According to the IDRC (1981), safe sanitation includes the use of flush toilets, covered pit latrines and ventilated improved pit latrines for waste disposal. Unsafe sanitation includes the use of a pan or bucket and uncovered pit latrines among others as a means of waste disposal. The Kenya National Bureau of Statistics (2010) indicates that urban households (30%) have slightly more access to safe sanitation than rural households (20%). The most common type of a toilet facility in rural areas is an open pit latrine (47%). In urban areas, toilet facilities are mainly shared with other households (52%). A household is considered to have safe sanitation if the toilet facility is used only by members of one household.

Respondents in Sauri were asked to report whether they had a covered "pit latrine/ flush toilet in their homestead prior to the initiation of the MVP in the village. Study findings show that, 63% of Sauri respondents had access to a covered pit latrine. The introduction of the ventilated improved pit latrine made minimal impact on Sauri residents. This is because it is only 39% of Sauri respondents who reported that the MVP was successful in promoting access to sanitation facilities. The MVP gave toilet slabs and ventilation pipes to vulnerable people to construct these toilets. However, most of these toilet slabs got broken because they were of poor quality. The MVP also conducted trainings on sanitation in Sauri village.
Currently 88% of Lundha respondents have access to a covered pit latrine. This indicates that there were more people in Lundha who could access safe sanitation than in Sauri village before the introduction of the MVP. This could be attributed to the presence of Non-governmental Organizations such as Africa Now which sensitized the residents on the importance of constructing pit latrines. Those who did not have pit latrines in these villages reported that they were using their neighbours' pit latrines or relieving themselves in bushes. According to IDRC (1981) human waste is dangerous. Therefore, proper disposal of faces is required in order to minimize the spread of diseases transmitted through contact with skin, food and drink contaminated with excreta. Such diseases are worm diseases, cholera, typhoid fever, dysentery, amoebiasis among others.

4.4.11 Involvement of residents from Sauri and Lundha in business

According to the studies conducted by Tegemeo Institute of Agricultural Policy and Development (2008), households that started off poor in the year 2000 and exited poverty by 2007 were those whose adult members earned income from off-farm sources especially business. This indicates that, diversification in business should be emphasized as a strategy to fight rural poverty.

Study findings revealed that 51% of respondents in Sauri were engaged in business prior to the introduction of the MVP. The MVP promoted involvement in farm business in Sauri village. This is because 78% of respondents reported that they were earning their income from selling farm produce after the MVP interventions. Respondents who engaged in non-farm business in Sauri village were only 12%. The MVP also introduced business training in Sauri village. However, this was reported by respondents to be one of the MVP activities with low levels of participation (19%). Currently in Lundha, 83% of respondents earn their income from selling farm produce. The percentage of respondents engaged in non-farm business was only 15%. This shows that the level of enterprise activity in Sauri was low compared to Lundha despite the MVP interventions.
**4.4.12 Environmental conservation in Sauri and Lundha villages**

Environmental conservation is 'the protection, preservation, management or restoration of natural resources such as forests, soil and water'. The Republic of Kenya (2002:117) indicates that, deforestation is a major threat to the environment because forests act as catchment areas. Local communities particularly in the rural areas depend on forests for provision of wood, fuel wood and non-wood products for their livelihoods. It is estimated that over 93% of the rural population is almost 95% dependent on wood fuel while over 90% of commercial and urban population are dependent on electrical energy.

Study findings show that 39% of Sauri respondents were engaged in environmental conservation prior to the initiation of the MVP. These respondents reported that they were mainly planting trees and digging terraces. After the MVP, 51% of Sauri respondents reported that they participated actively in environmental conservation. This indicates that the MVP increased the engagement of Sauri community in environmental conservation. This was by partnering with KEFRI (Kenya Forestry Research Institute) which organized training for environment committee members. These environment committee members played a crucial role in training Sauri residents in environmental conservation. The MVP also established tree nurseries and gave most farmers free tree seedlings. Key Informants reported that Sauri residents were mainly involved in tree planting, growing of nappier grass and digging terraces in order to curb soil erosion.

In Lundha, 59% of respondents reported that they were engaged in environmental conservation. This is an indication that there were more respondents in Lundha than Sauri who were engaging in environmental conservation prior to the initiation of the MVP. The high level of conservation in Lundha was probably due to the presence of organizations such as KARI, Ministry of Agriculture and ICRAF in Lundha village. Those who engaged in environmental conservation were planting trees, digging terraces and planting nappier grass.
4.5 Agricultural productivity in Sauri and Lundha villages

According to the MVP (2005), the MVP is an organization which has a broad mandate of restoring high agricultural growth that is crucial to poverty reduction in Sauri and other similar villages in Africa. To achieve this goal, the MVP provided farmers with fertilizer, improved seeds, fallow seeds to improve soil fertility, extension services and horticultural seedlings.

Given this background, respondents in Sauri were asked to report whether their agricultural productivity had increased since they started utilizing the MVP interventions. They were asked to state the production levels in terms of bags of the various crops that they grow before and after the interventions. This was to enable the researcher determine whether the MVP had achieved its goal of increasing agricultural productivity. Majority (94%) of respondents in Sauri acknowledged that their agricultural productivity had increased. However, 1% of respondents reported that their agricultural productivity had not increased. Table 4.7 shows the reported agricultural production in Sauri between 2004 -2010 and Lundha in the year 2010.

<table>
<thead>
<tr>
<th>Agricultural Produce</th>
<th>Reported Agricultural production per sack per year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
</tr>
<tr>
<td>Maize</td>
<td>2.8</td>
</tr>
<tr>
<td>Beans</td>
<td>0.4</td>
</tr>
</tbody>
</table>

N.B The data in brackets is for Lundha village in 2010

Data in Table: 4.7 indicate that there was low agricultural productivity in Sauri before the introduction of the MVP in 2005. Farmers were harvesting 3 and 0.4 sacks (less than one sack) of maize and beans respectively. This is equivalent to 270kgs and 45Kgs of maize and beans respectively. However, agricultural productivity increased to 10 sacks of maize (900kg) and 0.7 sacks (63Kg) of beans after the MVP interventions. Maize
production increased by three fold but the production of beans remained constant at less than one sack per year. Farmers attributed this to contamination of beans by urea which they were putting in their maize during mixed cropping. The study observed that, agricultural production started to dwindle from 2007 when the MVP stopped providing them with farm inputs. This is evident in 2008 and 2009 when the production level of maize decreased to 6 sacks (540kg). This is an indication that high agricultural productivity is not probably sustainable in Sauri village without the MVP agricultural interventions.

Currently in Lundha village, 55% of respondents reported that agricultural production had increased and they attributed this to hard work (55%), modern farming skills (34%) and usage of manure (32%). However, 45% reported that agricultural productivity had not increased and they attributed this to lack of farm inputs (34%), small land size (3%) and traditional farming techniques. However, the production level of maize was lower in Lundha than Sauri village. This could probably be attributed to MVP agricultural interventions. In 2010, the production level of maize and beans in Lundha was 4 sacks (360kg) and 0.8 (72kg) of sacks of beans per farmer while in Sauri village it was 6 sacks (540kg) and 0.5 sacks (45kg), respectively. The high production level of maize in Sauri village could probably be attributed to the MVP interventions. However, the production level of beans was slightly higher in Lundha than in Sauri village.

According to the Australian Centre for International Agricultural Research (2005) fruit and vegetables make up more than 20% developing country exports and can yield small farmers much higher incomes than grain growing. However, majority of respondents in Sauri and Lundha village did not diversify in crops such as vegetables and fruits but were dependent on grain growing (maize and beans) hence the low incomes in these villages. UN Millennium Project Task Force on Hunger (2005) also cites diversification into vegetables and fruits as crucial in improving food security. However in Sauri and Lundha village, these crops were mainly planted for subsistence rather than commercial Purposes hence failure to quantify them during the study.
Table 4.8 Reported changes in the quality of life of Sauri respondents

<table>
<thead>
<tr>
<th>Aspects of life changed by the MVP.</th>
<th>Extent of changes in the quality of life Sauri respondents</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Great deal</td>
<td>A lot</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Farming technology</td>
<td>88.0</td>
<td>7.7</td>
</tr>
<tr>
<td>Use of fertilizer</td>
<td>82.4</td>
<td>10.6</td>
</tr>
<tr>
<td>Improved health status of family</td>
<td>80.0</td>
<td>10</td>
</tr>
<tr>
<td>Enabled family to access water</td>
<td>66.2</td>
<td>23.2</td>
</tr>
<tr>
<td>Your children’s access to education</td>
<td>66.2</td>
<td>19.7</td>
</tr>
<tr>
<td>Increased harvest</td>
<td>71.8</td>
<td>11.3</td>
</tr>
<tr>
<td>Increased family income</td>
<td>48.6</td>
<td>26.1</td>
</tr>
<tr>
<td>Access to clothing</td>
<td>43.0</td>
<td>28.4</td>
</tr>
<tr>
<td>Soil conservation</td>
<td>43.0</td>
<td>27.5</td>
</tr>
<tr>
<td>Feeding habits</td>
<td>53.5</td>
<td>14.8</td>
</tr>
<tr>
<td>Area/Acreage under crops</td>
<td>36.6</td>
<td>15.5</td>
</tr>
<tr>
<td>Access to sanitation facilities</td>
<td>21.1</td>
<td>18.3</td>
</tr>
<tr>
<td>Enabled family to access market for their produce</td>
<td>7.5</td>
<td>19.7</td>
</tr>
<tr>
<td>Storage facilities for your produce</td>
<td>7.7</td>
<td>17.6</td>
</tr>
<tr>
<td>Enabled family to connect to electricity</td>
<td>0</td>
<td>.7</td>
</tr>
</tbody>
</table>

Respondents reported that their quality of life had changed to the highest level due to the following aspects of life: Farming technology (96%), use of fertilizer (93%), improved health status (90%), access to water (89%), access to education (86%), increased harvest (83%), increased income (75%), feeding habits (78%), access to clothing (71%) and soil conservation (71%). The study observed that, agricultural related factors, increased income and access to basic services had contributed to changes in the quality of life of Sauri respondents to a large extent. However, aspects of life that had changed to the least extent of the MVP interventions were: access to electricity (1%), access to storage facilities...
(25%) and access to the market (27%). Key Informants attributed lack of access to electricity to cost-sharing which was introduced by the MVP. Respondents were required to pay Kshs 17,000 to Kenya Power and Lighting in order to access electricity while the MVP was to pay the remaining balance of Ksh 18000 for each household. However, most respondents were unable to raise the money required. The study also observed that, most respondents were producing mainly for subsistence rather than commercial purposes.

4.6.1 Changes in the quality of life of Lundha respondents
The study attempted to establish whether changes in the quality of life of Lundha respondents were similar to those in Sauri village. The study observed that aspects of life which had changed the quality of life among Lundha respondents were similar to those of Sauri respondents. Factors which had improved the respondents' quality of life were mainly agricultural related. They included; increase in agricultural production due to modern farming techniques (17%) and increase in acreage under crops (14%). Other factors included; access to loans from Kenya women finance trust (1%), employment (13%), and access to clean water (3%). Factors which lowered the quality of life of respondents included; food insecurity (11%), poor health (23%) and lack/low (23%). The quality of life appears to have changed more in Sauri than Lundha village in terms of access to water, education, health and income. This could probably be attributed to the MVP interventions.

4.6.2 Success of the MVP interventions in Sauri village
According to the Key Informants, the MVP promised to assist Sauri village to achieve the eight Millennium Development Goals during the initial planning meeting in 2004. These promises were;

- to increase agricultural productivity by training farmers on modern farming techniques, providing them with free farm inputs and fallow seeds to improve soil fertility, to improve access to water and sanitation by protecting water springs and building water tanks* in central places in the village, to give poor residents slabs and ventilation pipes for construction of pit latrines, to tarmac all roads and connect all households to electricity, to improve access to education by
sponsoring bright and needy students, build more classrooms, pit latrines and introduce balanced diet in the school feeding programme, to give dairy goats/cows to all residents who formed groups, to improve access to health care by building a health clinic in Sauri village and equip it with staff medicine, laboratory and theatre equipments, to improve infrastructure at Yala Sub-District Hospital and equip it with necessary equipments, drugs and staff, to educate farmers on modern preservation techniques and link them to the National Cereals and Produce Board and to look for markets for farmers produce.

Based on these promises, respondents were asked whether the MVP had succeeded in selected interventions shown on Table 4.9.

Table 4.9 Perceived level of MVP success among Sauri residents

<table>
<thead>
<tr>
<th>Selected interventions</th>
<th>Extent of the success of the MVP in Sauri village in %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very successful</td>
</tr>
<tr>
<td>Promoting access to health facilities</td>
<td>87.3</td>
</tr>
<tr>
<td>Promoting modern farming</td>
<td>89.4</td>
</tr>
<tr>
<td>Increased farm input</td>
<td>81.7</td>
</tr>
<tr>
<td>Promoting dairy farming</td>
<td>7.7</td>
</tr>
<tr>
<td>Improvement of roads</td>
<td>75.4</td>
</tr>
<tr>
<td>Promoting enrolment in school</td>
<td>71.8</td>
</tr>
<tr>
<td>Promoting access to water</td>
<td>67.6</td>
</tr>
<tr>
<td>Promoting gender balance</td>
<td>56.3</td>
</tr>
<tr>
<td>Promoting access to sanitation facilities</td>
<td>20.4</td>
</tr>
<tr>
<td>improving storage facilities</td>
<td>11.3</td>
</tr>
<tr>
<td>Promoting livestock keeping</td>
<td>7.7</td>
</tr>
<tr>
<td>Promoting dairy farming</td>
<td>9.9</td>
</tr>
<tr>
<td>Promoting access to electricity</td>
<td>0.7</td>
</tr>
</tbody>
</table>
Table 4.10 Beneficiaries from the MVP intervention

<table>
<thead>
<tr>
<th>Categories of MVP beneficiaries in Sauri Village</th>
<th>The extent which Sauri respondents have benefited from the MVP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Great deal</td>
<td>A lot</td>
</tr>
<tr>
<td>Women</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Women</td>
<td>45.1</td>
<td>34.5</td>
</tr>
<tr>
<td>poor</td>
<td>39.4</td>
<td>20.4</td>
</tr>
<tr>
<td>Rich</td>
<td>33.1</td>
<td>22.5</td>
</tr>
<tr>
<td>Men</td>
<td>13.4</td>
<td>40.1</td>
</tr>
<tr>
<td>Community at large</td>
<td>26.1</td>
<td>16.2</td>
</tr>
<tr>
<td>Youth</td>
<td>8.5</td>
<td>27.5</td>
</tr>
</tbody>
</table>

Women and the poor appear to be the leading beneficiaries from the MVP interventions. Note that 80% and 60% of women and poor, respectively, were reported to have benefited 'at least a lot' from the MVP interventions. This indicates that the MVP is an organization which is more concerned with women empowerment. This contradicts the Republic of Kenya (2008) which indicates that women face discrimination on the basis of religion, retrogressive cultural practices, and laws that discriminate against them. As a result of this, women in Kenya are more vulnerable to poverty than men. The MVP also appears to be a pro-poor organization. This is because the poor were reported to be among the leading beneficiaries of the MVP interventions.

The Republic of Kenya (2002) estimates that over 3 million youth are outside the education system either as unemployed or employed in the informal sectors. Challenges facing the youth include; school and college dropout due to increased cost of education, poverty, teenage pregnancies and deviant behavior. However, only 36% of youth were reported to have benefited 'at least a lot' from the MVP. This shows that the youth were the least beneficiaries. This finding suggests the failure of the MVP to target and involve youth in various interventions.
4.6.4 The presence of Agricultural/development stakeholders in Sauri village

According to Masika (2010:52) stakeholders are individuals, groups or institutions that have interest in a project and can influence its success or failure, e.g. in provision of clean water. Respondents in Sauri village were asked whether there were other stakeholder organizations in Sauri village apart from the MVP which had assisted them to reduce poverty in their households. This was to enable the researcher to deduce whether poverty reduction in Sauri was due to the MVP interventions, other stakeholders' organizations or a combination.

In Sauri village, 21% of respondents admitted that there are other stakeholders who had assisted them in reducing poverty in their households apart from the MVP. Programs initiated by these development stakeholders appeared to be targeting the poorest members of Sauri community. These findings are supported by UNESCO (1998) which indicates that, projects aimed at improving the standard of living among the rural and urban poor should include community based organization, savings and credit, health, water and education. The study also observed that these stakeholders were playing different and crucial roles in the reduction of poverty in Sauri village.

Stakeholders' organizations facilitating access to credit for women included Women groups (7%), Care Kenya (36%) and Kenya Women Finance Trust (3%). According to Key Informants, this was to enable women to set up small businesses and thus become empowered economically. Saga Micro Finance (3%) was providing farmers with farm inputs on credit in order to increase their agricultural productivity. The Government of Kenya (3%), Care Kenya (36%), Constituency Development Fund (7%) and Centre For Disease and Control (17%) were providing orphans and vulnerable children with basic needs such as food, clothing, shelter, education among others. Icraf (3%) was providing agricultural extension services to farmers in order to increase their agricultural productivity. These stakeholders' organizations appeared to be supplementing the MVP and the Government's effort in Sauri village. Apparently, despite the persistent poverty in rural areas, there are many stakeholders attempting to bail out rural residents from the Multiple maladies.
4.6.5 The presence of Agricultural/development stakeholders in Lundha village

Respondents in Lundha were also asked to report whether there were stakeholders' organizations which had assisted them in reducing poverty in their households. This was to enable the researcher to deduce whether poverty reduction in Lundha was as a result of farming or stakeholders' organizations. Respondents reported the presence of agricultural/development stakeholders' organizations in Lundha village. These stakeholders' organizations were facilitating access to education, water, sanitation, food, credit and extension services. Study findings show that there were more respondents in Lundha (29%) who reported that they were aware of stakeholders in their village than those in Sauri (21%) village. Key Informants attributed this to the presence of the MVP in Sauri village which led potential stakeholders to focus on other rural villages such as Lundha. Just like in Sauri village, these stakeholders were playing different roles in the alleviation of poverty in Lundha village. Stakeholders in Lundha were targeting the poorest members of the community. This is because they were mostly promoting access to basic necessities such as education, food, water and sanitation which are crucial to improving poor peoples' standard of living.

Stakeholders' organizations which were assisting in facilitating access to education in Lundha were Academy for Education Department (10%) which was sponsoring the girl child's education and providing them with sanitary towels, Constituency Development Fund (17%) and Ministry of Education (3%) was sponsoring poor students in Secondary school. The Church (10%) was providing food to the poor while the Government of Kenya (3%) was providing financial support to orphans to enable them access basic needs. Africa Now (13%) and IFAD (3%) were protecting springs and constructing pit latrines. However, stakeholders such as women Groups (7%) and Kenya women Finance Trust (7%) were empowering women economically by giving them loans for starting small businesses and buying farm inputs. Faulu Kenya (3%) and Teachers Sacco's (3%) were offering credit facilities, while KARI (3%) and Ministry of agriculture (3%) were Providing agricultural extension services in order to increase agricultural productivity. These stakeholders' organizations appeared to be supplementing the Government's efforts in Lundha village.
4.6.6 The MVP efforts to attain gender balance
According to 70% of respondents the MVP was successful in promoting gender balance. Key Informants reported that women were elected to leadership positions and were allowed to participate in all the MVP interventions without any discrimination. Poor widows were also given iron sheets and nails to construct houses. This was to protect them from vagaries of weather such as the rain and sun. Women were also trained in group saving and loaning, horticultural farming, fish farming as well as dairy farming. Women were also reported by majority of respondents (80%) to be among the leading beneficiaries of the MVP interventions. However, in Lundha village, gender imbalance was reported to be a serious challenge facing the community by 68% of respondents. Gender imbalance hinders women from making strategic investment decisions thus lowering agricultural productivity.

4.6.7 The MVP phasing out strategy
During Focus Group Discussions with women and youth groups, respondents reported that they were not sure whether the MVP was still operating in Sauri village or had phased out. They attributed this to the absence of the MVP staff in the village and failure of the MVP to hold community meetings like before. This indicates that the phasing out of the MVP was not effectively communicated these residents.

4.7 Reported Key achievements of the MVP intervention at Sauri
The MVP (2008) shows the significant advances that it has made in each sector. In the agricultural sector, production of staple crops such as maize has increased, the input credit system has been established, access to basic services (health, water, education and sanitation) and infrastructure (roads and electricity) has been improved as well as environmental conservation. Women have also been empowered through income generating crops such as fruits and vegetables.

Based on this report, the study attempted to establish the key achievements of the MVP as reported by the respondents of Sauri village. The leading key achievements reported by respondents were: improved access to health care (90%), improvement of roads
(61%), increased agricultural productivity (56%) and improvements in the education sector (20%). These empirical data on the key MVP achievements supports the documented achievements in the MVP (2008).

4.7.1 Sustainability of the MVP in Sauri village

According to the World Conservation Union (1995:27-28), the concept 'sustainability' is derived from that of sustainable development. Development is any and all kinds of activities or processes that increase the capacity of people or the environment to meet human needs or improve the quality of human life. For development to be sustainable, it must continue, or its benefits must be maintained indefinitely.

In this regard, respondents were asked to explain whether the MVP interventions would continue long after it had phased out in Sauri village. However, 60% of respondents reported that the MVP was not sustainable. Reasons cited by respondents included: corruption among the MVP leaders (24%), lack of peoples' participation (17%), poor phasing out (14%) i.e. Sauri residents not sure whether the MVP was still in the village or not due to the absence of their staff, lack of farm inputs (21%), Poor implementation strategy MVP (16%), and lack of capacity building among Sauri residents (4%). However, Jeffrey Sachs (2005), the head of the UN Millennium project has also conceded that, the MVP is not sustainable because it depends on donor funding.

Studies conducted by Mulwa (2010) indicate that, sustainability is assured where there is true local participation building a strong sense of local ownership. However study findings revealed that apart from participation, factors such as corruption, poor phasing out of the project, poverty in the target community, lack of capacity building and poor implementation strategy of the project could hinder sustainability of the MVP.

According to 36% of respondents the MVP is sustainable due to the following reasons: the MVP trained them on modern farming and management of the project (51%), the Presence of the MVP in Sauri village (8%), they could access treatment (2%), the community owns the project (20%) and the introduction of farm inputs credit
system/ cooperatives (6%). According to Mulwa (2010), local capacity building is believed to be an essential factor for the sustainability of community development initiatives. This is because capacity building changes peoples' knowledge, skills, attitudes and ultimately practices. This enables them to efficiently marshal available resources towards meeting their own needs.

4.7.2 The suitability of the MVP as a model for agriculture

The word suitable means 'right or appropriate for a particular purpose or occasion'. Based on this definition, respondents in Sauri were asked to report whether the MVP was a suitable model for agriculture. An overwhelming majority (97%) of respondents, reported the MVP to be suitable model for promoting agriculture in Sauri village. Reasons cited by these respondents were mainly agricultural related. They included increased agricultural productivity (49%), community's acquisition of modern farming techniques (37%), the community's access to extension services (2%) and farm inputs (4%). Non-agricultural related reasons included poverty reduction in their households (1%) and increase in household income (3%). The MVP appeared to have been effective in achieving its goal of increasing agricultural productivity in Sauri village.

However, 3% of respondents reported that the MVP was not a suitable model for agriculture. Reasons cited by these respondents included: lack of the Government's involvement in the MVP (1%), low agricultural productivity (1%) and failure by some residents to utilize MVP agricultural interventions. Key Informants attributed low agricultural productivity to failure of these community members to respond to agricultural project advisers.

4.7.3 Summary of Univariate Analysis

Univariate data indicated that, more female than male respondents in Sauri (women 54%, men 44%) and Lundha village (women 58%, men 40%) participated in this study. This is an indication that majority of small-scale farmers in Kenya are women. In both Sauri (4/o) and Lundha (6%) respondents aged below 25 years were quite few. Generally, young people in Kenya are not attracted to farming at all. Majority of Sauri respondents
mainly participated in the implementation phase of the MVP (87%). It is crucial, for the target community to participate fully in the project identification, design, budget and timetable planning as its evaluation. This ensures ownership and sustainability of the project. It was also observed that the MVP achieved its goal of alleviating poverty (94%) and increasing agricultural productivity (95%). This was through provision of farm subsidies and improvement of infrastructure. According to respondents in Sauri the most successful interventions of the MVP were: promoting access to health (98%), promoting modern farming (97%), increased access to farm inputs (94%), improvement of roads (94%), promoting enrolment in School (94%), promoting access to water (88%), and gender balance (76%). However, the least successful interventions were: promoting access to electricity (4%) and dairy farming (18%).

An equally important finding was that an overwhelming majority (97%) reported that the MVP was a suitable model for farming. Reasons cited were mainly agriculturally related and they included: increased agricultural productivity, modern farming training, access to agricultural extension services and farm subsidies. According to 60% of respondents in Sauri the MVP was not sustainable due to corruption among leaders, poor phasing out, poor implementation strategy, lack of farm inputs, lack of peoples participation and capacity building among Sauri residents.
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction
In this chapter, the summary of findings from the study have been presented followed by conclusions that lead to the study's recommendation.

5.1 Objectives of the study
This study was anchored on four objectives;

a) To review how the MVP agricultural strategy has been conceptualized and implemented to alleviate poverty in Sauri village.

b) To examine how the local people have been engaged in the conceptualization and implementation of the MVP and how they perceive the project.

c) To establish the extent to which the MVP has contributed in reducing poverty among local people in Sauri village.

d) To establish the appropriateness of the MVP agricultural strategy in Kenya and its sustainability.

This study was interested in establishing the extent to which the MVP had alleviated poverty in Sauri village. The following is the summary of findings of the study;

5.2.1 Participation of Sauri community in the MVP
Study findings revealed that Sauri community did not participate in project identification, project design, time table and budget planning as well as in the evaluation of the MVP interventions. This indicates that there was no full participation of Sauri community in decision making. Participation of the local community is crucial because it ensures ownership and sustainability of projects.
5.2.2 Poverty in Sauri and Lundha villages

Majority of Sauri respondents (94%) reported that the MVP had reduced poverty in their households. However in Lundha, 70% of respondents reported that they were poor. The MVP appears to have achieved its goal of reducing poverty in Sauri village. The MVP achieved this by increasing agricultural productivity and promoting household income in Sauri village. This is because the percentage of people earning Kshs 2000 was more in Lundha (43%) than Sauri village (28%). This indicates that, there were more people living below poverty line in Lundha than in Sauri village. Study findings also revealed that respondents earning below Ksh 4000 were more in Lundha (68%) than Sauri village (56%). However, Key Informants reported that poverty reduction was not sustainable because the MVP had stopped providing farmers with farm subsidies thus resulting to low agricultural productivity from the year 2007.

5.2.3 Agricultural/Development stakeholders

A few respondents in Sauri and Lundha village admitted that there were other stakeholders who had assisted them to reduce poverty in their households. Study findings revealed that there were more stakeholders in Lundha (29%) than Sauri village (21%). This indicated that the MVP (94%) had contributed more to poverty reduction in Sauri than other stakeholders. This was achieved through increased agricultural productivity and improvement of infrastructure. Stakeholders in these villages were targeting the poorest members of the community. Key Informants reported that these stakeholders were mostly promoting access to basic necessities such as food, clothing, water, education and sanitation.

5.2.4 Agricultural productivity in Sauri and Lundha villages

Majority of respondents (95%) reported that agricultural productivity increased as a result of the MVP interventions. Study findings show that agricultural productivity had increased among 55% of Lundha respondents. This percentage is far much lower than that of Sauri village (94%). This is an indication that the MVP interventions increased agricultural productivity in Sauri village. Key informants reported that most farmers in Sauri and Lundha do not diversify to other income generating activities such as bee-
keeping, fish farming and horticultural farming due to their deep reliance on maize and beans. They were mainly planting tomatoes and vegetables rather than commercial purposes. According to Key Informants, the MVP hindered residents of these villages from increasing their incomes. High agricultural productivity is not sustainable in these areas.

2007 when the MVP stopped providing farmers with free farm inputs.

5.2.5 Access to electricity

According to 83% of the respondents, the MVP was not successful in providing access to electricity. During fieldwork, the researcher observed that the MVP had not connected the village to the electric grid. However, most households in Sauri had paid Ksh 17000 to Kenya Power and Lighting Company and the balance of Ksh 18000. According to the study findings, 98% of households had not been connected to electricity. Respondents attributed this to electricity not being available in Sauri and Lundha, which hindered majority of Sauri and Lundha residents doing agribusiness which is crucial to increasing their income.

5.2.6 State of roads in Sauri and Lundha villages

Majority of respondents (94%) reported improvement in roads. The MVP, which had put murrains in Sauri village. This had improved Sauri residents' access to health facilities. In Lundha, majority of respondents reported that roads in their village were in bad state. They mainly attributed this to impassability of roads during the monsoon. In regard to this, the study concluded that the MVP had improved roads in Sauri village. However, Key Informants reported that Sauri farmers were responsible for maintaining these roads once the MVP phases out due to lack of funds.

Access to education by Sauri and Lundha residents

The MVP appears to have promoted access to education in Sauri. Key Informants reported that the improvement of school infrastructure
keeping, fish farming and horticultural farming due to their dependency on growing maize and beans. They were mainly planting tomatoes and vegetables for subsistence rather than commercial purposes. According to Key Informants failure to diversify was hindering residents of these villages from increasing their incomes as well as improving nutritional status. High agricultural productivity is not sustainable in Sauri village since 2007 when the MVP stopped providing farmers with free farm inputs.

5.2.5 Access to electricity

According to 83% of the respondents, the MVP was not successful in promoting access to electricity. During fieldwork the researcher observed that the MVP had connected the village to the electric grid. However, most households in Sauri had no electricity due to the cost-sharing that was introduced by the MVP. Each household in Sauri village was to pay Ksh 17000 to Kenya Power and Lighting Company and the MVP the remaining balance of Ksh 18000. According to the study findings, 98% of households in Lundha had not been connected to electricity. Respondents attributed this to poverty. Lack of electricity had hindered majority of Sauri and Lundha residents from engaging in agribusiness which is crucial to increasing their income.

5.2.6 State of roads in Sauri and Lundha villages

Majority of respondents (94%) reported improvement of roads as one of the most outstanding success of the MVP. The MVP graded and put murram on most roads in Sauri village. This had improved Sauri residents access to health facilities and market. In Lundha, majority of respondents reported that the roads in that village were in a pathetic state. They mainly attributed this to impassability of roads during the rainy season (89%). In regard to this, the study concluded that the MVP had improved the state of roads in Sauri village. However, Key Informants reported that Sauri farmers would not be able to maintain these roads once the MVP phases out due to lack of funds.

5.2.7 Access to education by Sauri and Lundha residents

The MVP appears to have promoted access to education in Sauri village (94%). Key Informants reported that the improvement of school infrastructure and daily meals at
school increased the enrolment of pupils and improved their performance. However, in Lundha, 52% of respondents reported that education standards were poor. Poor education standards were attributed to poor infrastructure, lack of school fees and lack of teachers* commitment. The MVP interventions in education are not sustainable due to lack of funds.

5.2.8 Access to medical services
Majority of Sauri respondents (90%) cited access to medical services as one of the key achievements of the MVP. The MVP constructed a health centre in Sauri village and equipped it with medical personnel, drugs, medical equipment. The MVP also renovated and equipped Yala Sub-District hospital with medical equipment and personnel. Key Informants suggested that, the Government should run the facility when the MVP phases out because the community does not have funds to do so. On the other hand, majority of Lundha residents reported that they could not access medical services in public health facilities due to high cost (50%), long distance to health facility (70%) and shortage of drugs (23%). Based on this data, we can conclude that, the MVP increased Sauri residents access to health care services.

5.2.9 Access to water
Majority of Sauri respondents reported that the MVP had improved access to water (88%). The MVP achieved this by protecting springs and constructing water tanks for vulnerable people who had been identified by the community. Most of these springs had dried due to poor construction while others were letting out very little water. This had led to overcrowding in some of these springs. Most respondents reported that it was the responsibility of the MVP to repair these springs. This has resulted to lack of ownership of these springs. Study findings revealed that 70% of Lundha respondents could access clean water due to the presence of NGO's such as Africa Now. This percentage is lower than that of respondents in Sauri village who reported that they could access clean water. The MVP appears to have improved access to clean water in Sauri village.
5.2.10 Access to Market

The MVP was least successful in improving access to market in Sauri village (37%). Key informants reported that most Sauri farmers were forced to sell their maize at throw away price to middle men during the bumper harvests of 2005/2006 due to lack of market. This led to extreme loss of income among Sauri farmers. The study also revealed that, market access was a serious problem in Lundha village. This was due to low prices of agricultural produce (42%) and long distance to the market (19%).

5.2.11 Access to credit facilities

Key informants reported that, access to credit is a serious challenge in both Sauri and Lundha village despite the MVP interventions. Data from the study show that, majority of Sauri and Lundha respondents cannot access credit due to lack of title deeds (Sauri 77%, Lundha 61%) high interest rates charged and ignorance of existence of credit facilities. Access to credit enables a farmer to finance farm inputs as well as capital investment. The study concluded that, high agricultural productivity cannot be realized unless farmers access credit facilities.

5.2.12 Access to agricultural extension services

The MVP provided agricultural extension services to all Sauri residents between the years 2005-2007. Through agricultural extension services farmers acquire knowledge on contemporary technology and modern farming techniques. Note that, training in farming was reported by Sauri respondents as one of the MVP activities which had high levels of participation (70%). Key Informants reported that, the MVP stopped providing Sauri residents with extension services after the year 2007. As a result of this most Sauri farmers cannot access these services due to high cost. In Lundha, 93% respondents are unable to access agricultural extension services due to lack of agricultural extension services in their village, high cost of extension services and their preference to use traditional farming techniques. The study concluded that farmers in both these villages are unable to access extension services despite the MVP interventions.
5.2.13 Efforts to attain gender balance in Sauri and Lundha villages

Majority of Sauri respondents (70%) reported that, the MVP is an organization which is concerned with promoting gender balance. The MVP achieved this by ensuring that women were elected in leadership position and trained in group saving and loaning, horticultural farming, fish farming as well as dairy farming. Women were also reported by majority of respondents (80%) to have been the leading beneficiaries of the MVP interventions. However, in Lundha village, gender imbalance was reported to be a serious challenge facing the community by 68% of respondents. Gender imbalance hinders women from making strategic investment decisions thus lowering agricultural productivity.

5.2.14 MVP as a model for agriculture

According to majority of respondents, (97%), the MVP is an appropriate model for promoting agriculture in Kenya. Reasons cited by respondents were mainly agricultural related and they included; high agricultural productivity, extensive training on modern farming techniques, access to extension services and farm inputs.

5.2.15 Sustainability of the MVP

According to 60% of Sauri respondents the MVP was not sustainable due to corruption, poor phasing out, poverty, lack of capacity building and poor implementation strategy. This is an indication that the community was not actively involved in problem identification, prioritization, planning implementation, monitoring and evaluation of the project. Participation is crucial because it allows communities to give feedback on project successes, failures and propose corrective measures.

5.3 Implications of findings and research gaps

The findings from the univariate analysis have several implications. In Sauri and Lundha, respondents aged below 25 years who were interviewed were fewer than those from other age categories. This an indication that the youth are not attracted to agriculture as a source of livelihood. Therefore, attitude change among the rural youth is necessary in order for them to perceive farming as a business and make it commercially viable.
The household size in Sauri village (6 persons) and Lundha (8 persons) was larger than the mean size of a Kenya household (4.2 persons). This indicated little or lack of knowledge of family planning in these villages. Unless family planning is practiced in these villages, poverty is likely to loom large. This is because large households strain resources such as food, income and land.

Education achievement in both Sauri and Lundha villages was low. Overall 16% of respondents in both these villages had no formal education. Notably, majority of respondents in Sauri (86%) and Lundha (60%) have only attained primary education. This could probably be due to high cost of education and socio-cultural factors such as early marriages. The study concluded that low educational attainment is likely hinder members of these communities from securing future employment opportunities.

Study findings also observed that land is jointly owned by family members and the name on the title deed was of a male member. As a result of this majority of respondents in Sauri 70% and Lundha 86% cannot access credit due to lack of title deeds. The study concluded that these farmers cannot access farm inputs neither can they engage in agri-business or commercial farming. Acquisition of title deeds was crucial because it would enable these farmers to access credit and thus increase their agricultural productivity and incomes.

5.4 Conclusions
The study attempted to establish whether the MVP alleviated poverty in Sauri village through its agricultural interventions. Majority of Sauri respondents acknowledged that the MVP increased agricultural productivity (95%) and alleviated poverty in Sauri village (94%). This indicates that the MVP is a pro-agriculture as well as a pro-poor organization. However, 60% of respondents reported that these achievements were not sustainable due to factors such as corruption, poor phasing out of the project, poverty in Sauri village, lack of capacity building and poor implementation strategy of the project.
5.5 Recommendations

Based on the findings of the study, the following recommendations that could positively affect the implementation of the MVP in other parts of the world have been suggested.

a) The MVP should allow the target population to participate in project identification, budgetary allocation and evaluation process. This will bring about transparency and accountability in the project thus curbing the mistrust that might occur between the target community and the MVP. Failure of the target community to effectively participate in the MVP hinders sustainability of projects.

b) The MVP should improve on its implementation strategy and adhere to its initial promises. The MVP interventions should be implemented systematically in order to curb haphazard completion or failure of some of these projects.

c) The MVP should establish a proper mechanism for monitoring its activities and protecting its assets from being stolen. This will ensure that things meant for the target community are not embezzled by committee leaders.

d) The MVP should strive to be non-partisan especially during its implementation phase. This will prevent division and conflict that might occur in the target community.

e) The MVP should link farmers to markets prior to its initiation. This will prevent farmers from selling their produce at 'throw away' prices which leads to extreme loss of income thus perpetuating poverty in rural areas.

0 The MVP should educate the target community on the importance of credit facilities in agricultural productivity. This is likely to prevent farmers from defaulting on repayment of loans thus making them credit worthy in most financial institutions. Access to credit facilities will enable these farmers to access farm inputs which are crucial to increasing agricultural productivity.
g) Change agents such as the MVP should perceive themselves as facilitators and enablers of people's process of self-development rather than 'saviours'. The MVP gave Sauri community a lot of free things treatment thus creating dependency syndrome among them. As a result of this, most community members became angry and bitter with the MVP when it stopped providing them with free things. This is because they believed that it was their right to be provided with these things.

h) The MVP should encourage farmers to view farming as a business. This is because majority of farmers did not have farm records. Most of them could not quantify how much money they got from selling their farm produce such as vegetables, onions and tomatoes during the field study.

i) The phasing out of the MVP should be gradual not abrupt in both human and financial resources. Key informants reported that, the abrupt departure of the MVP is likely to hinder sustainability of the MVP interventions in Sauri village.
BIBLIOGRAPHY


Australian Centre for International Research. 2005. Partners in Research for Development (Helping the Philippines along the path to prosperity): Australian Centre for International Agricultural Research.


APPENDIX 1

QUESTIONNAIRE FOR FARMERS IN SAURI VILLAGE

Good day! I am a student from the University of Nairobi carrying out a research on Poverty Reduction in Kenyan Rural Areas: Implementation of the Millennium Villages Project in Sauri village. The purpose of the study is to find out the role of MVP agricultural interventions in the alleviation poverty in your household. I would like to kindly ask if you can answer the following questions for me. May I assure you that the information provided by you will be treated with utmost confidentiality. Thank you in advance.

A: BACKGROUND INFORMATION

1. Name of the respondent (put only first name(optional):

2. Gender
   Male 1. ( )  2. Female ( )

3. What is your age?

4. What is your marital status?

   1. Married ( )  2. single ( )  3. Divorced ( )  other ( )

5. What is the size of your household?
6. What is your level of education?
   1. None ( )  2. Primary ( )  3. Secondary  4. College ( )
   Others (please specify)

7. What is your religion?
   1. Catholic ( )  2. Protestant ( )  3. Traditionalist ( ) 4. Muslim ( ) 5. Others
   (Specify)

8. What is your occupation?

9. Do you do any business?
   1. Yes( )  2. No ( )

10. If yes, which business do you do?

11. What are your main sources of income?
    1. Farm produce ( )  2. Earnings from employment ( )  3. Earnings from business
       ()  4. Remittances from relatives and friends ( )  5. Others specify ( )

12. How much do you earn/receive as monthly income?

13. What are your major expenditures?
14. Do you have access to any land?
   1. Yes  2. No

15. If yes, what is the size of the land?

16. Is this land registered under your name? __________

17. If you have land registered in your name, how did you acquire it? ____________________________

B. KNOWLEDGE ON THE MVP?

18. Have you ever heard of the MVP?
   1. Yes ()  2. No ()

19. If yes, how did you get to know about the MVP? ________ meeti^__

   Other sources of information
   (specify)

20. Briefly outline how you came to know about the MVP? ________
14. Do you have access to any land?
   1. Yes  2. No

15. If yes, what is the size of the land?

16. Is this land registered under your name?

17. If you have land registered in your name, how did you acquire it?

B. KNOWLEDGE ON THE MVP?

18. Have you ever heard of the MVP?
   1. Yes ()  2. No ()

19. If yes, how did you get to know about the MVP?

   Other sources of information
   (specify)

20. Briefly outline how you came to know about the MVP?
21. Were you involved in the initial planning of the MVP?
   1. Yes().  2. No ( )

22. If No, were there people you know who were involved?
   1. Yes ( )  2. No ( )

23. To date, do you participate in the MVP?
   1. Yes ( )  2. No ( )

24. If yes, to what extent do you participate in the following activities of the MVP? 

   appropriate response.

<table>
<thead>
<tr>
<th>Participation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training in farming and livestock keeping</td>
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<tr>
<td>Improvement of roads</td>
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<tr>
<td>Improvement of health facilities</td>
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<tr>
<td>Improvement of schools</td>
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<tr>
<td>School feeding programme</td>
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<tr>
<td>Looking for markets for your produce</td>
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<td>Improvement of water</td>
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<tr>
<td>sanitation facilities</td>
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<tr>
<td>Training in business management</td>
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<tr>
<td>Environmental conservation</td>
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<tr>
<td>Others (specify)</td>
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</tbody>
</table>

C. HIGHLIGHTS OF THE VILLAGE BEFORE/AFTER THE MVP INTERVENTIONS

25. Describe the situation in this village before the implementation of the MVP in regard to the following?
1. Poverty situation

2. Farming

3. Access to agricultural extension services

4. Involvement in business

5. Access to medical services
6. The state of roads

7. Access to water and sanitation facilities

8. Access to market for your agricultural produce

9. Access to storage facilities for your produce

10. Environmental conservation
11. With the introduction of the MVP what was emphasized?

<table>
<thead>
<tr>
<th>IDENTIFIED ACTIVITIES</th>
<th>DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farming (soil conservation, farm inputs)</td>
<td></td>
</tr>
<tr>
<td>Livestock keeping</td>
<td></td>
</tr>
<tr>
<td>Marketing of agricultural produce</td>
<td></td>
</tr>
<tr>
<td>Training in business management</td>
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<tr>
<td>Provision of health care services</td>
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<tr>
<td>Provision of electricity</td>
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<tr>
<td>Improvement of roads</td>
<td></td>
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<tr>
<td>Improvement of water and sanitation facilities</td>
<td></td>
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<tr>
<td>Improvement of education standard</td>
<td></td>
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<tr>
<td>Environmental conservation</td>
<td></td>
</tr>
</tbody>
</table>

27. Has your agricultural productivity increased since you started utilizing MVP interventions?

1. Yes ( )  2. No ( )

28. If Yes, what is the production levels in terms of bags of the various crops that you grow?
<table>
<thead>
<tr>
<th>Agricultural produce</th>
<th>Production before MVP</th>
<th>Production after MVP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beans</td>
<td></td>
<td></td>
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<tr>
<td><em>Sukuma Wiki</em></td>
<td></td>
<td></td>
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<tr>
<td>Onions</td>
<td></td>
<td></td>
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<tr>
<td>Tomatoes</td>
<td></td>
<td></td>
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<tr>
<td>Others (specify)</td>
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</tr>
</tbody>
</table>

29. To what extent has the MVP interventions changed your lifestyle with regard to the following: Tick the appropriate response.

<table>
<thead>
<tr>
<th>Aspects of lifestyle changed</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Farming technology</td>
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<tr>
<td>Use of fertilizer</td>
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<tr>
<td>Area/acreage under crops</td>
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<tr>
<td>Soil conservation</td>
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<tr>
<td>Feeding habits</td>
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<tr>
<td>Increased harvests</td>
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<tr>
<td>Access to clothing</td>
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<tr>
<td>Increased family income</td>
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<tr>
<td>Improved health status of family</td>
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<tr>
<td>Enabled family to connect to electricity</td>
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<tr>
<td>Enabled family to access market for their produce</td>
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<tr>
<td>Enabled family to Access to water</td>
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<tr>
<td>Access to sanitation facilities</td>
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<tr>
<td>Storage facilities for your produce</td>
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<tr>
<td>Your children's Access to education</td>
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</table>

**D. OUTCOMES OF THE MVP INTERVENTIONS**

30. To what extent would you say that the MVP has succeeded in the following aspects? Please Tick the appropriate response.

<table>
<thead>
<tr>
<th>Selected interventions</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
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</thead>
<tbody>
<tr>
<td>Promoting modern farming</td>
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<tr>
<td>Increasing farm output</td>
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<tr>
<td>Promoting livestock keeping</td>
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<td>Promoting dairy farming</td>
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<td>Promoting access to health facilities</td>
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<td>Promoting enrolment in schools</td>
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<td>Promoting access to water</td>
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<td>Promoting access to sanitation facilities</td>
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<td>Improvement of roads</td>
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<td>Improving storage facilities</td>
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<tr>
<td>Promoting access to electricity</td>
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<tr>
<td>Gender imbalance</td>
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<tr>
<td>Promoting access to markets for your produce</td>
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</tbody>
</table>

31. Do you think this project has succeeded in reducing poverty in your household.

1. Yes  2. No

32. If Yes, explain
33. If No, explain

34. In your view to what extent have the following benefitted from the MVP project. Please tick the appropriate response.


<table>
<thead>
<tr>
<th>Category of beneficiaries</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
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<td>Women</td>
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<tr>
<td>Youth</td>
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<tr>
<td>Rich</td>
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<tr>
<td>Poor</td>
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<tr>
<td>Community at large</td>
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</tbody>
</table>

35. Are there other stakeholders who have contributed to reduction of poverty in your household?

1. Yes ( )  2. No ( )

36. If Yes, who are these stakeholders apart from the MVP who have contributed to reduction of poverty in your household.
E. CHALLENGES BEFORE/AFTER THE INTRODUCTION OF THE MVP INTERVENTIONS

37. Prior to the initiation of the MVP were you facing any challenges in your farming?
   1. Yes ( )  2. No ( )

38. If Yes, to what extent were you facing the following challenges? Tick the appropriate response.

<table>
<thead>
<tr>
<th>Challenges</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor health</td>
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<tr>
<td>Unfavourable land tenure system</td>
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<tr>
<td>Poor roads</td>
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<tr>
<td>Unfavourable weather conditions</td>
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<tr>
<td>Poor storage facilities</td>
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<tr>
<td>Lack of market for your agricultural produce</td>
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<tr>
<td>Lack of farm inputs</td>
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<tr>
<td>Gender imbalance (who makes decision on how the harvest should be used)</td>
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<tr>
<td>Lack of education</td>
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<tr>
<td>Access to credit</td>
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<tr>
<td>Lack of agricultural extension services</td>
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</tbody>
</table>
39. What specific challenges are you facing since the introduction of the MVP in this village?

40. Overall, what would you identify as the key achievements of the MVP in this village?

41. Do you think this project is sustainable in this village?

42. In your own view, do you consider MVP as a suitable model for promoting agriculture?
QUESTIONNAIRE FOR FARMERS IN LUNDHA VILLAGE

Hallo! I am a student from the University of Nairobi carrying out a research on Poverty Reduction in Kenyan Rural Areas. Implementation of the Millennium villages Project in Sauri village. The purpose of the study is to find out the role agriculture the alleviation of poverty in your household. I would like to kindly ask if you can answer the following questions for me. May I assure you that the information provided by you will be treated with utmost confidentiality. Thank you in advance.

A: BACKGROUND INFORMATION

1. Name of the respondent (put only first name/optional)

2. Gender
   (1) Male    (2) Female

3. What is your age?

4. What is your marital status?

   1. Married ( )   2. Single ( )   3. Divorced ( )   4. Others (please specify)

5. What is the size of your household?

6. What is your level of education?

   1. None ( )     2. Lower Primary ( )     3. Upper Primary ( )     4. Secondary ( )

   5. College ( )   6. Others (please specify).
7. What is your religion?
   1. Catholic ( )  2. Protestant ( )  3. Traditionalist ( )  4. Muslim ( )  5. Others (specify)

8. What is your occupation?

9. Do you do any business?
   1. Yes ( )  2. No ( )

10. If Yes, which business do you do?

11. What are your main sources of income?

   1. Farm produce ( )  2. Earnings from employment ( )  3. Earnings from business

   4. Remittances from relatives and friends  5. Others (Specify)

12. How much do you earn/receive as monthly income?

13. What are your major expenditures?

14. Do you have access to any land?

   1. Yes ( )  2. No ( )

15. If yes, what is the size of the land?
16. Is the land registered in your name?

1. Yes 2. No

17. If you have land registered by your name, how did you acquire it?

B. HIGHLIGHTS OF LUNDHA VILLAGE

18. Have you heard of the MVP?

1. Yes 2. No

19. If Yes, how did you get to know about it?

20. Describe the current situation in LUNDHA village in regard to the following:

1. Poverty situation

2. Food security
3. Access to medical services

4. The state of roads

5. Access to water

6. Access to market for your agricultural produce

7. Access to storage facilities for your produce ....

8. Environmental conservation
9. Access to credit facilities

10. Access to sanitation facilities

11. Access to agricultural extension services

12. Education standards

C: AGRICULTURAL PRODUCTION

21. What proportion of your land is under farming?

<table>
<thead>
<tr>
<th>Aspects of lifestyle changed</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeding habits</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Access to adequate shelter</td>
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<td>Access to water</td>
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<td>Access to clothes</td>
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<tr>
<td>Access to health services</td>
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<tr>
<td>Your childrens access to education</td>
<td></td>
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<tr>
<td>Access to sanitation</td>
<td></td>
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<td></td>
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<tr>
<td>Increased income</td>
<td></td>
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</tbody>
</table>

27. What are the major factors that have caused changes in your lifestyle in the last 5 years?

28. Do you think farming has succeeded in reducing poverty in your household?

   1. Yes ( )  2. No ( )

9
29. If Yes, explain.

30. If No, explain.

31. Are there other stakeholders who have contributed to reduction of poverty in your household?

1. Yes ( ) 2. No ( )

32. If Yes, who are these stakeholders?

E: CHALLENGES FACED IN FARMING

33. Do you face any challenges in your farming?

1. Yes( ) 2. No ( )

34. If yes, to what extent do you face the following challenges? Tick the most appropriate responses.
1. Very serious 2. serious 3. Moderate 4. No change 5. No change at all

<table>
<thead>
<tr>
<th>Challenges</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor health</td>
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<tr>
<td>Unfavourable land tenure system</td>
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<tr>
<td>Poor roads</td>
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<tr>
<td>Unfavourable weather conditions</td>
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<tr>
<td>Poor storage facilities for your agricultural produce</td>
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<tr>
<td>Lack of market for your agricultural produce</td>
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<tr>
<td>Lack of farm inputs</td>
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<tr>
<td>Gender imbalance (who makes decision on how the harvest should be used)</td>
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<tr>
<td>Lack of education</td>
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<td></td>
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<tr>
<td>Lack of Agricultural extension services</td>
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</tbody>
</table>

35. What would you identify as the major challenges faced by farmers in this area?
A: INTRODUCTION

- Introduction of the MVP
- Position
- Qualification
- "Number of year

B: CONCEPTUALIZATION

- Meaning of MVP and brief overview
- Involvement of local people and to date
- Outline of the organic activities of the MVP

C: MVP AS AN AGRICULTURE

- Outline the situation of agriculture, to sanitation, water and sanitation, food security, accessibility to shelter.
- Agricultural assistance the
- Tangible changes (in life.
- Specific achievements of the program

D. OUTCOMES OF THE MVP

- Evidence of success, constant
- Poverty situation to date; status of living.
INTERVIEW GUIDE FOR KEY INFORMANTS

A: INTRODUCTION

- Introduction of the MVP study informants
- Position
- Qualification
- Number of year

B: CONCEPTUALIZATION AND IMPLEMENTATION OF THE MVP

- Meaning of MVP and brief history on how it was introduced.
- Involvement of local — implementation during the introduction phase and to date.
- Outline of the organization of the programme and its objectives.
- Activities of the MVP.

C: MVP AS AN AGRI/H

- Outline the situation prior to the introduction of the MVP eg: facilities, agricultural extension services, market for agricultural produce, state of services, education standards and access to shelter.
- Agriculture brought about by the MVP or soft MVP.

D: INTERVENTIONS

- General standard
• General contributions of the MVP in Sauri village.
• Key beneficiaries of the project.

E. CHALLENGES AND PROSPECTS OF THE MVP

• Challenges of the MVP in Sauri.
• Suggestions on how to strengthen/sustain/phase out MVP.
• Need to strengthen/sustain the MVP
• Need to phase out MVP?
• Overall assessment of the MVP model
## APPENDIX IV

### OBSERVATION CHECKLIST FOR RESPONDENTS AND INFRASTRUCTURE IN SAURI VILLAGE

<table>
<thead>
<tr>
<th>OBSERVATION CHECKLIST</th>
<th>OBSERVATIONS MADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shelter</td>
<td></td>
</tr>
<tr>
<td>2. Household possessions (radio, TV, chair, table etc)</td>
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<tr>
<td>3. Livestock</td>
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<tr>
<td>3. Granary and food in it.</td>
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<tr>
<td>4. Clothing</td>
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<tr>
<td>5. Sanitation facilities (bathroom, type of latrine)</td>
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<tr>
<td>6. Water facilities</td>
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<tr>
<td>7. Roads</td>
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<tr>
<td>8. Health facilities</td>
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<td>9. Electricity</td>
<td></td>
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<tr>
<td>10. Schools</td>
<td></td>
</tr>
<tr>
<td>11. Environmental conservation</td>
<td></td>
</tr>
</tbody>
</table>