# DONOR FUNDED AGRICULTURAL BASED PROJECTS, CULTURE AND EDUCATION AS CONTRIBUTORS TO RURAL DEVELOPMENT IN LURAMBI CONSTITUENCY, KAKAMEGA COUNTY

**BY**

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## DECLARATION

This research project report is my original work and has not been presented for a degree or any other award in any other university.

……. Date……..

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L50/69553/2011

This research project report has been submitted for examination with our approval as the university supervisors.

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## DEDICATION

This research project is dedicated to my dear late mother Florence Mapenzi Mdzomba. She was my very first teacher. Her endless love, continuous encouragement, support, prayers and desire to see me excel to greater heights in academic excellence has taken me this far.

This work is also dedicated to my young, lovely daughter Angel Mapenzi. Your warm tender company always being by my side propelled me to work hard and excel in this academic journey with hopes you will emulate it to greater heights. It is my prayer that God grants you wisdom.

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| | |
|---|---|
| **AIDS** | Acquired Immune-Deficiency Syndrome |
| **CIGs** | Common Interest Groups |
| **GDP** | Gross Domestic Product |
| **KIHBS** | Kenya Integrated Household Budget Survey |
| **MDGs** | Millennium Development Goals |
| **OVOP** | One Village One Product |
| **PEAP** | Poverty Eradication Action Plan |
| **PELUM** | Participatory Ecological Land Use Management |
| **SACCOS** | Savings and Credit Accounts |
| **SPSS** | Statistical Package for Social Sciences |
| **UNICEF** | United Nations Children's Fund |

## ABSTRACT

Statistics indicate that a majority of the people living in the developing countries live in rural areas and live below the poverty line. It is shown that these people living in rural areas derive most of their livelihoods form agriculture related activities. In order to improve the livelihoods of these people, it is important to put in place initiatives that can encourage rural development. The problems facing people in rural areas include: poverty due to lack of employment, food insecurity, lack of access to services such as health facilities, electricity, clean water and lack of quality education. In the case of Lurambi constituency it was noted that there were many donor funded agricultural based projects which were involved in the production of crops and livestock . It was also found that there were many schools (both primary and secondary schools). Additionally it was noted that Lurambi constituency had a rich traditional culture which was still being practiced as witnessed in the case of many African traditional communities. The purpose of the study was to describe how various factors contributed to rural development in Lurambi constituency. The factors that were studied were: donor-funded agricultural based projects, participation in the donor funded agriculture based projects, cultural beliefs and practices and level of education and how they contribute to rural development. The research study was guided by the following research questions: to what level do donor funded agricultural based projects contribute to rural development? To what extent does individual participation in rural development contribute to rural development? To what extent do cultural beliefs and practices contribute to rural development? And finally how does the level of education contribute to rural development in the case of Lurambi constituency? The study employed a descriptive survey study. Data relating to the above mentioned variables was collected from the research population which is the people living in Lurambi constituency who have participated in donor funded agricultural based projects. Random sampling was used to select the subjects to be involved in the study sample. Data was collected using questionnaires. Validity of the instruments was ensured by conducting a pilot study on ten percent of the study sample so as to gauge if the instruments were measuring what they were supposed to measure. The reliability of the instruments was measured using test retest method whereby the instrument was administered to a study group during the pilot study at a given time then after a period of two weeks' time, the instruments was administered again to the same study group . The degree of correlation between the first set of results and the second set of results was assessed using Pearson's product moment formula to know how reliable the instrument was. Collected data was analyzed descriptively in consultation with experts. Data was subjected to processing and analysis where by the data was processed by classifying, editing and coding and then analyzed using SPSS. The results of the study were presented in frequency distribution tables and interpreted. It was found that there was a positive correlation of 0.895 between participation in donor funded agricultural based projects and income generation and 0.790 in relation to the donor funded agricultural projects and ability to install electricity in homes of participants. These results indicated that there was a significantly positive relationship between participation in donor funded agricultural based projects and rural development. It was also found that there was a positive correlation of 0.701 between level of education and employment as an indicator of rural development. This meant that people who had significantly higher levels of education participated more in developmental activities compared to those with little or no education. It was also found that there was a negative correlation of -0.392 between a large number of children and ability to create employment for other people and a negative correlation of -0.623 between alcohol consumption and the amount of income generated. These results indicated that some cultural practices such as excessive alcohol consumption and large family size had a negative impact on rural development. It was recommended that more donor funded agricultural projects should be introduced and sensitization concerning the projects should be done.

# CHAPTER ONE

# INTRODUCTION

## 1.1. Background of the Study

At the Millennium Summit in September 2000, world leaders undertook the commitment to halve by 2015 the proportion of people in the world whose income is less than a dollar a day and the population of people who suffer from hunger. They also pledged in the United Nations Millennium Declaration to achieve other Millennium Development Goals (MDGs) that encompass education, gender equality and women empowerment, health and communicable diseases such as AIDS and malaria and environmental sustainability. Studies indicate that about 1.2 billion people live on an income of less than 1 US dollar a day and these people are mostly located in the rural areas. Even in 2025 when the majority of the world population is projected to live in urban areas, 60% of the poverty will still be rural poverty (IFAD, 2001). Different countries have handled the issue of rural development diversely with the aim of reducing poverty among the rural population.

The agricultural sector is critical to the prospects of economic growth for many developing countries. Where as in 1997, agriculture accounted for only 3% of the gross domestic product (GDP) for developed countries, it contributed 26% of the GDP for developing countries and more than 50% for the least developing countries. It is also the main source of employment and accounts for a major share of exports and foreign exchange in most developing countries (Beierle, 2002).The people in rural areas rely heavily on Agriculture in developing countries. To raise productivity or diversify their income, the rural poor often need investment and working capital. Yet the rural credit schemes have frequently failed to reach small farmers and the poor and have rarely been sustainable. Assistance need to focus on developing professionals and responsive rural financial institutions which not only provide credit but also offer a range of appropriate financial products to rural savers and borrowers. Agriculture can therefore be considered to be at the center of approaches to reducing poverty.

In Mauritania use of government policies and donor funded agricultural based projects were used for land improvement to assist in the production of food crops. A law on land tenure was adopted in 1983 to provide security to farmers by facilitating private ownership of land. The law however failed to effectively serve poor communities. Under the Maghama Improved Flood Recession Farming project, the possibility of substantially increasing flood recession farmland from

less than 4000 hectares to more than 9000 hectares in areas dominated by traditional land use arrangements presented an opportunity to propose a change in policy to the government involving the devolution of local land tenure arrangement to the village population concerned. A decree was promulgated in the year 2000 providing for beneficiary involvement in the resolution of land tenure issues. An overall framework agreement guarantee secure access for at least fifteen years to land upon which improvements are made (IFAD, 2002).

In Japan, a model of one village one product (OVOP) was key in tackling issues of rural development. OVOP is a unique approach to rural development by which rural areas are transformed into economically vibrant entities through release of latent local potential and creation of unique and appealing local product and environment. The OVOP concept was the brain child of Japanese former governor of Orita prefecture, Hiramatsu who used his previous experience and exposure in the Japan ministry of Economy, Trade and Industry to try to find a solution to Orita serious rural economy decline. This approach has been very successful in the Japanese prefecture of Orita and has attracted and continues to attract wide international appeal particularly in developing countries, because of its potential to reverse local decay and decline (Fumihiko, 2007).

In Malawi, the OVOP model was also adopted. The origin of the Malawi OVOP programme can be traced to earlier visits to the Orita prefecture in Japan by high ranking government officials to see how the OVOP approach to rural development had transformed local communities there. The ministry of Agriculture visited first in December 1997 followed by the former president of Malawi Dr. Bakili Muluzi in October 2003. Both visits made such an impression on the Malawi government that a strategic decision was made to adopt the OVOP as a fully fledged national development programme. The overall goal of the programme was to create an empowered community generating equitable incomes and wealth while its mission was to generate income and wealth for Malawians society by community mobilization to produce value added goods and services that are marketable in order to reduce wealth disparities. Underlying the programme is zoning and production, processing and marketing of goods and services, the idea being that communities should direct their efforts towards the production of goods and services which have a comparative advantage over other communities (Nsubuga, 2009).

The Uganda government has long identified widespread poverty and the single most important hurdle in the country's development and has been pursuing a relentless and sustained campaign to

reduce it or if possible eradicate it. The main instrument in this is the Poverty Eradication Action Plan (PEAP) which has been implemented since 1997.The PEAP is implemented by different sectors such as local government, education, health, agriculture and social development each with its own strategic investment plan. The implementation of PEAP is coordinated at the central level by the prime minister through the National Integrated Monitoring and Evaluation Systems (NIMES). The progress on poverty reduction is monitored by different bodies such as the poverty monitoring and analysis unit in the ministry of Finance, planning and economic development, the poverty eradication working group and the poverty monitoring network (Nsubuga, 2009).

In Kenya a reform process set in motion in the 1980s led to significant changes in the Kenyan economy, but the pace of progress slowed down in the second half of the 1990s. Since then population growth, degradation of natural resources, the changing global climate and the political crisis of early 2008 have all contributed to worsening of poverty levels and slowing down development in the country. Kenya's long-term development plan, the Kenya vision 2030, was launched in 2008, with an aim of creating a globally competitive and prosperous country with high quality life by the year 2030. Kenya Vision 2030 was designed to guide the country towards meeting the MDGs by 2015 and beyond, transforming Kenya into a newly industrialized middle level country industry (Oparanya, 2012). It has been shown that the key to better performance in agriculture lies in boosting small-scale holder productivity and developing non- farm activities. The government of Kenya aims to stimulate rural development by making financial services available to rural communities.

The government of Kenya recognizes that economic development depends on agriculture, tourism, manufacturing and the energy sector. All of these rely heavily on the sustainable management of natural resources, particularly Kenya's five major water towers. The increased frequency of drought has also led the government to place natural resource management and climate change at the center of its agricultural and economic development strategy. The government has introduced new legislative and policy reforms to coordinate ecosystems management and the sustainable use of natural resources (IFAD). In Kenya, rural development is therefore influenced by various aspects including agriculture, infrastructural facilities and education. Indicators of rural development are basically pointers that indicate the level of improved living standards among the people living in the rural areas. Rural development indicators can be social indicators, economic indicators, infrastructural indicators and demographic indicators. A major indicator of rural

development is food security whereby the people in rural areas can comfortably feed themselves and if need be remain with surplus which they can sell to supplement their income. Improved income levels are an economic indicator of rural development particularly if this improvement is tied to an additional activity that was done with the aim of improving livelihoods of the people. Diversification of income sources is an indicator of development as it shows that the communities in rural areas are getting away from solely depending on agriculture as the primary source of income. This is important as it can lead to creation of employment both for the owner of the enterprise and others within the vicinity. Successful migration to urban areas by people in rural areas can also serve as a social indicator of rural development. This is because it implies that the people in rural areas can compete for similar job opportunities with those in the urban areas which are perceived to have access to better facilities. Infrastructural facilities include better roads, access to electricity and clean water, access to markets for their produce and access to health facilities.

**1.2. Statement of the Problem**

Studies indicate that a larger percentage of the population in most developing countries live in the rural areas. These rural areas are usually characterized by problems such as extreme poverty, food insecurity, lack of good infrastructure and limited access to services such as health, water and education. Additionally many rural areas have a similar culture that is agreeable among the rural population (IFAD, 2003). According to the Population census (2009), only 15.2% of the population in Kakamega County lives in urban areas while 84.8% of the total population of 1,660,651 lives in the rural areas. Of those living in the rural areas 53% live below the poverty line (KIHBS,2005). Studies also indicate that the majority of the population living in the rural areas lack access to good education as exemplified by the case of Kakamega County whereby the population with primary education stands at 70.9% which means that about 29.1% of the population lacks basic primary education (KIHBS,2005). This is a test to the achievement of the millennium development goal number 2 which aims at the achievement of universal primary education (United Nations, 2001).

The population with secondary school education in Kakamega County stood at 11.0% as of 2011(County data fact sheet, 2011). This means that about 59.9 % of the population that completes primary education does not progress on to complete their secondary education. This is mainly attributed to lack of enough secondary schools to accommodate the large number of primary school graduates as a result of the free primary education, lack of funds for school fees and poor performance on the part of students in the rural areas which is attributed to lack of adequate facilities

for training such as books, classrooms and large numbers which limit contact between teachers and students. Many of the rural areas lack access to services and facilities .According to the data from the Rural Electrification Authority it indicates that only 5.6 % of the households in Kakamega County have electricity, and only 4.9% of the roads in this county are paved. The others are neither paved nor tar marked. This impacts negatively on trade since some of the trading parties may face a challenge when ferrying their commodities to and from the market. It was also found that in Lurambi constituency found in Kakamega County, there were about 27 registered donor funded agricultural based projects that were operational within the Constituency, ( MOA 2006).

The research problem therefore was: How does donor funded agricultural based projects, culture and education contribute to rural development in Lurambi Constituency?

### 1.3. Purpose of the Study

The purpose of this study was to describe how donor funded agricultural based projects; culture and education contribute to rural development in Lurambi constituency in Kakamega County.

### 1.4. Objectives of the Study

The study was guided by the following objectives:

1. To determine how donor funded agricultural based projects contribute to rural development in Lurambi Constituency.
2. To examine the extent to which participation in donor funded agricultural based projects contribute to rural development in Lurambi Constituency.
3. To evaluate the extent to which cultural beliefs and practices contribute to rural development in Lurambi Constituency.
4. To assess the influence of level of education on rural development in Lurambi constituency.

### 1.5. Research Questions

In order to evaluate the objectives of the study and to establish the relationship between the variables, the following research questions were used:

1. To what level do donor funded agricultural based projects contribute to rural development in Lurambi Constituency?

2. To what extent does individual participation in donor funded agricultural based projects contribute to rural development in Lurambi Constituency?
3. To what extent do cultural beliefs and practices contribute to rural development in Lurambi Constituency?
4. What is the influence of the level of education on rural development in Lurambi Constituency?

### 1.6. Significance of the Study

It was hoped that the findings of this study would be used by county officials to improve the development plan for Kakamega County and in the development of policies for the decentralized government to the county level. It was also hoped that the adoption of these findings would help in reducing the existing gap between the urban and rural environments and in strengthening the rural – urban continuum. The findings would also shed light on the applications of modern development models on the transformation of rural economies and also contribute to Rural Development studies.

### 1.7. Basic assumptions of the Study

The basic assumption of this study was that the people living in the rural areas in Kakamega County were positively affected by the dynamics of economic development, given that they were involved at various levels of means of production. The study also assumed that the respondents who were included in the sample population gave honest opinion and correct information regarding the study subject and that there would be an adequate return rate of the questionnaires issued to respondents. The study also assumed that the political environment in the country would be stable and that there would be peace and stability given that the country had just gone through an election. The study also assumed that the weather would be conducive for research and that it would not interfere with the research process given that the area under study was expected to face heavy rains during the proposed time for the research.

### 1.8. Limitations of the Study

The main limitation of the study was funds which were required for the training of adequate number of paraprofessional research assistants to assist in conducting of the research study. This limitation was mitigated by shortening the training period so as to take a period of two man days instead of five man days. Another limitation that was likely to hinder the study was the heavy rainfalls that were expected to be experienced in the region during the time of the research period. It

was feared that this limitation would hinder the researcher from reaching as many areas as possible. This limitation was mitigated by scheduling for mornings and mid mornings for administering of the questionnaires in an effort to avoid the afternoon rains. This is because the area under study is prone to receiving conventional rainfall which is mainly received in the afternoons.

### 1.9. Delimitations of the Study

The study was limited to Kakamega county of Kenya. The concern was rural development in Lurambi constituency because it was a section of Kakamega County that was found to have large areas that were predominantly rural and had a rich culture. Additionally, it was found to be an area where there were many donor funded agricultural based projects that were being implemented by the local community. The content of this study was limited to donor funded agricultural based projects, culture and education and how they contributed to rural development in Lurambi constituency.

### 1.10. Definitions of Significant Terms used in the study

**Agricultural Based Projects:** refers to carefully organized plans designed to achieve a particular goal over a specified period of time that involves the cultivation of land and keeping of animals for purposes of food production and economic well being.

**Common Interest Groups:** refers to collections of members who have like interests and come together to share information and work cooperatively around some unifying issue.

**Contributor:** refers to the ability of a factor to play a role in the final outcome of an event.

**Culture:** refers to the total way of life of any community.

**Indicators of Development**: refers to pointers of the level of improved living standards among people living in rural areas.

**Infrastructural Facilities:** refers to the basic structures and facilities necessary for a country or an organization to function efficiently e.g. buildings, transport

systems, water and energy sources, social amenities and administrative systems.

**Levels of Education:** refers to the various categories which one can be exposed to in the process of training children or young people in schools or colleges in terms of physical elements, psychological elements and service delivery.

**Participation:** refers to the ability to take part in an activity that is being undertaken by others.

**Poverty:** refers to inability to afford the basic needs.

**Rural Area:** refers to a place where vast open lands exist which are sparsely populated and the people in the area rely heavily on agriculture based activities for their livelihoods

**Rural Development:** refers to the process of improving the quality of life and economic well being of people living in relatively isolated and sparsely populated areas.

### 1.11 Organization of the Project Report

The report is organized in to five main chapters. The first chapter is the introduction and it contains the background of the study, the statement of the problem, the purpose of the study, the objectives and the research questions. It also has the significance of the study, assumptions and limitations of the study, delimitations of the study, definition of significant terms and the organization of the study. The second chapter contains the literature review and is made up of the introduction and the definition of rural development, factors that influence change in rural areas, influence of donor-funded agricultural based projects on rural development, the place of cultural beliefs and practices in rural development and how levels of education affect rural development. The chapter also has a summary of the literature review and a conceptual framework showing the theoretical relationship between the variables.

Chapter three covers the research methodology which is made up of a brief introduction, research design, research population; study sample, sample size and sampling techniques. The

chapter also has the data collection methods, data collection instruments, reliability and validity of instruments, data analysis and the operational definition of variables. Chapter four of the study covers the data analysis. Data was categorized, ordered, manipulated and summarized to obtain results that would be used to answer the research questions. The results obtained were interpreted to give meaning and implication of the research data. Statistical package for social sciences (SPSS) was used to analyze data. Chapter five of the study covers a summary of the findings which were drawn from the results of the data analysis in chapter four. This is followed by a discussion of the findings, conclusion and recommendations. A student introduction letter, a copy of the research permit and a sample of the questionnaire that was used in data collection are contained in the appendix section .

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

This chapter on literature review discusses the research topic under various sub headings including; the concept of rural development, various factors influencing change in rural areas, how donor funded agricultural based projects are involved in rural development, how Individual participation in donor funded agricultural based projects can influence rural development ,how cultural beliefs and practices have a bearing on rural development, and how levels of education can be related to rural development. The chapter also has a theoretical framework and a conceptual framework explaining the relationship between the independent variables and the dependent variables.

## 2.2. Concept of Rural Development

Rural development refers to the process of improving the quality of life and economic well being of people living in relatively isolated and sparsely populated areas (Malcolm J. 2003). The definition of rural development varies from one point of view to the other. The definition of rural development may be centered on income criterion in which the concept is made to address the problem of rural poverty. It may be defined in sociological concept in which the rural poor represents a reservoir of untapped talent a target group that should be given the opportunity to enjoy the benefits of development through improved education, health and nutrition ( IFAD. 2007). This is one of the most important definitions of rural development as the provision of social infrastructures could provide the catalyst that would transform the rural areas. Rural development may also be seen as an ideology and a practice. It may mean planned change by public agencies based outside the rural areas such as the national government and international organization; it may also be the bringing of the countryside into an active state, as well as the transformation of the inferior nature of the country side into something more superior in terms of activities. Rural development can also be seen as the improvement in the living standard of the rural dwellers by engaging them in productive activities such as the establishment of rural industries that will increase their income. It is also seen as a means of raising the sustainable living of the rural poor by giving them the opportunity to develop their full potentials.

In essence rural development may imply a broad based re-organization and mobilization of rural masses in order to enhance their capacity to cope effectively with the daily task of their lives and with changes consequent upon this. According to the World Development Report (2008), rural development must be clearly designed to increase production. It recognizes that improved food supplies and nutrition ( food security), together with basic services, such as health and education, not only directly improve the physical well-being and quality of life of the rural poor, but can also indirectly enhance their productivity and their ability to contribute to the national economy. Rural development ensures the modernization of the rural society and the transition from its traditional isolation to integration with the national economy. It is concerned with increased agricultural production for urban and international markets. This is essential so as to generate foreign exchange, and to attract revenue to finance public and private consumption and investment. In order to encourage increased production rural development may offer a package of inputs and welfare services for the rural masses. Such inputs and welfare services include physical inputs (such as the provision of feeder roads, water and electrification), social inputs—(namely health and educational facilities) and institutional inputs such as credit facilities, agricultural research facilities, rural expansion services among others.

**2.3. Factors that have Influenced Change in Rural Areas**

Spencer,( 1977) highlights the key factors that have influenced change in rural communities in the developing countries in the 19$^{th}$ and 20$^{th}$ centuries. According to him, improvements in public health, particularly after 1950, lowered mortality rates and increased life expectancy at birth. This resulted in explosive population growth rates, land shortage and enhanced migration from rural to urban areas in search of alternative employment. Improvements in transport and communications provided physical access to rural areas and facilitated the flow of new ideas through electronic and print media. Better transport facilities provide opportunities for the producers to serve wider market areas. The expansion of education facilities opened the minds of children to new ideas that may greatly influence their future. Education has particularly influenced the young generation to seek non-traditional forms of employment that are not widely available in rural areas, thus encouraging mobility and new ways of life. Increased mechanization and electrification vary greatly in its impact. In some places it has had a major influence both on agricultural technology and domestic lifestyles. The penetration of manufactured goods into the rural areas has transformed rural lifestyles in many ways. Numerous range of manufactured products are now on sale in rural areas. These include such

items as galvanized iron sheets, construction materials, modern domestic utensils, bicycles and radios. The possession of such items changes rural lifestyles and encourages individuals to seek higher income by adopting new techniques or through migration in search of employment. On the other hand, government influences operate in many ways and interact with many other factors to impact on rural lifestyle. For example in Tanzania, the government policy of Ujamaa brought about wholesale social and economic re-organization linked to land reform programmes. In some places, the government influences range from the encouragement of foreign investment in specified development schemes to induced social change through legislation.

**2.4. Donor Funded Agriculture based Projects and Rural Development**

Agricultural based projects refer to carefully organized plans which are temporary, unique, and rely on specific resources to achieve a particular goal that involves the cultivation of land and keeping of animals for purposes of food production and economic well being. As previously indicated, most of the people living in rural areas particularly in developing countries rely on agriculture for their livelihoods either directly or indirectly. It can therefore be said that a more dynamic and inclusive agriculture could dramatically reduce rural poverty and increase food security hence help meet the MDGs on poverty and hunger. In sub- Saharan Africa, agriculture represents about 42% of the GDP in the low income countries and 27% in the middle income countries and it employs between 65% and 80% of the labor force. Agriculture exports also account for as much as 60% of export income in more than half the countries in this region (Abdulai and Delgado, 1995). In Asia, agriculture contributes between 6% and 60% of the GDP in different countries and provides employment to two thirds of the labor force regionally (CIDA, 2002). Projects are usually carefully planned with the aim of meeting specific objectives. A critical aspect of projects is the funding. There are however different sources of funding which can be availed to interested stakeholders so long as they have good proposals of projects that are worth funding.

A project has the initiation stage whereby the project planners come up with a project proposal after conducting of need assessment and involving the project beneficiaries so as to be able to identify the real problem of the people to be involved in the project. This stage has been found to be very important in enhancing the sustainability of the projects. A project is also planned carefully at this stage based on the available funds so as to ensure that the project does not stall at a given point. Projects also have implementation phase whereby the project activities are carried out in line with a pre- arranged schedule so as to ensure that every planned activity is done according to the planned

time. This ensures that there are no delays experiences that could impact negatively on the outcome of the project. Projects also have a stage of careful monitoring and evaluation of the activities involved in the project. This is important as it enables the project managers and implementers to be able to identify any problems early enough before they increase in magnitude and apply corrective measures. This is important as it mitigates against risks that could have major financial implications to the project. Finally, last on the project cycle is the closure and handing over whereby the project comes to an end either after meeting the objectives or if the project failed. There are many success stories of agriculture as an engine of growth in the early development process and of agriculture as a major force of poverty reduction.

In China the rapid growth of agriculture has been largely responsible for the decline in rural poverty from 53% in 1981 to 8% in 2001 (Byerlee, Diao & Jackson, 2005). Agricultural growth was the precursor to the accelerated industrial growth, very much in the way agricultural revolutions predated industrial revolutions that spread across the world in the $18^{th}$ and $19^{th}$ century (Bairoch,1973). Agriculture also offers attractive business opportunities such as high value products for domestic market such as dairy farming products or horticultural products as has been experienced in some parts of Kenya.

### 2.5. Participation in Donor Funded Agricultural Projects and Rural Development

Storey (1991) asserts that there has been a need to investigate new approaches to rural development as a consequence of the significant and on-going changes occurring in rural areas. Community participation has long been a subject of active discussions in the field of political, administrative sciences and community based activities. One may consider community participation as an action that incorporates the demands and values of citizens into public administration services. World Bank (1996) indicates that reaching the poor requires working with them to learn about their needs, understanding how development decisions are made in their communities, and identifying institutions and mechanisms that acquire opportunities and resources.

The Working Group on Programme Harmonization, 1978 in Oakley and Marsden (1984), indicates that; what gives clear understanding of popular participation is the "collective efforts by the people concerned pooling their efforts and resources together in order to attain objectives they set for themselves." Kumar (2002) argues that participation in this regard deals with encouraging participants to take initiatives and actions which are stimulated by their own thinking and deliberation

and over which they can exert effective control. Nampila (2005) agrees that different individuals in the same community may have different interests and may not necessarily want to participate in development projects. With community participation, the people decide, act and reflect on their actions as conscious subjects. The common belief is that involving citizens in rural programmes and empowering them have the potential to boost their livelihoods and foster development (Kakumba and Nsingo, 2008). Such involvement facilitates the reversal of the inequalities that have been developed under colonialism by helping people to engage in the process of identifying problems and acting on them.

The majority of the poorest people in rural areas in Africa are engaged in agriculture. Their channels for dialogue with the authorities responsible for agriculture are weak or non-existent, yet when their views are sought, farmers are very clear in their responses. Practical Action and PELUM – projects initiated by the European Commission, working with small-scale farmers and farmers' organizations, have learnt that farmers participating in donor funded agricultural based projects have five key demands from donors and their governments. These demands are; access to essential inputs including land, credit, water and appropriate seeds and breeds. Agricultural advice and support that complements, builds on and values farmers' own knowledge, giving them access to affordable appropriate technology to improve production and add value to their produce; this should be supported by an agricultural research system that is farmer-led so that it produces results that reflect their needs. Another demand is agricultural development programmes that focus on the needs of marginal farmers and pastoralists that are delivered locally, rather than commodity focused programmes that are nationally run and Participation in decisions regarding the allocation of resources to agriculture, through strengthened farmers' organizations. Farmers felt that there should be an end to regular programmes of food aid and instead, governments should work with communities to identify alternative longer-term programmes of support to ensure food security. (European Commission, PELUM ,2005).

These demands were articulated by new and growing farmers' organizations in eastern and southern Africa, which are co-ordinated under the Eastern and Southern Africa Farmers' Forum. In a recent workshop for farmers and NGO staff hosted by PELUM in Nakuru, the unanimous view was that food aid is never a priority for Kenyan farmers; development aid is what is needed to develop as individuals and in turn as a community. Therefore, the conclusion can be drawn on the fact that meaningful participation of the rural poor in development is concerned with direct access to the

resources necessary for development, and some active involvement and influence in the decisions affecting those resources (Burkey, 2000).

### 2.6. Cultural Beliefs and Practices and Rural Development

Culture refers to the total way of life of any society. Culture encompasses the learned behaviors, beliefs, practices, attitudes, values and ideals that are characteristic to a particular society (wandibba, 2008). Mbakogu (2004) also argues that culture is created in the process of adjustment to the social setting. This process of adjustment is manifested through language, food, arts, traditions and customs and social activities . Culture and tradition were found to be extremely important factors in reaching women in the Near East and North Africa region. In these regions the women were seen to be in the fore front of participating in rural development activities. In South Kordofan, for example, mobile teams provide extension outreach to women in places where they assemble (water points, markets). The teams disseminate information on women's productive activities and their responsibilities for household well-being. In the Bekaa Valley, Lebanon, thanks mainly to their access to loans, women have initiated a significant cooperative movement and can now take advantage of the market niche for organic food products. In the province of Tafilalet, Morocco, the regional office for the promotion of agriculture has helped close the gap in outreach to women by recruiting and training women extension agents, providing them with transport and developing a strategy for women's empowerment and gender equity (IFAD, 2002.)

Kenya has fourty-two tribes. Each of these tribes has deep rooted cultural practices that are practiced by the different ethnic communities within the country. These cultures touch on males, females and youth and have in one way or another influenced rural development. A good example of deep rooted culture can be exemplified by the case of the pastoralist communities like the Maasai in Kenya who constantly migrate from place to place in search of better grazing fields and water. Rural development among such communities has been slower compared to communities that do not practice pastoralism. According to (The Kenya's fourth development plan 1979-1983), it states under the population policy that in Kenya the decision on family size rests with the parents. These decisions taken together determine the rate of population growth within the nation. While the government is concerned about the rapid population growth in Kenya, it is also convinced that these concerns will come to be understood in terms of effects on family welfare and quality of life (Weekly Review 1986). In many Kenyan cultures, naming of children is a cultural practice that is still practiced in great magnitude. In these naming rituals women are expected to name children after relatives and

ancestors from both sides of the family. This has caused many families to have large number of children since every parent wants to name as many people as possible from their side of the family.

Also in the African traditional societies, having a large number of children is associated with wealth. Contrary to this, studies have indicated that in many rural areas, large family size corresponds to low quality of life in that the parents may not be able to adequately provide for the large family .In the sociological literature, this is often explained using an argument of finite resources: parents have limited time, money, and patience to devote to the education of their children, and those with fewer children can invest more per child. This theory of resource dilution fits well with the classic notion of the quality-quantity trade-off in family economics (Becker 1991; Becker and Tomes 1976). Cultural practices such as the culture of wife inheritance which is widely practiced in Western and Nyanza provinces of Kenya has been closely linked to the spread of HIV and AIDS within the region (IFAD, 2003). This has had an impact on the labour force in the area since the working age group has been the most affected by the disease. In turn, many lands have been left bare with no one to cultivate them and also because a lot of family resources go in to seeking treatment and giving care to the affected members which has impacted negatively on food security. As has been witnessed in many cultures in the African traditional societies, women are expected to yield to the wishes of men. Acts of defiance or insubordination by women towards their husbands, fathers in law or other senior male relatives can result into beatings by male relatives. Also the women in such communities are expected to be actively involved in bringing up the children, maintaining the home and cultivating the farm (World Development Report, 2008). The culture of gender inequality particularly in rural traditional African communities has resulted in to sidelining of the females in programmes that could result in their empowerment and hence improving the living standards in the home.

### 2.7. Education Level and Rural Development

Education is a lifelong process involving the acquisition and development of desirable knowledge, skills and attitudes for the benefit of individual or society. Quality education refers to how good or bad a process of training children or young people in schools or colleges is in terms of physical elements, psychological elements and service delivery. Education helps in the development of individual potential to the full, helps one to adjust to society, it helps individuals to think critically and constructively, prepares one to accept change and enables one to deal with the environment positively. Education is a valuable asset for rural population so as to enable them to pursue opportunities in the new agriculture, obtain skills, start businesses in the non –farm rural economy

and migrate successfully. Yet education in rural areas tends to be dismally low in the rural areas worldwide. Improving basic rural education has been slower in rural areas than in urban areas. However it is the quality of rural education that requires most improvement; with education conceived broadly to be vocational training that can provide technical and business skills that are useful in the new agriculture and the rural non-farm economy (World Development Report 2008). Bryant, (1989) observes that the contribution of education to development extends far beyond the school context. As early as the 1970s, the notion of 'basic education' was defined in a much broader sense referring to the acquisition of knowledge and know-how in complementary fields such as food, nutrition, hygiene, health, family planning, etc. Hence, the discussion on education and rural development included various forms of non-formal education, including adult literacy programmes.

According to the United Nations Children's Fund (UNICEF, 2000) quality education must include learners who are healthy, well nourished and ready to participate and learn and are supported in learning by their families and communities. It must also include environments that are safe, healthy, and protective and gender sensitive and provide adequate resources and facilities. Quality education should have content that is reflected in relevant curricula and materials for the acquisition of basic skills especially in the area of literacy, numeracy and life skills. Learning must have processes through which trained teachers use child-centered teaching approaches in well managed classrooms and schools and skill for assessment to facilitate learning and reduce disparities. Quality education has outcomes that encompass knowledge, skills and attitudes and are linked to national goals for education and positive participation in society.

### 2.8 Theoretical framework

The study is anchored on the structural change theory as proposed by Hollis Chenery in his patterns of development approach. The structural-change theory deals with policies focused on changing the economic structures of developing countries from being composed primarily of subsistence agricultural practices to being a more modern, more urbanized, and more industrially diverse manufacturing and service economy. There are two major forms of structural-change theory; W. Lewis' two-sector surplus model, which views agrarian societies as consisting of large amounts of surplus labor which can be utilized to spur the development of an urbanized industrial sector, and Hollis Chenery's patterns of development approach, which holds that different countries become wealthy via different trajectories. Chenery (1960) observes that the pattern that a particular country will follow, in this framework, depends on its size and resources, and potentially other factors

including its current income level and comparative advantages relative to other nations. Empirical analysis in this framework studies the sequential process through which the economic, industrial and institutional structure of an underdeveloped economy is transformed over time to permit new industries to replace traditional agriculture as the engine of economic growth (Todaro, Michael & Stephen, 2006). Structural-change approaches to development economics have faced criticism for their emphasis on urban development at the expense of rural development which can lead to a substantial rise in inequality between internal regions of a country. The two-sector surplus model, which was developed in the 1950s, has been further criticized for its underlying assumption that predominantly agrarian societies suffer from a surplus of labor. Actual empirical studies have shown that such labor surpluses are only seasonal and drawing such labor to urban areas can result in a collapse of the agricultural sector.

### 2.9 Identified Gaps

Much work has been done regarding rural development since many decades ago. Projects is a relatively new concept in developing countries but has been proved to be the easiest way to achieve results while avoiding bureaucracies that can cause bottle necks. However from the literature review, it was identified that little has been done regarding donor funded agriculture based projects and the role they play on rural development. To support this, it was found that although culture and education and their role in rural development have been researched on by other researchers, little had been done regarding the Kenyan context and as such, the study wanted to find out about the case of Kakamega County (Lurambi constituency)to find how rural development was influenced by culture and education.

Below is a graphical representation of the relationship between the dependent variable and the independent variables.

**INDEPENDENT VARIABLES** **DEPENDENT VARIABLE**

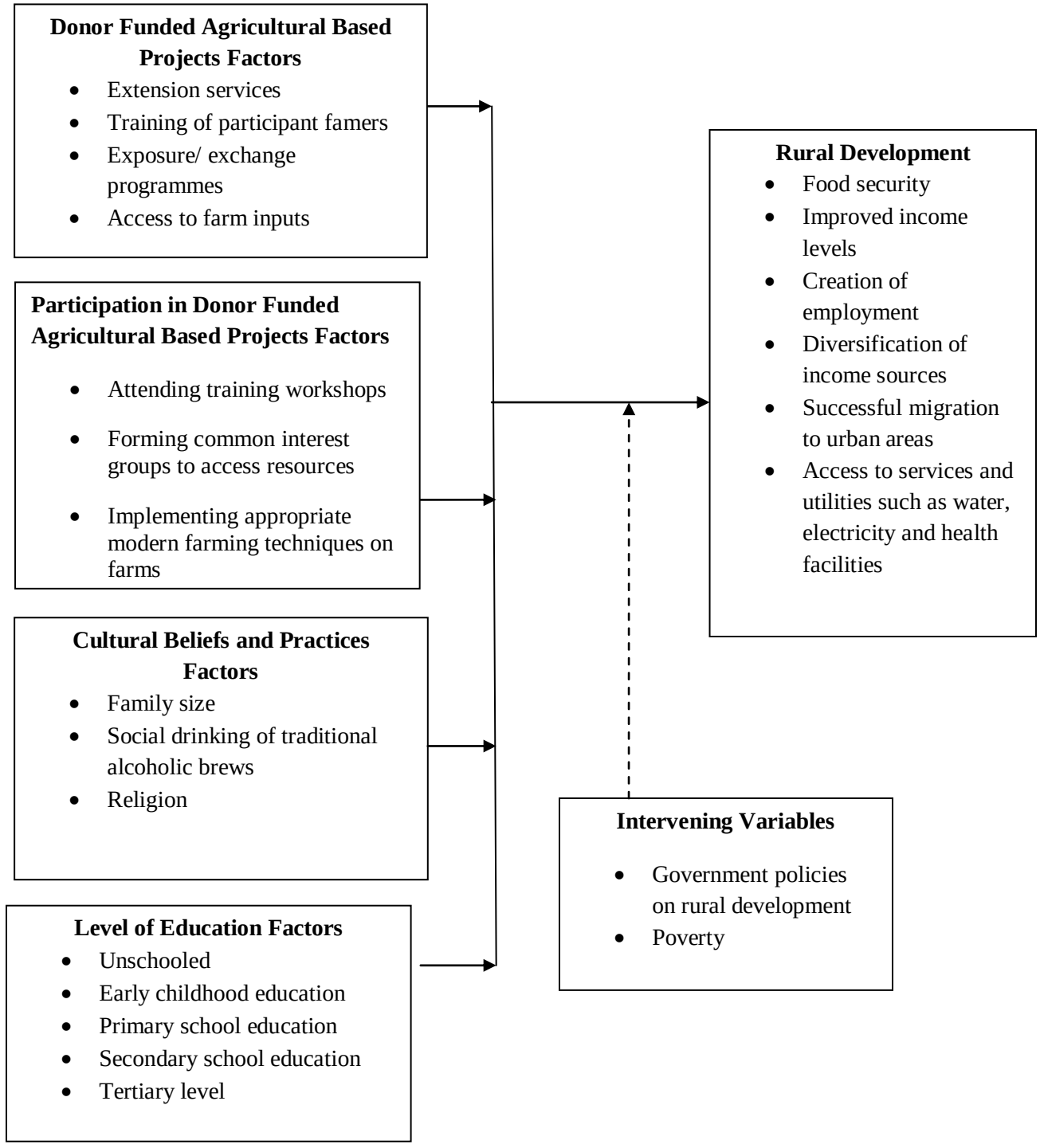


**Figure 1. Conceptual Framework**

In this study, rural development is the dependent variable and it has various indicators which are infrastructural, economic and social indicators that show the level of the living standards of the

people in rural areas. The indicators of rural development are; food security, improved income levels among the people, creation of employment ,diversification of income sources, ability of people to migrate successfully into urban areas and access to services and utilities such as water, electricity and health facilities.

The independent variables of the study were the contributors of rural development which were: donor funded agricultural based projects, participation in donor funded agricultural based project, cultural beliefs and practices and level of education. The study wanted to analyze how the above mentioned variables contributed to development in rural areas. The indicators of Agricultural based projects that were used in this study were; presence or absence of extension services and the frequency of visits to farms by the extension officers, presence of training services offered to farmers on modern farming methods and how they can increase productivity in their farms, exposure of the farmers to new farming techniques and issue of farm inputs that include seeds, farm tools and implements, fertilizers and other farm inputs.

The study wanted to establish if there existed a relationship between individual participation in donor funded agricultural based projects and participation in rural development. The indicators that were studied under participation were attending training workshops, formation of common interest groups with the aim of accessing resources and implementing modern farming techniques on the farms. The study wanted to find out if these indicators had a negative or a positive relationship to rural development.

Cultural beliefs and practices as a variable were studied under various indicators such as; family size( number of children), social drinking of alcoholic traditional brews and religion and an analysis was conducted to show how these indicators affected rural development. The level of education was also another variable that was analyzed to show how it affected rural development. The indicators under the level of education variable were the unschooled category which refers to people who have not been exposed to any formal training, early childhood education which referred to people who attended formal pre- elementary school education, primary school education, secondary school education and tertiary school education. The study sought to find out if the level of education of individual had an impact on rural development. The study also had intervening variables such as government policies on rural development and poverty.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter covers the research methodology to be employed in conducting the research. It covers the research design, the target population, the sample population and the sample size, the sampling technique, the data collection methods and the instruments for data collection, reliability and validity of the instruments, data processing and analysis and definition of operational terms.

## 3.2. Research Design

A research design refers to an arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. A research design is a plan according to which we collect information (Welman, et al, 2006).Yin (1994) states that the aim of research design is to guide the researcher through the process of collecting, analyzing and interpreting data. Kothari (2009) defines research design as the conceptual structure within which research is conducted; it constitutes the blue print for the collection, measurement and analysis of the data.

The descriptive survey research design was employed in order to describe the contributors of rural development in Lurambi constituency. A descriptive survey research is a study which is concerned with describing the characteristics of a particular individual, group or situation, (Kothari ,2009). The study design was chosen because it would give a proper description of the situation in Lurambi constituency in terms of where it was as far as rural development was concerned and how the dependent variables were contributing to rural development.

## 3.3. Target Population

Mugenda and Mugenda (2003) define a research population as an entire group of individuals, events or objects having common observable characteristics. For the case of this study, the target population was 3018 households in Lurambi constituency. This was the number of households which were involved in various donor funded agricultural projects.

## 3.4 Study Sample

A sample can be defined as a smaller group obtained from the assessable population (Mugenda and Mugenda, 2003). A sample is normally representative of the target population particularly when it is not possible to reach out to the entire target population.

### 3.4.1 Sample Size

The sample size refers to the number of subjects that is used in the research study. A large sample size is recommended particularly where time and finances allow. This is because when the sample size is large, then the sampling error is reduced and the researcher is confident that if another sample of the same size were to be selected, findings from the two samples would be similar to a high degree as observed by Mugenda and Mugenda (2003).Due to the constraints of time and finances, the study selected a sample size that was ideal for research while still keeping the sampling error as low as possible. Since the target population was 3,018 households the following formula that is suggested by Mugenda and Mugenda for use in social surveys was used to determine the sample size:-

$$n=\frac{Z^2\ pq}{d^2}$$

Where: n= the desired sample size if the population is greater than 10,000

Z= the standard normal deviate at the required confidence level (1.96)

P= the proportion in the target population estimated to have characteristics being measured. (0.5)

q=1-p

d= the level of statistical significance set (0.05)

$$n=\frac{(1.96)^2\ (.50)\ (.50)}{(.05)^2}$$

n =384

The proponents of this formula explain that if a sample is less than 10,000 a second formula should be used to reach the final sample size. Since the target population is 3,018 households the required sample size will be smaller and as such, the final sample estimate will be calculated using the following formula:

$$nf=\frac{n}{1+n/N}$$

Where nf= desired sample size when population is less than 10,000

n= desired sample size when the population is more than 10,000

N= the estimate of the population size

$$nf = \frac{384}{1+384/3018}$$

nf=340

Sample size for the study was therefore 340

### 3.4.2. Sampling Techniques

Sampling refers to the process of selecting a number of individuals for a study in such a way that the selected individuals represent the large group from which they were selected, Mugenda and Mugenda (2003). The study adopted systematic random sampling because it was found to be the most suitable technique if a researcher wanted to select a reasonable number of subjects that was representative of the entire target population. In this method, all the subjects of the target population were assigned numbers 1 to 3,018 and starting from a specific point (household), every eight households were skipped and therefore every $9^{th}$ household was included in the sample until a sample size of 340 households was obtained.

## 3.5. Data Collection Methods

Kothari observes that there are several methods of collecting primary data particularly in surveys and descriptive studies. The study adopted the use of questionnaires as data collection instruments. The questionnaires were given to the respondents to fill individually and in some cases they were read out to respondents during telephone conversations and the responses filled in by the researcher .The instruments addressed the respective variables as outlined in the preceding sections.

### 3.5.1. Questionnaires

The study adopted the use of questionnaires. Gee (1993 ) defines a questionnaire as a set of questions to be answered by the respondents without the personal aid of an investigator. A good questionnaire should have both structured and unstructured questions. The structured questions were

used because as Mugenda and Mugenda (2003) observe, they are easier to analyze, to administer and they are economical to use in terms of time and money. The unstructured questions or open ended questions were used because they permitted a greater depth of response by giving the respondent the freedom to use their own words in response. The responses gave insight to the feelings, background, hidden motives or interests of the respondent. Some of the questionnaires were administered through self administration whereby the respondents were asked to complete questionnaires by themselves through hand delivery. This was chosen as it ensured a high return rate. Questionnaires were also administered by the researcher whereby the researcher decided to use the questionnaire to interview the respondents particularly where the subjects may not have the ability to easily interpret the questions probably because of their educational level or do not have the ability to read or write due to various reasons. This was also done for the cases where the telephone numbers of the respondents were available. The questionnaires focused on the four main objectives which were the impact of donor funded agricultural based projects on rural development, individual participation in donor funded agriculture based projects and how they influenced their ability to participate in rural development. The questionnaire also focused on cultural beliefs and practices of concern that could in one way or another affect rural development and it also touched on the level of education and the extent to which education it contributed to rural development.

### 3.6. Validity of Instruments

Mugenda and Mugenda, (2003) define validity as the degree to which results obtained from the analysis of the data actually represent the phenomena under study .Instrument validity can also mean the ability of an instrument to measure what it is purported to measure. The content validity of this instrument was therefore measured in two ways. First the researcher discussed the items in the instrument with the supervisors and lecturers from the department who then indicated if every item in the instrument was measuring what it was supposed to measure. Advice given helped the researcher in making the necessary adjustments to ensure that the instruments were valid. Secondly, the validity of instruments was assessed by conducting a pilot study whereby thirty four questionnaires were administered to 34 individuals in Lurambi Constituency and their responses were checked against the research objectives.

### 3.7. Reliability of the Instruments

Mugenda and Mugenda, (2003), define reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Blanche and Durrheim (1999 ) define reliability as the dependability of a measurement instrument, that is, the extent to which the instrument yields the same results on repeatedly trials. The reliability of the instruments in this study was assessed using the test-retest method whereby a pilot study was conducted on 34 individuals within the locality in Lurambi Constituency. After a period of two weeks the research instruments was administered again to the same population and the level of correlation was determined between the first results and the second results obtained. A Pearson's product moment formula for test-retest was employed to compute correlation coefficient in order to establish the extent to which the contents of the instruments are consistent in eliciting the same responses every time it was administered. Kothari (2009) observe that if the correlation coefficient is high an instrument is said to yield data that has high test-retest reliability. A correlation coefficient of about 0.8 is considered high enough to judge the instrument as reliable for the study. A correlation coefficient of 0.826 was obtained and therefore the instrument was considered to have reliability.

### 3.8. Ethical Considerations

Ethics was an integral part of this research study right from the planning stage to the actual conducting of the study. Some of the ethical issues that the researcher was keen to observe were: deception and invasion of privacy. Throughout the period of the research study, the principles of ethics such as respect and justice were upheld to ensure that participants are not deceived or harassed in any way. Questions which were deemed to be too personal were avoided in the research tool and in an effort to protect the privacy of the respondents, respondents were asked not to write their names.

### 3.9 Data Analysis Techniques

Data were analyzed descriptively. The responses were coded and then tallies made. Data was then analyzed using SPSS . Frequencies were obtained from which percentages were drawn and used in interpreting the respondent's perception of issues raised in questionnaires so as to answer the research questions. Correlations were also done using Pearson's product moment correlation.

For most of the variables, nominal scales were used and the outcome was analyzed and interpreted to give meaning. Descriptive statistics such as frequency distribution, percentages, means and correlations were calculated and data presented in the form of frequency distribution tables.

### 3.10 Operationalisation table

The detailed definition of variables is shown in Table 3.1 that follows.

**Table 3. 1: Operationalisation Table**

| Objectives | Variable | Indicators | Measures | Scale |
|---|---|---|---|---|
| • Contributors to rural development | • Rural development | • Food security, Improved income levels, Creation of employment, Diversification of income sources, Access to services and utilities like electricity, and water | • Number of sacks of maize produced annually<br>• Income from sale of surplus farm produce<br>• Number of employees per homestead<br>• Income from non-farm activities<br>• Number of households with electricity and water. | • Nominal |
| • To assess to what extent donor funded agriculture based projects contribute to rural development | • Donor funded agriculture based projects factors | • Extension services,<br>• Training of participant farmers<br>• Exposure to model farms<br>• Issue of farm inputs | • Frequency of visits to farms by extension officers.<br>• Number of training workshops attended by farmer participating in donor funded agriculture based projects.<br>• Number of field visits to model farms per farmer<br>• Farm inputs offered and quantity | • Nominal |
| • To examine the extent to which participation in donor funded agricultural based projects contribute to participation in rural development | Participation in donor funded agricultural based projects factors | • Attending training workshops | • Number of training workshops attended | Nominal |
| | | • Forming common interest groups | • Number of common interest groups in the region | Nominal |
| | | • Implementing modern farming techniques | • Membership into a common interest group.<br>• Type of modern farming technique adopted. | Descriptive |

| | | | | |
|---|---|---|---|---|
| • To establish how cultural beliefs and practices contribute to rural development | • Cultural factors | • Number of Children, Social drinking of traditional alcoholic brews and Religion | • Number of men and women working in urban areas<br>• Number of children per household<br>• Frequency of drinking alcohol per week<br>• Alcohol brands that were preferred | • Nominal |
| • To assess how level of education contributes to rural development | • Level of education | • Unschooled, Early childhood education, Primary, Secondary, Tertiary education | • Number of people who are unschooled, with early childhood education, with primary education, with secondary education and tertiary education | • Nominal |

# CHAPTER FOUR

# DATA ANALYSIS, PRESENTATION AND INTEPRETATION

## 4.1 Introduction

This chapter covers data analysis, presentation and interpretation. It shows the response rate and the demographic characteristics of the respondents. It also covers the extent to which donor funded agricultural based projects contribute to rural development by looking at the provision of technical and material support offered to the participants of the projects. The chapter also covers the correlations between participation in donor funded projects and one's ability to participate in developmental activities such as installation of electricity and water in the home, creating employment and generating income. The chapter also covers the impact of cultural beliefs and practices on rural development. It looks at culture with regard to religion, number of children and alcohol consumption in relation to rural development. It covers correlations between the above mentioned cultural practices and one's ability to participate in developmental activities. The chapter also covers the extent to which level of education contributes to rural development. It looks at the correlation between level of education and one's ability to be employed, to install electricity and water in his/her home, ability to create employment for others and the number of children.

## 4.2 Response Rate

**Table4.1 : Response Rate**

| Questionnaire | Frequency (F) | Percentage (%) |
|---|---|---|
| Number given | 340 | 100 |
| Number of questionnaires returned | 274 | 80.6 |
| Deficit | 66 | 19.4 |

From Table 4.1 , it can be seen that 340 questionnaires were administered to collect the data. The questionnaires were administered using self administration where by individuals were given the questionnaires to fill and return them to the researcher and also they were researcher administered in cases where the respondents were not in a position to fill the questionnaires on their own due to inability to read or write and in the case of telephone interviews. Two hundred and seventy four questionnaires were returned which translated to 80.6%, while 66 questionnaires were not returned which was 19.4 %. Mugenda and Mugenda (2003) observe that a return rate of 70% and above is

very good for analysis and reporting therefore the response rate of 80.6% was considered to be acceptable.

### 4.3 Demographic Characteristics

These refer to the facts about the makeup of a population. For the purposes of this study, the demographic characteristics that were looked at were the age of the respondents, the gender, marital status, employment status, educational level and the religion of the respondents. These were looked at so as to enable the researcher to understand the type of population that the study was dealing with.

#### 4.3.1 Age of the Respondents

Studies indicate that there exists an inverted U shaped relationship between age and opportunity exploitation due to the amount of information, knowledge and skill people collect during their life but which decline when people become older (Agnete, Carte and Ljunggren. 2003). With regard to the age of the respondents who participated in the research their ages were summarized as in table 4.2.

**Table 4.2: Age Distribution of Respondents**

| Age Bracket | Frequency (F) | Percentage (%) |
|---|---|---|
| Below 30 Years | 56 | 20.4 |
| 31 - 40 Years | 57 | 20.8 |
| 41 - 50 Years | 95 | 34.7 |
| 51 - 60 years | 36 | 13.1 |
| Over 60 Years | 30 | 11 |
| Total | 274 | 100 |

The results indicate that a majority of the respondents are within the age bracket of thirty years to fifty years which is the most productive age in terms of economic activities. Out of the population sampled, 55.5% of the respondents were within this age bracket. About 47.8% were between the ages of 41 and 60 years while about 11% of the respondents were over 60 years. These results indicated that a majority of the respondents belonged to the age bracket whereby they were most likely to participate in developmental activities.

### 4.3.2 Gender of the Respondents

A majority of small holder farmers in rural areas are predominantly women. Due to the many responsibilities associated with the females in the homes it has led to their failure to release their full potential in agriculture which is contributing to low productivity hence food insecurity (World development report. 2008). This indicated that the gender of the respondents may directly or indirectly influence ones disposition with regard to participating in developmental activities. The gender of the respondents was as outlined in table 4.3.

**Table 4.3 : Gender of Respondents**

| Gender | Frequency (F) | Percentage (%) |
|---|---|---|
| Male | 133 | 48.5 |
| Female | 141 | 51.5 |
| Total | 274 | 100.0 |

From the table 4.3 it was noted that 48.5% of the respondents were male while 51.5% of the respondents were female. These results agree with the observations made by the World Development Report, 2008 whereby they observe that a majority of small holder farmers in rural areas are predominantly women.

### 4.3.3 Marital Status of the Respondents

The marital status of individuals can influence their freedom for making decisions with regard to initiating development within their homes. In most cases stability in the marital issues in individuals has been shown to have a relationship to stable development while unstable relationships have been shown to derail development. The marital status of the respondents was summarized as in table 4.4.

**Table 4.4: Marital Status of the Respondents**

| Marital status | Frequency (F) | Percentage (%) |
|---|---|---|
| Married | 157 | 57.3 |
| Single | 37 | 13.5 |
| Separated | 28 | 10.2 |
| Divorced | 15 | 5.5 |
| Widowed | 37 | 13.5 |
| Total | 274 | 100 |

From the table it was found that a majority of the respondents were married. This was shown by the 57.3% which represented the married group. About 13.5% of the respondents were single, 10.2% of the population were separated while 5.5% of the population were divorced. The respondents who were widowed were represented by 13.5%. Since the larger percentage of the population was married it was assumed that the couples pooled their resources together which helped in participating in developmental activities as opposed to households where there was only one person providing for the household.

### 4.3.4 Employment Status of the Respondents

Employment status of individuals can affect rural development in that it is the source of livelihood for the people. The respondents who were sampled fell in to three categories which were made of those in formal employment, those who were self employed and those who were not employed. The results were as shown in table 4.5

**Table 4.5: Employment Status of the Respondents**

| Employment status | Frequency (F) | Percentage (%) |
|---|---|---|
| Formal Employment | 35 | 12.8 |
| Self Employment | 90 | 32.8 |
| Not Employed | 149 | 54.4 |
| Total | 274 | 100 |

From the table, it was found that 12.8% of the respondents were in formal employment while 32.8% of the respondents were in self employment in the form of business enterprises. A majority of the respondents by 54.4% were not employed and relied purely on subsistence farming. The lack of formal employment was attributed to low levels of education while the low numbers of people involved in self employment was attributed to the fact that most people wanted to be in white collar jobs. Most of the respondents were not approaching farming as a business enterprise but as a hobby.

### 4.3.5 Education Level of the Respondents

Education is seen as the most basic tool that gives all people a level ground to enable them to compete equitably with other people for similar opportunities. Many studies on education have indicated the existence of a direct relationship between level of education and development. (Twesigye,2005) observes that education leads to self employment and creation of employment whereby one is able to support themselves and participate in the creation of employment for others. The level of education of the respondents in Lurambi constituency was summarized as shown in table 4.6 .

**Table 4.6: Education Levels of the Respondents**

| Level of Education | Frequency (F) | Percentage (%) |
|---|---|---|
| No Formal Education | 31 | 11.3 |
| Early Childhood Education | 19 | 6.9 |
| Primary Education | 72 | 26.3 |
| Secondary Education | 91 | 33.2 |
| Tertiary Education | 61 | 22.3 |
| Total | 274 | 100 |

From the table 4.6, it was noted that 54.5 % of the respondents had secondary education and above. Only 11.3 % could be considered illiterate while 26.3% had primary education. Those who had attended formal education up to early childhood education were only 6.9% of the sampled population. Compared to the information from the Kakamega county data fact sheet of 2011, the respondents had significantly higher levels of education. Among the respondents only 11.3% were considered illiterate while those with secondary education and above were 54.5% as opposed to the

11.0% in the County data fact sheet of 2011. This meant that education level was one of the factors that were considered in being selected to join the donor funded agricultural based projects.

### 4.3.6 Religion of the Respondents

The belief system of any individual can influence development. For example there are religions that do not allow their members to visit the hospitals when they are sick. For such communities, they may not find it necessary to build hospitals which are seen as indicators of development. The religion of the respondents was summarized as shown in table 4.7

**Table 4.7: Religion of the Respondents**

| Religion | Frequency (F) | Percentage (%) |
|---|---|---|
| Christian | 227 | 82.8 |
| Muslim | 23 | 8.4 |
| African Traditional | 24 | 8.8 |
| Total | 274 | 100 |

From the results, it was found that an overwhelming majority of the respondents were Christians. The Christians were represented by 82.8% of the respondents while those who professed the Muslim faith were 8.4%. The respondents who were practicing African Traditional Religion were 8.8% of the respondents. It was however noted that of the Christian followers, there were many religions and sects some of which had belief systems which could hinder participation in developmental activities.

## 4.4 Extent to which Donor Funded Agricultural Projects Contribute to Rural Development.

Development activities worldwide depend on motivation arising from creating awareness about the need for such active participation among other things. Donor funded projects usually have provision for such motivation through equipping participants with skills, knowledge, technical support, equipment, material among others. The result is usually improved productivity and livelihoods or well being. It was therefore necessary to explore the extent to which donor funded agricultural based projects contribute to rural development. This was done by looking at the indicators of donor funded agricultural based projects that were used in this study.

### 4.4.1 Provision of Extension Services

Extension services are a form of technical support that is offered to farmers that can enable them to practice better agricultural practices that can enhance productivity of their farms. With regard to whether respondents received technical support through provision of extension services, the results were outlined as shown in table 4.8

**Table 4.8: Provision of Extension Services**

| Provision of extension services | Frequency (F) | Percentage (%) |
|---|---|---|
| Yes | 274 | 100.0 |
| No | 0 | 0.0 |
| Total | 274 | 100 |

From table 4.8 it was found that 100% of the respondents participating in the donor funded agricultural based projects obtained technical support through provision of extension services. The extension services were found to be very important as they enabled the farmers to detect early any problems occurring on their farms in relation to agricultural activities and also enabled them to arrest those problems on time before progressing on to cause massive losses.

### 4.4.2 Frequency of Provision of Extension Services

Having established that the respondents involved in donor funded agricultural based projects received technical support, the study wanted to find the frequency with which these extension services were offered. The findings were as shown in Table 4.9

**Table 4.9: Frequency of Provision of Extension Services**

| Frequency of Provision of extension services | Frequency (F) | Percentage (%) |
|---|---|---|
| More than once a month | 53 | 19.2 |
| Once a Month | 165 | 60.3 |
| After Every two months | 17 | 6.4 |
| After every three months | 24 | 9.0 |
| On request | 14 | 5.1 |
| Total | 274 | 100.0 |

A majority of the respondents by 79.5% had visits from extension officers at least once a month. About 6.4 % had visits after every two months, 9.0 % had visits after every three months while 5.1% had visits from extension officers on request. The extension services were important as they enabled early detection and correction of problems affecting the productivity of the agricultural activities. This was not the case with those who did not receive such technical services as in some cases problems would go unnoticed until the damage was already done and nothing much could be done to reverse it. This was seen to be a contributing factor to the crop and animal productivity.

### 4.4.3 Supply of Farm Inputs by Donor Funded Projects

For any activity to be of economic importance it is necessary to have some inputs that will be invested in the enterprise. For many people in rural areas these farm inputs were in the form of land, equipment, seeds, fertilizer, animals, animal feeds among others. It was noted that with the climate change that was being experienced if a farmer did not have the right inputs, there was a high chance of obtaining low yields or even completely loosing the harvest. The study wanted to find out if the donor funded agriculture based projects provided inputs to the project participants. The results were as outlined in table 4.10.

**Table 4.10: Supply of Farm Inputs by Donor Funded Project**

| Supply of farm inputs by donor funded project | Frequency (F) | Percentage (%) |
|---|---|---|
| Yes | 264 | 96.2 |
| No | 10 | 3.8 |
| Total | 274 | 100.0 |

From the results, 96.2 % of the respondents were given farm inputs by the donor funded agriculture based project they were involved in only 3.8% were not given. It was found that many people who had refrained from participating in the projects feared that the inputs were being given on loan basis and failure to repay the loan would lead to the confiscation of their property and hence preferred to abstain from the projects. This fear was attributed to lack of sensitization of the rural population regarding these donor funded projects.

### 4.4.4 Type of Farm Input Supplied

Having established that the projects supplied their participants with farm inputs, the study wanted to find out the kinds of inputs supplied to participants. The summary of the results is as shown below.

**Table 4.11: Type of Farm Input Supplied**

| Type of farm input supplied | Frequency (F) | Percentage (%) |
|---|---|---|
| Farm tools, equipment, seeds, fertilizer | 91 | 33.3 |
| Seeds and fertilizers | 81 | 29.5 |
| Animal | 42 | 15.4 |
| Farm tools and equipment | 32 | 11.5 |
| Animal feeds | 28 | 10.3 |
| Total | 274 | 100.0 |

From the findings, it was found that 33.3% which was the highest percentage of those who participated in donor funded agriculture based projects were given farm inputs in the form of farm tools, equipment, seed and fertilizer. These are some of the most important farm inputs required for any crop production venture without which the crop production venture may be futile. 29.5% of the sampled population was given seeds and fertilizer while 15.4% were given farm inputs in the form of animals. Others were given inputs in the form of animal feed while 11.5% of the population sampled was given farm inputs in the form of farm tools and equipment. These were important for the project participants as it ensured that they were able to access the right quality of seeds and other farm inputs more easily as compared to their counterparts who refrained from the projects.

## 4.5: The Impact of Participating in Donor Funded Agriculture based Projects on Rural Development

Having found out that donor funded agricultural projects had a positive impact on rural development, the study wanted to find out if individual participation in the donor funded agriculture based projects had an impact on rural development on the participants. Some of the indicators that were used to assess rural development were improved livelihoods as a result of improved income, employment status and ability to create employment for others, diversification of income sources from the traditional agricultural based income sources and access to utilities such as electricity and

water. The indicators that were used as evidence for participation in the donor funded agricultural based projects were: attendance of training workshops, joining common interest groups and implementation of modern farming techniques.

### 4.5.1: Attendance of Training Workshops by Participants of Donor Funded Projects

Training workshops are important as they usually provide an avenue where people with common interest can get a chance to share their views and in the process new ideas are learnt. The study wanted to find out if those who participated in donor funded agriculture based projects were exposed to training workshops. The results were as outlined in Table 4.12.

**Table 4.12: Provision of Training Workshops to Participants of Donor Funded Projects**

| Have you ever attended a training workshop? | Frequency (F) | Percentage (%) |
|---|---|---|
| Yes | 253 | 92.3 |
| No | 21 | 7.7 |
| Total | 274 | 100.0 |

From the results, 92.3 % of the respondents who participated in the donor funded agricultural based projects attended training workshops. Only 7.7 % of the respondents did not attend any training workshop. It was found that for most of the donor funded agricultural based projects it was a requirement that all participants attend training workshops. Those who had not attended had failed to do so due to personal problems and not problems related to the projects.

### 4.5.2. Frequency of Training Workshops Attended

The study wanted to find out how many times the respondents had attended the training workshops. Training workshops were seen to be important as they gave the farmers an opportunity to share the information on farming that they may have. Additionally, it was during such workshops where they were trained on new farming techniques that would ensure high yield for increased productivity and income. The results were as outlined in Table 4.13 that follows:

**Table 4.13: Frequency of Training Workshops Attended**

| Number of training workshops attended | Frequency (F) | Percentage (%) |
|---|---|---|
| None | 10 | 3.8 |
| One | 56 | 20.5 |
| Two | 112 | 41.0 |
| Three | 88 | 32.1 |
| Four | 8 | 2.6 |
| Total | 274 | 100.0 |

Most of the respondents had attended two or three workshops as represented by 73.1 %. About 2.6 % of the respondents had attended four training workshops. Only 20.5 % of the sampled population had attended only one training workshop while 3.8% had not attended any training workshop. From these training workshops the participants were able to gain some technical skills on better and new methods and techniques of improving the yields from their agricultural activities. The trainings also enabled participants to know how they can access inputs and access ready markets for their agricultural produce.

### 4.5.3 Formation of Common Interest Groups

Common interest groups refer to a collection of members who have like interests and come together to share information and work cooperatively around some unifying issue. The common interest groups make it easy for members to access resources which may be difficult to access individually due to cost or availability. Common interest groups also help in monitoring how the inputs are used and ensures accountability. The study wanted to find out if the project members were involved in such groups. The results were as outlined in table 4.14

**Table 4. 14. Formation of common interest groups**

| Are you a member of any common interest group? | Frequency (F) | Percentage (%) |
|---|---|---|
| Yes | 198 | 72.3 |
| No | 76 | 27.7 |
| Total | 274 | 100.0 |

From the results, it was found that 72.3% of the respondents were members of common interest groups while 27.7% were not. The study further wanted to find out how these project participants were benefitting from the common interest groups. The findings were as outlined in table 4.15.

**Table 4.15 . Access to resources through the common interest groups**

| What resources are you able to access when in common interest groups that are hard to access individually? | Frequency (F) | Percentage (%) |
|---|---|---|
| Farm tools and equipment | 14 | 6.9 |
| Seeds and fertilizers | 50 | 25.6 |
| Animals | 22 | 10.9 |
| Animal feeds | 22 | 10.9 |
| Loans | 90 | 45.7 |
| Total | 274 | 100.0 |

From the study, it was found that out of those respondents who were members of common interest groups, all had in one way or another been able to access resources which they agreed would be harder to obtain had they not been in common interest groups. Out of the respondents in common interest groups, 47.5% claimed to have been able to access loans which went a long way in assisting them to conduct developmental activities within their homes. This was because the group members acted as guarantors for fellow members hence enabling the farmers to access loan without any other form of security. About 21.8% of the respondents were able to access animals and animal feeds through the common interest groups while 25.6% of the respondents managed to access seeds and fertilizer at a subsidized price. About 6.9% of the respondents were able to get farm tools and equipment.

### 4.5.4 Implementation of Modern Farming Techniques by Project Participants

Modern farming technologies emerge every other day and in order to improve and maximize productivity, farmers must embrace these technologies. Additionally with the ever increasing population in the world, land is becoming smaller and yet the demand for agricultural produce rises so as to feed the rising population. It was found that one of the most effective ways for rural farmers to appreciate these modern farming practices was if they were taken to model farms

which had embraced modern farming practices and were reaping the benefits. These modern farming practices include use of green houses production technology, tissue culture, zero grazing, keeping hybrid livestock and emerging livestock. The study wanted to find out if those who participated in the donor funded projects were taken to visit model farms. The results are as summarized in table 4.16.

**Table 4.16: Exposure of Project Participants to Modern Farming Practices.**

| Does project expose participants to modern agric practices | Frequency (F) | Percentage (%) |
|---|---|---|
| Yes | 207 | 75.6 |
| No | 67 | 24.4 |
| Total | 274 | 100.0 |

From the results, it was found that 75.6% of the sampled population of those participating in donor funded agricultural based projects had been exposed to model farms that were practicing modern farming. Only 24.4 % of the participants had not been exposed to these modern farming practices.

It was found that the exposure to model farms enabled farmers to have a vision of what their farms should look lie and this gave them a mental picture of what to work towards achieving.

### 4.5.5 Number of Visits to Model Farms.

Having established that the respondents participating in donor funded projects had been exposed to modern agricultural practices, the study wanted to find out how frequent the participants had visited these model farms. The results were as outlined below in Table 4.17.

**Table 4.17: Number of Visits to Model Farms**

| Number of visits to model farms | Frequency (F) | Percentage (%) |
|---|---|---|
| None | 67 | 24.4 |
| One | 39 | 14.1 |
| Two | 91 | 33.3 |
| Three | 70 | 25.6 |
| More than 5 | 7 | 2.6 |
| Total | 274 | 100.0 |

Most of the respondents who had visited model farms had done so about twice or thrice as indicated by the percentages 33.3 % and 25.6% respectively. About 2.6 % had visited model farms more than five times while 14.1% of the participants had visited model farms only once. The frequency of the number of visits to model farms was important since it was through visiting different model farms that a farmer was able to pick the technologies that work best for him or her and can be easily implemented at his or her level.

### 4.6 Relationship between Donor Funded Agricultural Based Projects and Rural Development

The study wanted to find out if there existed a relationship between the donor funded agricultural based projects and rural development and to find out if individual participation in the donor funded agricultural based project played a role in rural development. The indicators of rural development that were used included: employment, income levels, installation of electricity and running water.

#### 4.6.1 Employment as an Indicator of Rural Development

The study wanted to find out if participating in the projects improved ones chances of being in formal employment or self employment. This was because participants of the projects were trained in various areas that were expected to increase their skills .It was hoped that these skills would make them suitable for employment or enable them to create their own employment. The findings were as summarized in table 4.18

**Table 4.18: Employment Status of the Respondents**

| Employment status | Frequency (F) | Percentage (%) |
|---|---|---|
| Formal Employment | 35 | 12.8 |
| Self Employment | 90 | 32.8 |
| Not Employed | 149 | 54.4 |
| Total | 274 | 100 |

From the table, it was found that 12.8% of the respondents were in formal employment while 32.8% of the respondents were in self employment. A majority of the respondents by 54.4% were not employed and relied purely on subsistence farming.

#### 4.6.1.2 Correlations between Participation in Donor Funded Agriculture based Projects and Employment

In order to verify the above observation, a correlation between participation in donor funded agriculture based projects and employment was done. The results were as shown below.

**Table 4.19: Correlations between Participation in Donor Funded Agriculture based Projects and Employment**

| | | Ever Participated in Donor-Funded Agric Project | Employment Status |
|---|---|---|---|
| Ever Participated in Donor-Funded Agric Project | Pearson Correlation | 1 | .282(*) |
| | Sig. (2-tailed) | . | .012 |
| | N | 274 | 274 |
| Employment Status | Pearson Correlation | .282(*) | 1 |
| | Sig. (2-tailed) | .012 | . |
| | N | 274 | 274 |

* Correlation is significant at the 0.05 level (2-tailed).

From Table 4.19, it can be seen that there was a Pearson Correlation of 0.282 at a significance level of 0.05. This implies that there was a weak positive relationship between participation in donor funded agricultural projects and employment. That meant that the more one participated in the donor-funded agricultural projects, the more likely one was able to be employed. The relationship was weak due to the fact that those who participate in the projects would wish and are encouraged to create their own employment instead of being employed though there were a few that wished to use the skills acquired to search for employment.

### 4.6.2 Income Generation as an Indicator of Rural Development

Income generation is directly related to the standards of living of any individual. If living standards of an individual are high then it means that this individual must have a good source of income to sustain the high living standards. The study wanted to find out if participation in donor funded agricultural based projects affected the income generated by its participants hence influencing

their living standards. The findings of the income levels of the respondents were as outlined in Table 4.20.

**Table 4.20: Income generation of the people of Lurambi Constituency from their Agricultural Enterprises**

| The amount generated from Agric enterprise by projects participants per month | Frequency (F) | Percentage (%) |
|---|---|---|
| Less than Ksh. 5,000 | 32 | 11.5 |
| Ksh. 5,000 - 10,000 | 42 | 15.4 |
| Ksh. 10,000 - 15,000 | 74 | 26.9 |
| Ksh. 15,000 - 20,000 | 112 | 41.0 |
| More than 20,000 | 14 | 5.1 |
| Total | 274 | 100 |

From the results, 41.0% of those involved in donor funded agriculture based projects had income levels ranging between Ksh. 15,000 and Ksh. 20,000 from their agricultural enterprise while only 11% had an income level of below Ksh.5, 000. On the other hand 26.9% had an income of between Ksh.10, 000 and Ksh. 15,000. There was a small percent of 5.1% who had an income of more than Ksh. 20,000 per month from their agricultural enterprise.

### 4.6.2.1 Correlations between Participation in Donor Funded Agricultural based Projects and Income Generated from Agricultural Enterprises.

In order to find out if there was a relationship between participation in donor funded agricultural based projects and rural development through increased generation of income, a Pearson Correlation was done between participation in donor funded agricultural based projects and the amount of income generated from agricultural enterprise. The results were as outlined in Table 4.21.

**Table 4.21 : Correlation between Participation in Donor Funded Agricultural based Projects and the Amount of Income Generated from Agricultural Enterprise**

| | | Ever Participated in Donor-Funded Agric Project | The amount generated from Agric. Enterprise |
|---|---|---|---|
| Ever Participated in Donor-Funded Agric Project | Pearson Correlation | 1 | .895 (**) |
| | Sig. (2-tailed) | . | .002 |
| | N | 274 | 274 |
| The amount generated from Agric. enterprise | Pearson Correlation | .895 (**) | 1 |
| | Sig. (2-tailed) | .002 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (2-tailed).

From Table 4.21, it can be seen that there was a Pearson Correlation of 0.895 at a significance level of 0.01. This implies that there is a positive relationship between participation in donor funded agricultural based projects and the amount generated from agricultural enterprises. That means that the more one participates in the donor-funded agricultural based projects, the more he/ she is likely to generate higher income from the Agricultural enterprises.

### 4.6.3 Installing Electricity as an Indicator of Rural Development

Electricity is often viewed as an indicator of rural development since it is a source of energy which can be used to spur many developmental activities. A Pearson correlation was done to find out if there was a relationship between participation in donor funded agricultural projects and the ability for one to install electricity in their houses. The findings were as shown in table 4.22

**Table 4.22: Correlation between Participation in Donor Funded Agricultural Projects and the Ability for one to Install Electricity in their Houses**

| | | Participation in Donor-Funded Agric Project | House installed with electricity |
|---|---|---|---|
| Participation in Donor-Funded Agric Project | Pearson Correlation | 1 | .790 (**) |
| | Sig. (2-tailed) | . | .001 |
| | N | 274 | 274 |
| House installed with Electricity | Pearson Correlation | .790 (**) | 1 |
| | Sig. (2-tailed) | .001 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (2-tailed).

From Table 4.22, it can be seen that there was a Pearson Correlation of 0.790 at a significance level of 0.01. This implies that there is a strong positive relationship between participation in donor funded agricultural projects and installation of electricity in houses. That means that the more one participates in the donor-funded agricultural projects, the more likely one is able to install electricity in his/her house.

### 4.6.4 Installation of Running Water in Houses as an Indicator of Rural Development

Availability of clean water for use in households is an indicator of rural development. In many rural areas, the people still rely on the use of water from rivers or springs. It takes a lot of time to fetch the water and this time could be used in other developmental activities. The study wanted to find out if there was a relationship between participation in donor funded agricultural projects and installation of running water in houses. The findings of the correlation were as outlined in table 4.23.

**Table 4.23: Correlations between Participation in Donor Funded Agricultural Projects and Installation of Running Water in Houses**

| | | Participation in donor-funded Agricultural Projects | House installed with running water |
|---|---|---|---|
| Participation in donor-funded Agricultural Projects | Pearson Correlation | 1 | .842 (**) |
| | Sig. (2-tailed) | . | .001 |
| | N | 274 | 274 |
| House installed with running water. | Pearson Correlation | .842 (**) | 1 |
| | Sig. (2-tailed) | .001 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (2-tailed)

From Table 4.23, it is evident that there was a Pearson Correlation of 0.842 at a significance level of 0.01. This implies that there is a strong positive relationship between participation in donor funded agricultural projects and installation of running water in houses. That means that the more one participates in the donor-funded agricultural projects, the more likely one is able to install running water in his/her house.

## 4.7 Impact of Cultural Beliefs and Practices on Rural Development

Among the factors that greatly influence people's participation in developmental activities are cultural beliefs and practices. These may either impede or facilitate such participation. For example the pastoralist people of Kenya lead a nomadic lifestyle and therefore it may not be of any economic

importance for them to invest heavily in permanent structures that are well equipped with running water or electricity. It was therefore necessary to explore the respondents' cultural values and practices that had a bearing on their development agenda.

### 4.7.1 Religion of the Respondents

Religion plays a role in development of a community. For example, the Islam faith places high value on cleanliness particularly before praying. As such it is common to find that in areas where this religion is dominant there are plenty of wells or running tap water which apart from the religious use can also be used for other developmental activities such as farm irrigation. On the other hand some religious sects such as "Imani moja" are against seeking conventional treatment for diseases and as such may not place high value on building hospitals .Regarding their religious background; the results of the respondents were as shown below.

**Table 4.24: Religion of the Respondents**

| Religion | Frequency (F) | Percentage (%) |
|---|---|---|
| Christian | 227 | 82.8 |
| Muslim | 23 | 8.4 |
| African Traditional | 24 | 8.8 |
| Total | 274 | 100 |

From the findings it was found that a majority of the participants were Christians. 82.8% of the respondents were Christians but of various denominations. About 8.4% of those in projects were Muslims while 8.8% of the respondents were of the African Traditional Religion. It was however noted that of the Christian followers, there were many religions and sects some of which had belief systems which could hinder participation in developmental activities.

### 4.7.2 The Family size of the Respondents

The family size plays a significant role in rural development. The number of children in a family can be directly related to the living standards of any given family. With the rising world population resources are clearly becoming scarce. It is therefore important for couples to have the number of children that they can comfortably provide for. From the study it was found that the modal

number of children among the respondents was six. Regarding the number of children the respondents had, the findings were as summarized in Table 4.25.

**Table 4.25: The Number of Children of the Respondents**

| Number of Children | Frequency (F) | Percentage (%) |
|---|---|---|
| None | 19 | 6.9 |
| One | 16 | 5.8 |
| Two | 33 | 12.1 |
| Three | 26 | 9.5 |
| Four | 44 | 16.1 |
| Five | 41 | 14.9 |
| Six | 45 | 16.4 |
| Seven | 21 | 7.6 |
| Nine | 17 | 6.3 |
| Eleven | 4 | 1.5 |
| Thirteen | 8 | 2.9 |
| Total | 274 | 100 |

However it was noted that there were those who had up to 13 children. In the sociological literature, the above findings can be often explained using an argument of finite resources: parents have limited time, money, and patience to devote to the well being of their children, and those with fewer children can invest more per child. This theory of resource dilution fits well with the classic notion of the quality-quantity trade-off in family economics (Becker 1991; Becker and Tomes 1976). It can therefore be argued that with the increase in number of children, the quality of life depreciated.

### 4.7.3 Relationship between Number of Children and Rural Development

Having obtained the above results, the study wanted to find out if there was a correlation between the number of children and rural development. One of the correlations that was done was to correlate the number of children and the number of employees in farms. The results were as shown in Table 4.26.

**Table 4.26: Correlation between the Number of Children and Employees on the Farms.**

| | | Number of Children | Number of employees |
|---|---|---|---|
| Number of Children | Pearson Correlation | 1 | -.392(**) |
| | Sig. (2-tailed) | . | .000 |
| | N | 274 | 274 |
| Number of employees | Pearson Correlation | -.392(**) | 1 |
| | Sig. (2-tailed) | .000 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (2-tailed).

From Table 4.26, it can be shown that there was a Pearson Correlation of - 0.392 at a significance level of 0.01. This means that there is a negative relationship between number of children and number of employees on the farm. This implies that people with more children have fewer employees on their farms compared to those with fewer children. It further indicates that farmers with more children tend to use them for farm labour which may interfere with their educational pursuit. At the same time it may be due to financial constraints to cater for the children's needs thus lack of adequate funds to employ more laborers to assist on the farm.

### 4.7.4: Correlation between Number of Children and Installation of Running Water.

The study wanted to find out if there was a relationship between the number of children in a family and the ability to install running water. The findings were as outlined in the table below.

**Table 4.27: Correlation between Number of Children and Installation of Running Water.**

| | | Number of Children | House installed with running water |
|---|---|---|---|
| Number of Children | Pearson Correlation | 1 | -.316(**) |
| | Sig. (2-tailed) | . | .005 |
| | N | 274 | 274 |
| House installed with running water. | Pearson Correlation | -.316(**) | 1 |
| | Sig. (2-tailed) | .005 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (2-tailed).

From Table 4.27, it can be seen that there was a Pearson Correlation of - 0.316 at a significance level of 0.01. This means that there is a negative relationship between number of children and installation of running water in houses. This implies that people with more children are less likely to install running water in their houses compared to those with fewer children. This may be due to financial constraints to cater for the children's needs thus lack of adequate funds to install running water in the houses.

**4.7.5: Correlation between Number of Children and Installation of Electricity in Houses.**

Electricity being an indicator of rural development, the study wanted to find out if there was a relationship between the number of children and the ability of one to install electricity in his/her house. The findings were as outlined in the table below.

**Table 4.28: Correlation between Number of Children and Installation of Electricity in Houses.**

| | | Number of Children | House installed with electricity |
|---|---|---|---|
| Number of Children | Pearson Correlation | 1 | -.351(**) |
| | Sig. (2-tailed) | . | .002 |
| | N | 274 | 274 |
| House installed with electricity | Pearson Correlation | -.351(**) | 1 |
| | Sig. (2-tailed) | .002 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (2-tailed)

From Table 4.28, it can be seen that there was a Pearson Correlation of - 0.351 at a significance level of 0.01. This means that there is a negative relationship between number of children and installation of electricity in houses. This implies that people with many children are less likely to install electricity in their houses compared to those with fewer children. This may be due to financial constraints which may arise in catering for the children's needs thus lack of adequate funds to install electricity in the houses.

**4.7.6 Alcohol Consumption and Rural Development**

Alcohol consumption can affect rural development in two ways. It can be positive or negative. Alcohol consumption can be positive when the locals are brewing alcohol as an activity of economic importance and the returns from the alcohol consumption are directed towards developmental activities. On the other hand, alcohol consumption can affect rural development negatively if too much time is spent by the locals consuming alcohol instead of using that time in doing constructive

developmental activities. The study therefore wanted to find out how alcohol consumption culture influenced rural development. The findings are as shown below in Table 4.29 that follows

**Table 4.29: Alcohol Consumption Trends of Respondents**

| Do you participate in any drinking of alcohol | Frequency (F) | Percentage (%) |
|---|---|---|
| Yes | 183 | 66.8 |
| No | 91 | 33.2 |
| Total | 274 | 100 |

From the findings it was found that alcohol consumption was very common among the respondents. It was found that 66.8% participated in alcohol consumption. Only 33.2 % of the respondents did not participate in alcohol consumption. It was also found that of those who consumed alcohol a majority were male. A lot of family resources went in to alcohol consumption.

### 4.7.7. Correlation between Consumption of Alcohol and the Amount of Income Generated from Agricultural Enterprise

The amount of income generated in any given household is important for spurring development. High income levels improve one's ability to participate in developmental activities. The study wanted to find out if there was a relationship between participation in alcohol consumption and the amount generated from agricultural enterprise. The results were as indicated in table 4.30

**Table 4.30: Correlation between Consumption of Alcohol and the Amount of Income Generated from Agricultural Enterprise**

| | | Participation in alcohol consumption | The amount generated from Agric. enterprise |
|---|---|---|---|
| Participation in alcohol consumption | Pearson Correlation | 1 | -.623(*) |
| | Sig. (2-tailed) | . | .049 |
| | N | 274 | 274 |
| The amount generated from Agric. enterprise | Pearson Correlation | -.623(*) | 1 |
| | Sig. (2-tailed) | .049 | . |
| | N | 274 | 274 |

* Correlation is significant at the 0.05 level (2-tailed).

From Table 4.30, it was shown that there was a Pearson Correlation of - 0.623 at a significance level of 0.05. This implied that there was a strong negative relationship between participation in alcohol consumption and the amount generated from Agricultural enterprise. That means that people who drunk more generated less income from Agricultural enterprises compared to those who drunk less or did not drink alcohol.

### 4.7.8 Participation in Alcohol Consumption and Highest Level of Education Attained

Education can be viewed as an indicator of development. This is demonstrated by the fact that areas with many educational facilities are associated with development and likewise the higher the level of education; the more one is likely to be development minded. The study wanted to find out if there was a relationship between consumption of alcohol and level of education as an indicator of rural development. The findings were as outlined in the table 4.31.

**Table 4.31: Participation in Alcohol Consumption and Highest Level of Education Attained.**

| | | Participation in alcohol consumption | Highest level of education |
|---|---|---|---|
| Participation in alcohol consumption | Pearson Correlation | 1 | -.383(**) |
| | Sig. (2-tailed) | . | .001 |
| | N | 274 | 274 |
| Highest level of education | Pearson Correlation | -.383(**) | 1 |
| | Sig. (2-tailed) | .001 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (2-tailed).

From Table 4.31, it was found that there was a Pearson Correlation of -0.383 at a significance level of 0.01. This implied that there was a strong negative relationship between participation in alcohol consumption and level of education. That means that people who drunk more were more likely to have lower levels of education compared to those who drunk less.

### 4.7.9 Participation in Alcohol Consumption and Employment Status

Employment can be used as an indicator of rural development. This is so because when one is employed they become self sufficient as a result of the earnings from the employment. Further, some

of the returns from the employment can be used to start developmental activities. The study wanted to find out if there was a relationship between alcohol consumption and employment. The results were as shown below.

**Table 4.32: Correlations between Participation in Alcohol Consumption and Employment Status**

| | | Participation in alcohol consumption | Employment Status |
|---|---|---|---|
| Participation in alcohol consumption | Pearson Correlation | 1 | -.416 |
| | Sig. (2-tailed) | . | .005 |
| | N | 274 | 274 |
| Employment Status | Pearson Correlation | -.416 | 1 |
| | Sig. (2-tailed) | .005 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (5-tailed).

From Table 4.32, it can be seen that there was a Pearson Correlation of -0.416 at a significance level of 0.01. This implies that there was a negative relationship between participation in alcohol consumption and employment status. That means that people who drunk more alcohol were likely to be unemployed compared to those who drunk less or did not drink alcohol at all. This could be attributed to lack of time to look for employment as a lot of time is wasted in drinking joints or some have lost jobs through dismissal due to drunkardness.

### 4.8 Extent to which Level of Education determines Rural Development

Education is an important tool for rural development. The contribution of education to development extends far beyond the school context. According to (Atchoerena and Sedel, 1998) the notion of 'basic education' can be defined in a much broader sense referring to the acquisition of knowledge and know-how in complementary fields such as food, nutrition, hygiene, health, family planning, etc. Hence, the discussion on education and rural development includes various forms of non-formal education, including adult literacy programmes.

### 4.8.1 Level of Education of Respondents

Studies on education have indicated the existence of a direct relationship between level of education and economic development. The levels of education of the respondents from Lurambi constituency were as outlined in table 4.33.

**Table 4.33: level of Education of Respondents**

| Level of Education | Frequency (F) | Percentage (%) |
|---|---|---|
| No Formal Education | 31 | 11.3 |
| Early Childhood Education | 19 | 6.9 |
| Primary Education | 72 | 26.3 |
| Secondary Education | 91 | 33.2 |
| Tertiary Education | 61 | 22.3 |
| Total | 274 | 100 |

From the table 4.33, it was noted that 74.4 % of the population involved in donor funded agricultural based projects had secondary education and above. Only 7.2 % could be considered illiterate while 17.9% had primary education. Of those not involved in donor funded agricultural based projects, 48% had secondary education and above which can be rated as fair, those who had primary education were 29.6% while about 22.5% had early childhood education or no formal education at all. Level of education was one of the factors that was being considered before being allowed to participate in the donor funded agricultural projects. This was because it was felt that the reading , writing and critical thinking skills were necessary for the project participants to implement the skills they were learning from the project. Therefore very few participants were illetrate .

### 4.8.2 Relationship between Level of Education and Employment

The study wanted to find out if there was a relationship between education and employment as an indicator of rural development. The results were as shown in table 4.34

**Table 4.32: Correlation between Level of Education and Employment Status**

| | | Education Level | Employment Status |
|---|---|---|---|
| Education Level | Pearson Correlation | 1 | .701(**) |
| | Sig. (2-tailed) | . | .000 |
| | N | 274 | 274 |
| Employment Status | Pearson Correlation | .701(**) | 1 |
| | Sig. (2-tailed) | .000 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (2-tailed).

From Table 4.34, it can be seen that there was a Pearson Correlation of 0.701 at a significance level of 0.01. This implies that there is a strong positive relationship between level of education and employment status. That indicates that the higher the level of education, the more likely one is to be employed compared to those with lower levels of education.

### 4.8.3 Relationship between Education and Installation of Electricity

Electricity being an indicator of rural development, the study wanted to find out if there was an existing relationship between ones level of education and rural development. The findings were as shown in table 4.35

**Table 4.35: Correlation between Education and Installation of Electricity**

| | | Education Level | House installed with electricity |
|---|---|---|---|
| Education Level | Pearson Correlation | 1 | .689(**) |
| | Sig. (2-tailed) | . | .000 |
| | N | 274 | 274 |
| House installed with electricity | Pearson Correlation | .689(**) | 1 |
| | Sig. (2-tailed) | .000 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (2-tailed).

From Table 4.35, it can be seen that there was a Pearson Correlation of 0.689 at a significance level of 0.01. This implies that there is a strong positive relationship between level of education and

installation of electricity. That means that the higher the level of education, the more likely one is to install electricity in his/her house compared to those with lower levels of education.

### 4.8.4 Relationship between Education and Installation of Running Water

Running water being an indicator of rural development, the study wanted to find out if there was a relationship between level of education and one's ability to install running tap water in his or her house. The results of this correlation were as outlined in table 4.36.

**Table 4.36: Correlations between Level of Education and Ability to Install Running Tap Water in Houses**

| | | Education Level | Installation of running water |
|---|---|---|---|
| Education Level | Pearson Correlation | 1 | .675(**) |
| | Sig. (2-tailed) | . | .001 |
| | N | 274 | 274 |
| Installation of running water | Pearson Correlation | .675(**) | 1 |
| | Sig. (2-tailed) | .001 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (2-tailed).

From Table 4.36, it can be seen that there was a Pearson Correlation of 0.675 at a significance level of 0.01. This implies that there is a strong positive relationship between level of education and installation of running water. That means that the higher the level of education, the more likely one is to install running water in his/her house compared to those with lower levels of education.

### 4.8.5 Relationship between Level of Education and Number of Employees

Employment is an indicator of rural development and particularly so if the people in rural areas are in a position to create employment for other people. The study wanted to look at the relationship between level of education and creating employment for others. The findings of this correlation were as shown in Table 4.37.

**Table 4.37: Correlation between Level of Education and Number of Employees**

| | | Education Level | Number of employees |
|---|---|---|---|
| Education Level | Pearson Correlation | 1 | .505(**) |
| | Sig. (2-tailed) | . | .000 |
| | N | 274 | 274 |
| Number of employees | Pearson Correlation | .505(**) | 1 |
| | Sig. (2-tailed) | .000 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (2-tailed).

From Table 4.37, it can be seen that there was a Pearson Correlation of 0.505 at a significance level of 0.01. This implies that there is a positive relationship between level of education and ability to create employment for others. That means that the higher the level of education, the more likely one was likely to have employees in their homes compared to those with lower levels of education.

### 4.8.6 Relationship between Level of Education and Number of Children

The study felt that it was important to look at whether the level of education had an influence on the number of children that a couple had. This was important because of the earlier established relationship between number of children and rural development. The findings from the correlation between the level of education and the number of children was as shown in table 4.38

**Table 4.38: Correlation between the Level of Education and the Number of Children**

| | | Education Level | Number of Children |
|---|---|---|---|
| Education Level | Pearson Correlation | 1 | - 535(**) |
| | Sig. (2-tailed) | . | .003 |
| | N | 274 | 274 |
| Number of Children | Pearson Correlation | - 535(**) | 1 |
| | Sig. (2-tailed) | .003 | . |
| | N | 274 | 274 |

** Correlation is significant at the 0.01 level (2-tailed).

From Table 4.38, it can be seen that there was a Pearson Correlation of -0.535 at a significance level of 0.01. This implies that there is a strong positive relationship between level of education and number of children. That means that the higher the level of education the fewer children one is likely to have compared to those with lower levels of education.

# CHAPTER FIVE

# SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

## 5. 1. Introduction

Chapter five covers the summary of finding which basically gives an overview of the outcomes of the study; it also has a discussion which relates the findings of the study with the work of other researchers. The chapter also has conclusions which are drawn from the study and recommendations. The chapter also gives suggestions for further research.

## 5.2 Summary of Findings

The first objective was to find out to what extent donor funded agriculture based projects contribute to rural development. It was found that donor funded agricultural based projects played a positive role in rural development. This was achieved through the technical support offered in form of extension services and training workshops. This enabled the respondents to detect problems during the production period and correct them accordingly hence preventing further damage to crops or animals under production and this improved food security. Many of these donor funded agriculture based projects offered material support by supplying farmers with farm inputs in the form of farm tools and equipment, seed and fertilizer, animals and animal feeds. This gave them an edge as in some cases the farmers were not in a position to afford the farm inputs on their own.

Regarding the second objective, which was to examine the extent to which individual participation in donor funded agricultural based projects contributed to rural development, it was found that there was a strong positive relationship between participation in donor funded agricultural projects and installation of electricity and water in houses. It was also found that there was a positive relationship between participation in donor funded agricultural projects and the amount of income generated from agricultural enterprises. It was also found that there was a weak positive relationship between participation in donor funded agricultural projects and employment. That meant that the more one participated in the donor-funded agricultural based projects, the more likely one was able to be employed. The relationship was weak due to the fact that those who participate in the projects would wish and are encouraged to create their own employment instead of being employed though we have a few who wished to use the skills acquired to search for employment.

The third objective was to evaluate the extent to which cultural beliefs and practices of the community contributed to rural development. It was found that culturally a couple was expected to

produce a large number of children as children were perceived to be wealth. It was found that these cultural beliefs still hold. In the study, the modal number of children per household was six. It was found that having a large family size had a negative relationship to rural development since most of the family resources went towards providing for the children as opposed to being channeled into developmental practices. Additionally it was found that in such families, there was a likelihood of these children being used as a source of labour on the farms instead of concentrating on their studies. It was found that a lot of time was spent consuming alcohol instead of spending that time in developmental activities. Additionally, it was found that alcohol consumption had a negative relationship with employment and participation in developmental activities.

Regarding the fourth objective which focused on how the level of education impacted rural development. It was found that education impacted rural development positively in that those with higher levels of education were more likely to be in employment, install water and electricity in their homes and spend less time participating in alcohol consumption. It was also found that those with higher levels of education were more likely to create employment for others and even have a lesser number of children, which improved their chances of having better living standards.

### 5.3 Discussion

Projects are planned activities that are time bound and are geared towards the achievement of certain objectives with the use of specified resources. Donor funded agricultural projects usually have the objective of improving livelihoods of the rural poor through enhancement of food security and improved income levels (World Development Report, 2008). This can be achieved through increasing crop yields so that there is enough for the farmer and his/her family and surplus to sell so as to increase the family income levels. The study wanted to find out the impact of donor funded agriculture based projects, cultural beliefs and practices and level of education on rural development. Some of the indicators that were used to assess rural development were improved livelihoods as a result of improved income, employment status and ability to create employment for others, diversification of income sources from the traditional agricultural based income sources and access to utilities such as electricity and water

From the study it was found that there was a weak positive relationship between participation in donor funded agricultural based projects and employment. That means that the more one participated in the donor-funded agricultural projects, the more likely one was able to be employed. The

relationship was found to be weak due to the fact that those who participated in the projects wished and were encouraged to initiate their own projects instead of being employed though there were a few that wished to use skills acquired in projects to search for employment. These results agree with those of Workforce Recruitment Programme, (2009) which indicate that most employers seek to employ employees who have prior experience in the field they are searching for employment.

It was found that the participation in donor funded agricultural projects improved the income levels generated by its participants hence improving their living standards. The improved income levels were obtained as a result of increased yields which came about by using modern farming methods, using better farm inputs and the technical support offered from time to time in the form of extension services which ensured that potential problems were arrested on time. These results agree with the study conducted by the World Development Report, (1984) which argue that there was a strong correlation between extension services and increased crop productivity. This is also supported by Dean and Peter, (2000) in their study about the role of education and farm efficiency in Nepal, whereby it was found that schooling, extension services and cognitive skills influenced crop production.

Regarding the impact of cultural beliefs and practices, it was found that the number of children born to a couple had an impact on their ability to participate in developmental activities. In the sociological literature, these can be often explained using an argument of finite resources which states that: parents have limited time, money, and patience to devote to the well being of their children, and those with fewer children can invest more per child. This theory of resource dilution fits well with the classic notion of the quality-quantity trade-off in family economics (Becker 1991; Becker and Tomes 1976). It can therefore be argued that with the increase in number of children, the quality of life depreciated and so did the ability to participate in developmental activities since most of the family resources went into providing for the children. It was also found that there was a negative relationship between number of children and number of employees on the farm. This implies that people with more children have fewer employees on their farms compared to those with fewer children. It further indicates that farmers with more children tend to use them for farm labour which may interfere with their educational pursuit. These findings agree with those of International Labour Organization which state that 58.6% of children involved in child labour are used in the agricultural sector and are mostly from families that face extreme poverty (International Labour Organization Global Estimates, 2012)

Another cultural practice that was found to be rampant in the rural areas that had a negative relationship with rural development was the excessive consumption of alcohol. From the study, it was found that there was a strong negative relationship between participation in alcohol consumption and the amount generated from Agricultural enterprise. That means that people who drunk more generate less income from Agricultural enterprises compared to those who drunk less. Additionally, it was found that there was a negative relationship between participation in alcohol consumption and level of education, employment and one's ability to participate in developmental activities. These findings agree with those of Hutchison and Blackely (2003) which claim that although both rural and urban areas experience drug related problems, the consequences of drug use are greater among the rural populations because drug use is not considered as a treatable condition furthermore, there are fewer treatment facilities for drug abuse in rural areas than in urban areas.

Regarding education, many studies on education have indicated the existence of a direct relationship between level of education and development. (Twesigye,2005) observes that education leads to self employment and creation of employment whereby one is able to support themselves and participate in the creation of employment for others. (Atchoerena and Sedel,1998) observe that Agriculture has been 'taught' in schools in many countries for a long time, with varying degrees of success in terms of the outcomes expected from its inclusion in the curriculum. The value of agriculture as an intrinsic part of the rural school curriculum where it has been implemented either as a manual activity added on to the school curriculum or as a distinct subject area in the curriculum has been hotly contested for many years. Primary school agriculture quieted somewhat towards the end of the 1990s. With the exclusion of Agriculture as a subject in the Kenyan curriculum, people in rural areas whose education ends upon completion of primary education may not be in a position to know anything regarding agricultural practices which happens to be the main source of livelihood for the rural communities.

The study found that there was a positive relationship between level of education and employment status. That indicates that the higher the level of education, the more likely one is to be employed compared to those with lower levels of education. Also it was found that there was a strong positive relationship between level of education and income levels and one's ability to participate in developmental activities such as installation of electricity and running tap water in their houses.

## 5.4 Conclusions

From the findings of the research study, it can be concluded that donor funded agriculture based projects have a positive role in influencing rural development. This was based on the fact that most of those who had participated in the donor funded agricultural based projects said that their living standards had improved since they started participating in the projects. Livelihoods had improved in terms of increased income levels and food security. This was achieved through the technical and material support given by the projects to the respondents.

It was concluded that individual participation in donor funded agricultural based projects contribute to participation in developmental activities. It was found that there was a positive relationship between participation in donor funded agricultural based projects and income generation from agricultural enterprise. Also there was positive correlation between participation in donor funded projects and the ability to install electricity in houses and running water. Additionally correlation studies indicated a positive relationship between participation in these projects and employment .These are indicators of rural development. It can therefore be concluded that there was a positive relationship between participation in donor funded agriculture based projects and rural development.

It was also concluded that culture still has a strong bearing on the people of Lurambi constituency and in turn affecting rural development. This is because a large percentage still believes that they needed to have large number of children to ensure that they name them after their ancestors so that their ancestors are not forgotten. Correlation studies indicate that there was a negative relationship between the number of children and the number of employees in a farm. This implies that people with more children have fewer employees on their farms compared to those with fewer children. It further indicates that farmers with more children tend to use them for farm labour which may interfere with their educational pursuit. At the same time it may be due to financial constraints to cater for the children's needs thus lack of adequate funds to employ more laborers to assist on the farm. Also these studies show a negative relationship between the number of children and one's ability to install electricity and running water in the home. It was also found that participation in alcohol consumption was also contributing negatively to rural development as it was found that those people who drink more generate less income from Agricultural enterprises compared to those who drink less. This means that the little money these people were able to generate went into buying alcohol instead of being used for income generation purposes. Additionally, there was a negative

relationship between participation in alcohol consumption and employment status. That means that people who drunk more were likely to be unemployed compared to those who drunk less. This could be due to lack of time to look for a job for they waste a lot of time in drinking joints or some have lost jobs through dismissal due to drunkardness. Therefore to some extent, it was found that there were some cultural practices that had a negative relationship with rural development.

Regarding how the level of education impacted on rural development, it was concluded that education had a positive impact on rural development. From the study, it was found that there was a positive relationship between level of education and employment status. That indicates that the higher the level of education, the more likely one was to be employed. It was also found that there was a positive relationship between level of education and one's ability to install running water and electricity in their households. It was also found that the higher the level of education one had, the more they were likely to create employment for others. These are all indicators of rural development which show that the level of education had a positive relationship with rural development. There was a negative correlation between level of education and number of children. This meant that the higher the level of education, the less number of children one had.

### 5.4 Recommendations

1. It is recommended that more agricultural based projects should be initiated and implemented within the constituency in conjunction with the local government. Some funds from the community development fund should be set aside to support the implementation of these donor funded agriculture based projects. Additionally, sensitization and awareness should be conducted about these agricultural based projects so that people at the grassroots have a clear understanding of how the donor funded agriculture based projects work.
2. It is recommended that women should be empowered through education so as to enable them to be equally productive as their male counterparts. From the study, it was found that more women are left to cultivate the farms and look after the home and children while their males go to urban centers to seek employment. It is also noted that more men are involved in donor funded agricultural based projects than women yet it has been found that those involved in these projects have improved income levels than those not involved. It therefore makes sense to initiate development programmes that target the female gender so as to empower them to be more productive in the farms even as they are left behind to look after the farms.

3. It is also recommended that the government should strengthen the implementation of post primary education since only 52.9% of the population sampled had post primary education. This has been shown to hamper development efforts as in some of the projects some post primary education was a prerequisite for effective implementation of the project activities. This made most of the people in the constituency to shun participating in the projects. It is recommended that the government should encourage adult learning and make it easily assessable by opening adult learning centers where people can access education and gain their education certificates regardless of their age.
4. It is also recommended that the donor funded agricultural based projects should also diversify and not solely focus on production of crops and animals. They should incorporate and encourage positive socio-cultural change whereby cultural practices that are detrimental to rural development are dealt with. Issues of family planning should be brought on board to encourage people to have smaller number of children whom they can comfortably provide for in terms of the basic human needs. This is because, even though the projects have been seen to have a positive impact in terms of improving food security and income levels, the impact would be diluted if the families are too large and a lot more resources are needed to cater for their needs. Additionally, government policies on alcohol consumption – "Mututho laws" should be upheld to ensure that people drink responsibly.

### 5.5 Suggestions for Further Research

1. Factors that determine community participation in donor funded agricultural based projects in rural areas.
2. The impact of alcohol consumption on economic development in Lurambi Constituency.
3. The prevalence of Child labour among families living in rural areas.

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## APPENDICES

### APPENDIX 1: LETTER OF TRANSMITTAL

Agnes Pahe Mdzomba,

University of Nairobi,

P.O.Box 30197-00100

Nairobi.

Dear respondent,

I am a student of University of Nairobi, in the department of extra mural studies. I am currently undertaking a master's degree in Project Planning and Management. This research I am doing will help me to complete my research project.

My area of study is on Donor Funded Agricultural Based Projects, Culture and Education as Contributors to Rural Development in Lurambi Constituency, Kakamega County**.** A questionnaire has been attached to this letter to enable me to gather data.

I would like to assure you that the information gathered will be handled with great confidentiality and will only be used for the purposes of this research project only. I therefore request your honest opinion when answering it.

Your cooperation will be highly appreciated. Thank you in advance.

Yours sincerely,

Agnes Pahe Mdzomba

## APPENDIX 2: QUESTTIONNAIRE

**RESEARCH QUESTIONNAIRE FOR THE PEOPLE LIVING IN THE RURAL AREA OF LURAMBI CONSTITUENCY**

This instrument is meant to gather data from respondents on how donor funded agricultural based projects, culture and education contribute to rural development.
Please fill it to the best of your knowledge. Your honesty will be highly appreciated and treated with utmost confidentiality.

**SECTION A: Demographic information of the study respondents.**

**(Please put a tick where appropriate)**

1. **Age**

☐ Below 30 years ☐ 31-40 years ☐ 41-50 years ☐ 51-60 years ☐ Over 60 years

2. **Gender**

☐ Male ☐ Female

3. **Marital status**

☐ Married ☐ Single ☐ Separated ☐ Divorced ☐ Widowed

4. **Employment status**

☐ Formal Employment ☐ Self employment ☐ Not employed

5. **Educational level**

☐ No formal education
☐ Early childhood education
☐ Primary education
☐ Secondary education
☐ Tertiary education

6. **What is your religion?**

☐ Christian
☐ Muslim
☐ African traditional religion
☐ Others (specify)……

7. **What is your profession**?.....

**SECTION B: INFORMATION BASED ON THE RESERCH OBJECTIVES**

8. Have you ever participated in any donor –funded agricultural based project?

☐ Yes No ☐

9. If yes, state the name of the project and briefly elaborate what the project involved.

……

……

10. a) Does the project management provide extension services to participants during the life of the project?

☐ Yes No ☐

b) If yes, how frequently do extension officers visit the project participants during the implementation period of the project?

☐ More than once a month
☐ Once a month
☐ After every two months
☐ After every three months
☐ Others (specify)…….

11. a) Does the project management provide training workshops to participants during the life of the project?

☐ Yes No ☐

b)If yes, how many training workshops have you attended in the course of the project?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ More than 5

12a) Does the project management expose its participants to modern agricultural practices through visiting model farms or exchange programmes?

☐ Yes No ☐

12 b) If yes, how many times have you visited model farms under the sponsorship of the project?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ More than 5

13a).Does the project supply project participants with farm inputs?

☐ Yes ☐ No

13 b) If yes specify the farm inputs supplied. (You can select more than one item)

- ☐ Farm tools and equipment
- ☐ Seeds and fertilizer
- ☐ Animal
- ☐ Animal feed
- ☐ Others (specify)……..

14. What criteria is used in selecting members who participate in the donor funded projects?

- ☐ Level of education
- ☐ Gender
- ☐ Age
- ☐ Ownership of land within the area
- ☐ Others (specify)……..

15. During the initiation stage of the project, are your views sought before the onset of the project?

☐ Yes ☐ No

16. Are you a member of any common interest group?

☐ Yes ☐ No

17. What resources have you been able to access as a result of being in the common interest groups?

- ☐ Farm tools and equipment
- ☐ Seeds and fertilizer
- ☐ Animal
- ☐ Animal feed
- ☐ Others (specify)……..

18. In Your opinion, what are the factors that hinder people within the community from fully participating in the donor funded agricultural projects?

- ☐ Lack of time
- ☐ Lack of general information
- ☐ Inadequate financial capacity
- ☐ Absence of rural representation in decision making
- ☐ Others (specify)……..

19. In your opinion, how has your living standards improved since you started participating in the donor funded agricultural based projects?.....……..

……
……

20. Does your house have electricity?

☐ Yes ☐ No

21. Does your house have running tap water?

☐ Yes ☐ No

22. How far is your home from the nearest health facility?

- ☐ Less than one km
- ☐ Less than two kms
- ☐ Less than three kms
- ☐ Less than 5kms
- ☐ More than 5 kms

23. How far is your home from the nearest market?

- ☐ Less than one km
- ☐ Less than two kms
- ☐ Less than three kms
- ☐ Less than 5kms
- ☐ More than 5 kms

24 a). Are there any challenges you face in selling the surplus produce from your farm or any other products from your business?

☐ Yes ☐ No

b) If yes explain the challenges……

……
……

25. What is the main source of income for the household?

- ☐ Salary
- ☐ Business
- ☐ Shares
- ☐ Sale of farm produce
- ☐ Others (specify)

26.a) Are you involved in any non-farm income generating activities?

☐ Yes ☐ No

b) If yes, give details…….

……

27. What is the size of your farm?

☐ Less than 1 acre
☐ 1 acre
☐ 2 acres
☐ 3 acres
☐ More than 5 acres

28. What is your main agricultural enterprise? (You can select more than one item)

☐ Maize production
☐ Sugarcane production
☐ Cattle keeping
☐ Poultry production
☐ Others (specify)…….

29. How much do you generate from the agricultural enterprise?

☐ Less than Ksh. 5,000
☐ Ksh. 5,000-10,000
☐ Ksh.10, 000-15,000
☐ Ksh. 15,000- 20,000
☐ Others (specify)……

30. Do you have any employees working in your home stead?

☐ Yes ☐ No

b) If yes, give number

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ More than 5

31. a). Do you participate in drinking of alcohol or use of cigarettes or bhang?

☐ Yes ☐ No

b) If yes, how many times a week do you use any of the above?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ More than 5

c) State your preferred alcoholic drink…….

32. a) How many children do you have?.....

b) What is their highest level of education?

☐ No formal education
☐ Primary education
☐ Secondary education
☐ College education
☐ University education

33. a) Are there any family members from the household who are employed in urban areas?

☐ Yes No ☐

b) What is their profession?.....

c) What is their highest level of education?

☐ No formal education
☐ Primary education
☐ Secondary education
☐ College education
☐ University education

END

THANK YOU