

**FACTORS INFLUENCING COMMUNITY PARTICIPATION IN THE  
IMPLEMENTATION OF AGRICULTURAL PROJECTS: A CASE OF  
KIMIRA- OLUCH SMALLHOLDER FARM IMPROVEMENT PROJECT,  
HOMA BAY COUNTY- KENYA**

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**A Research Project Report Submitted In Partial Fulfillment of the Requirement  
for the Award of the Degree of Master of Arts in Project Planning & Management  
of the University of Nairobi**

## DECLARATION

This research project report is my original work and has not been submitted as part of coursework for a degree in any other University.

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This research project report has been submitted for examination with my approval as university supervisor

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## **DEDICATION**

This research project report is dedicated to all my family members for their unwavering support during the period I was doing the study. Special thanks go to my late wife Lilian Ouma for her encouragement and patience during the period I was undertaking the course.

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## ABSTRACT

The concept of community participation in development gained prominence in development discourse in the seventies and since then literature on the subject has grown dramatically. The incorporation of the locals in development projects has become a common phenomenon that almost every organization talks about. Related literature shows that there is very little scope of participation for common people in decision making, management and supervision of many community based development projects. Kimira Oluch Smallholder Farm Improvement Project, (KOSFIP), is an irrigation agricultural project currently implemented in Homa Bay County to enhance sustainable income levels for the rural households and thus help in alleviating poverty. However, the participation of the local community in the activities of this project is considerably low, thereby threatening the realization of the project goal. The purpose of the study was therefore, to investigate factors influencing community participation in the implementation of agricultural projects with Kimira Oluch Small holder Farm Improvement Project (KOSFIP) as a case. The variables whose influences were examined included; project design principles; mode of resources contribution; types of implementation approaches and community capacity building strategies. The research design was descriptive survey, in which data was collected through questionnaire and interview schedule. A random sampling was done to identify 280 respondents as sample population, from a target population of 3000 farmers. From the data analyzed through descriptive statistics, the study findings revealed that; the project design principles were adequate and provided the local community with an avenue to be effectively involved in all stages of implementation. Among the design principles, stakeholder engagement rated at 61.41% by the respondents as the most effective principles which encouraged participation of key stakeholders in project implementation; that in-kind mode of resource contribution had not enhanced community participation and acceptability of the project. The results revealed that provision of labor rated at 57.5% was considered as the most essential contribution made by the community, compared to land which was rated at 42.5%; that the bottom-up approach adopted in project implementation enhanced participation since it was inclusive and consultative. Two types of implementation approaches, bottom-up and top-bottom were considered. The project was rated at 77.86% as being implemented through bottom-up approach. This is because we were viewing the project as being implemented by the government in a consultative manner with the local community; and that capacity building strategies were not effective enough thereby causing differential commitment among farmers towards participating in project activities. Poor capacity building strategies rated at 67.14%. The study concluded that the apparent lack of ownership, acceptability and low level of community participation could be largely attributed to lack of cohesion among the farmers, resulting from ineffective community capacity building strategies. It was therefore recommended that; the scope of the design principles be expanded as affirmative action to focus on the youthful segment of the community so as to put them in a better position to engage fully in project activities; there is need for the local community to focus on mobilizing their own resources by identifying possible sources of revenue for scheme management; IWUA leadership should integrate bottom-up approach by creating forums for regular consultation and engagement with the farmers; and that there is need to review the structure and content of the current capacity building strategies, with a view to incorporating appropriate strategies which are community-oriented.

## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>ARC-</b>	Action for the Rights of Children
<b>ASDS-</b>	Agricultural Sector Development Strategy
<b>ADB-</b>	African Development Bank
<b>CBO-</b>	Community Based Organization
<b>CDD -</b>	Community Driven Development
<b>EWB-USA-</b>	Engineers without Borders -USA
<b>ERWEC-</b>	Economic Recovery Strategy for Wealth & Employment Creation
<b>GoK-</b>	Government of Kenya
<b>GAD</b>	Gender and Development
<b>iDE-</b>	International Development Enterprises
<b>IWUA</b>	Irrigation Water Users Association
<b>KOSFIP-</b>	Kimira Oluch Smallholder Farm Improvement Project
<b>MORDA-</b>	Ministry of Regional Development Authorities
<b>MDG-</b>	Millennium Development Goals
<b>NEPAD -</b>	New Partnership for Africa's Development initiative

<b>O&amp;M</b>	Operation and Maintenance
<b>PRSP-</b>	Poverty Reduction Strategy Paper
<b>PSC</b>	Project Steering Committee
<b>PMCT-</b>	Project Management & Coordination Team
<b>SRA-</b>	Strategy for Revitalizing Agriculture
<b>UNDP-</b>	United Nations Development Programmes
<b>UNHCR -</b>	United Nations Human Commission for Refugees
<b>WID-</b>	Women In Development

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background of The Study**

The concept of community participation in development gained prominence in development discourse in the seventies and since then literature on the subject has grown dramatically. The incorporation of the locals in development projects has become a common phenomenon that almost every organization talks about. Related literature shows that there is very little scope of participation for common people in decision making, management and supervision of many community based development projects. Contemporary development scholars have been advocating the inclusion of people's participation in development projects as they believe the avowed objectives of any project cannot be fully achieved unless people meaningfully participate in it (Stone, 1989). Development policies world over seek to improve the living standards of the rural communities. This has been perceived to be a positive move particularly in the developing countries where majority of the population live in rural areas, (Kimani and Muia , 2004). It is in rural areas where the bulk of the foreign exchange and investment surplus are produced (UNDP, 2004).

International community has been seeking new strategies to revitalize rural development. One such a strategy is people's participation in the development process (UNDP, 2000). This means that development efforts must aim at releasing the energies of rural people and fully guarantee their share in the fruits of their efforts. This can only be achieved by enabling the poor to take charge of their lives, make full use of resources and manage their own development activities. However, for proper development to occur, motivation, knowledge, skills, organization and willingness of the people have to be tapped. In this respect, people's will in their development

process is paramount. It is, however recognized that the mobilization of the people has been the most obvious problem facing development process in many countries (UNDP, 2000).

Community participation in rural development involves an act of sharing common to all participants as stakeholders of the development process. In this case, each participant is directed towards a specific goal, which is shared by others within the development process. This is what is defined as popular participation in the development process, and which has been thought to be a positive move in the running of affairs that directly concern and affect people (Tandon, 1991). Internationally, there have been some attempts to operationalize and extend the participation of people in rural areas' development process. Over the years, participatory development approach has been a major concern for United Nations Agencies such as the International Labour Organization (ILO), World Health Organization (WHO), Food and Agriculture and Development (IFAO) and United Nations Educational Scientific and Cultural Organization (UNESCO).

Sloane et al.,( 2003) posit that in the United States of America, community participatory approaches to enhancing food security that engage multiple stakeholders have begun to gain momentum in multiple settings. The mechanisms of power among stakeholders within such community participatory food security planning processes warranted analysis. Sloane and fellow researchers collaborated with community residents to promote community-directed interventions aimed at sustainable healthy food availability in regions of Los Angeles encountering health disparities

In Ecuador a research by sustainable agriculture and rural development engaged 90 local communities in assisting farmers in becoming self-sufficient. More than 20 indigenous

communities participated in improving agricultural production and reducing risks to the ecosystem, through land-use planning and management. This initiative has ensured food security, increasing farmers' income, land productivity and project sustainability (UNDP, 2003). In Japan, Pandey and Okazaki, (2005), argued that Community programs initiated by the government and the international donor agencies failed to be sustainable at local level after completion of project. Kakaza (2009) further indicated that it was necessary to have the community involved during the project initiation so as to enhance the success rate of the project.

In Zimbabwe, a study done by Chifamba (2013) revealed that despite two decades of tireless effort and the adoption of several approaches to raise the development and economic growth of rural areas in Zimbabwe by integrating the rural population, who are largely peasants, into mainstream rural development (through community involvement and participation in rural development projects), development projects and the conditions of living of the rural poor are still deteriorating. This has led to a number of questions which have prompted people to interrogate the role of community participation in rural development. In Nigeria, Maduagwu (2000) indicated that Governments should not presume that they knew what will benefit the poor better than the poor themselves. Projects embarked need to be demand driven and on clear sustainability frameworks.

In Kenya, as in most other African countries, development policies seek to improve the conditions of the majority of rural communities. Soon after independence, the Sessional Paper No. 10 of 1965 on African Socialism and its Application to Planning in Kenya, underscored the importance of participation by all Kenyans in the development process. The paper defines community participation in terms of social responsibility by society and its members in the



struggle for prosperity. This is an appreciated effort as majority of the Kenyans live in rural areas where their livelihood is mainly from agriculture, the main stay of the country's economy.

Additionally, the Kenya Development Plan of 1989-1993 carried the theme, "Participation for Progress" and emphasized on the importance of tapping the energies of individuals and various socio-economic entities and institutions in the economy. Wabwobwa et al, (2013) observes that community Participation in Kenya has evolved through a long process of economic reforms. The community projects have therefore played a major role in providing services to the public.

Agricultural sector in many countries is being reoriented to provide more demand-based and sustainable services, taking account of the diversity, perceptions, knowledge and resources of users. Kumba (2003) emphasizes that in order for local participation in development, efforts are rendered effectively, local people should have access to decentralized institutions at local level that will honor their knowledge and their priorities and further emphasizes that local priorities should be addressed as soon as possible to ensure that locals do not lose faith in the capacity of local institutions.

As captured in the Kenya's Agricultural Sector Development Strategy (ASDS) for 2010- 2020, agriculture being the mainstay of the Kenyan economy, directly contributes 26 per cent of the GDP annually and another 25 per cent indirectly. The sector accounts for 65 per cent of Kenya's total exports and provides more than 70 per cent of informal employment in the rural areas. Therefore, the agricultural sector is not only the driver of Kenya's economy but also the means of livelihood for the majority of Kenyan people.

One of the agricultural projects launched to improve community livelihood in Kenya is Kimira Oluch Smallholder Farm Improvement Project, (KOSFIP). The project is a rural-based community development project which is focusing on irrigated agriculture. The project is situated in Homa Bay County, Kenya and is co- funded by the Government of Kenya and African Development Bank (ADB). The overall aim of the project is to improve the livelihoods of smallholder farmers by enhancing their incomes through practice of sustainable irrigated agriculture. This was to be achieved through the development of two community-based irrigation schemes, covering a total of 1474 Ha. Going by the level of investment ploughed in for the implementation of the project, it is envisaged that KOSFIP will be one of the largest food security projects in the Kenya (KOSFIP Appraisal Report, 2006).

This study examined how project design; mode of resources contribution; how different implementation approaches; and how community empowerment strategies influenced community participation in implementation of this project. The study thereafter recommended various strategies through which effective community participation could be facilitated in rural development process, in order to enhance success rates of agricultural projects in particular and development initiatives in general.

## **1.2 Statement of the Problem**

Community participation in rural development is widely recognized as a basic operational principle of rural development, although debates about this concept are fervent. Beneficiaries of community projects have been seen as consumers of services, and their role in rural development has been accorded less importance. Community participation has been limited to consultation, thereby stifling the creative capabilities and potential of community members at all levels of the society.

Community development initiatives are often demonstrated to be participatory if they can be shown to incorporate community perspectives and represent community concerns (Schafft & Greenwood, 2003). Participation does not occur by chance (Samah & Aref 2009). However, the participatory practice has not yet been cultured properly, more so in the African countries. The lack of effective structures for people's participation has been a major constraint upon more widespread development. People's participation in their own projects has not yet attained the acceptable levels that qualify to imply full participation (Community development society, 2001).

In Kenya, a poor economic environment and rapidly increasing population has resulted in 50% of Kenyans currently living in absolute poverty (Mkutu,2011). Many food security projects have been funded by both the Kenyan government and other development partners in an effort to mitigate against food insecurity (UNDP, 2010). Wabwoba et al (2013) state that despite the numerous interventions by the government and external support to enhance the income and food security of the poor population Kenya remains a net food importer. However the trend remains less focused on factors which could improve success rate of initiated livelihood improvement projects. The absence of strong roles for resource-poor farmers in agricultural programs in Kenya probably contributes to the stagnation of agricultural development projects. This is why there is need to emphasize effective farmers' participation along side professionals.

In order to address food situation in Homa Bay, Kimira Oluch smallholder farm improvement project was initiated in 2007, in Homa Bay County, to help alleviate poverty by improving the livelihood of the local communities. Homa Bay County is a region with extreme poverty of

above 56% amongst its dense population who experience unreliable rainfall and frequent crop failures where agriculture is the mainstay of the people (Poverty Mapping exercise, 2003/2004). Despite seven years of tireless effort and the adoption of several approaches to raise the participation of the farmers, through involvement in the implementation of the project, the farmers are yet to fully be involved in the project activities (KOSFIP Annual Progress Report, 2014).

The participation of the community as primary stakeholders during the implementation phase of the project has been noted to be lackluster, in spite of the fact that local participation was made to be a key requirement in the project implementation framework. It is observed that the primary beneficiaries (farmers) have apparently been unable to effectively self- mobilize, and implement the non- technical activities of the project, as required. As such, the current level of participation is regarded to be uncondusive for sustainability of the project. It is therefore feared that the continued alienation of community members (farmers) would make the project unsustainable and would likely increase poverty, household food insecurity and economic stagnation in Homa Bay County, thus working against the noble objectives of the project. This led to a number of questions which have prompted people to interrogate the role of community participation in the implementation of this project (KOSFIP Annual Progress Report, 2014).

### **1.3 Purpose of the Study**

The purpose of the study was to examine factors influencing community participation in the implementation of agricultural projects, a case of Kimira Oluch Small holder Farm Improvement Project (KOSFIP) in Homa Bay County.

## **1.4 Objectives of the Study**

The study sought to achieve the following objectives:

1. To examine how project design principles influence community participation in implementation of KOSFIP
2. To determine whether mode of resources contribution influences community participation in implementation of KOSFIP.
3. To establish how types of implementation approaches influence community participation in implementation of KOSFIP.
4. To assess how capacity building strategies influence community participation in implementation of KOSFIP.

## **1.5 Research Questions**

The study sought to answer the following research questions:

1. How do project design principles influence community participation in implementation of KOSFIP?
2. How does community resources contribution influence their participation in implementation of KOSFIP?
3. How do types of implementation approaches influence community participation in implementation of KOSFIP?
4. How do community capacity building strategies in influencing the participation of community members in implementation of KOSFIP?

## **1.6 Significance of the Study**

The study gathered information on the factors influencing community participation during the implementation of KOSFIP as an agricultural project in Kenya. The information gathered would be important to stakeholders in rural development. These stakeholders include farmers, government, quasi government institutions such as county governments and non-governmental organizations. Specifically, It was hoped that the relevant institutions implementing KOSFIP would use the result of this study to streamline or formulate policies and strategies that would guide the planning for the effective participation of project beneficiaries in the implementation of the project. Similarly, other agencies implementing food security projects other rural parts of Kenya may find the results useful for enhancing stakeholder involvement in project development activities. These institutions would be expected to see the importance of redistributing rights and benefits to local communities and the value of involving beneficiaries of rural development initiatives.

## **1.7 Limitation of the Study**

The limitation of the study may be related to the fact that the study was to be confined just to the implementation period only, yet factors influencing community participation may also be found during the project production phase. Secondly, the study was likely to be affected by people's attitude and perception given individual expectations about the expected project outcome. This was expected to be overcome by using an appropriate research design which could help in collecting information about people's; attitude, opinions, habits or perceptions on various social issues.

The study could also encounter lack of cooperation from the current project team, access to projects records and financial constraints for the completion of the project under study. This is because the area under study needed transport to move from one section of project area to another. The study would also be limited by the level of education of the respondents because some of the respondents may be unable to read and write. Respondents would not be willing to disclose some sensitive information that may be specific to individual households.

### **1.8 Delimitations of the Study**

The scope of the study was limited to Kimira Oluch Small holder Farm Improvement Project (KOSFIP) in Homa Bay County. The study would be restricted to responses obtained from the residents of Karachuonyo, Kochia and Kagan areas, who own and use agricultural plots within the designated project area. Other information will be obtained from literature search.

### **1.9 Basic Assumptions of the Study**

The study assumed that there would be some degree of influence of community participation on the success rate of the project during the implementation period. It was also assumed that the study findings would provide basis for generalization on the similar projects. The study also assumed that the respondents would provide accurate information without undue influence or expectation thereby helping to attain the objectives of the study. The study further assumed that the instruments and the sample size would give a fair representation of the target population.

Due to the fact that respondents are farmers within the project area, enough information would be collected for this study. Further, information collected would be reliable because it would be obtained project staffs, which are responsible for day to day running of the project and those responsible for monitoring progress of project implementation.

## **1.10 Definition of Significant Terms**

**Community Members** of the lowest administrative unit at which the project is working.

**Implementation** refers to the way the project is rolled out.

**Participation** refers to involvement of community members in the development initiatives that concern and affects them. It implies that the community has the ability to initiate and implement development endeavors that reflect its own needs

**Community participation** may comprise varying degrees of involvement of the local community. It may range from the contribution of cash and labour to consultation, changes in behavior, involvement in administration, management and decision-making

**Capacity building** Capacity building consists of developing knowledge, skills and operational capacity so that individuals and groups may achieve their purposes

**Projects** –a unique, transient endeavor, undertaken to achieve planned objectives, which could be defined in terms of outputs, outcomes or benefits. A project is usually deemed to be a success if it achieves the objectives according to their acceptance criteria, within an agreed timescale and budget.

**Factor Influencing** – Affect positively or negatively.

## **1.11 Organization of the study**

The study was divided into five chapters. Chapter one dealt with the background to the study which highlighted the concept and the context of the study. It also included the statement of the problem, which was to help identify the gap which the study was to fill, research objectives,



research questions, significance of the study, limitations of the study, delimitations, basic assumptions, and definition of the significant terms and the organization of the study.

In chapter two, the existing empirical literature will be reviewed so as to ensure proper understanding of the concept of community participation. The review was done in accordance with the community participation variables under study. These included literature related to project design principles, types of Implementation approaches, community capacity building strategies and modes of project resources mobilization and contribution. The chapter also focuses on the theoretical framework around which the study is grounded.

The third chapter included details on the methodology for doing the study. The sub sections included the research design, target population, sample size and sample selection procedures, data collection procedures and data analysis techniques. Also the ethical issues to be considered in the study were highlighted. In chapter four, the results of the study were presented, analysed , discussed as per the research objectives. Chapter five included the findings, conclusions, recommendations for further action, including policy, the suggestions for further research.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter deals with Literature review and endeavors to identify the existing gap from the previous studies in relation to the current study. The review was done in accordance with the community participation variables under study. These included literature related to project design principles, types of implementation approaches, community capacity building strategies and modes of project resources contribution. The chapter also focuses on the theoretical framework around which the study is grounded.

#### **2.2 Concept of community participation**

Often the term participation is modified with adjectives, resulting in terms such as community participation, citizen participation, people's participation, public participation, and popular participation. The Oxford English Dictionary defines participation as "to have a share in" or "to take part in," thereby emphasizing the rights of individuals and the choices that they make in order to participate. Brager, Specht, and Torczyner (1987) defined participation as a means to educate citizens and to increase their competence. It is a vehicle for influencing decisions that affect the lives of citizens and an avenue for transferring political power. However, it can also be a method to co-opt dissent, a mechanism for ensuring the receptivity, sensitivity, and even accountability of social services to the consumers.

Armitage (1988) defined citizen participation as a process by which citizens act in response to public concerns, voice their opinions about decisions that affect them, and take responsibility for changes to their community. Pran Manga and Wendy Muckle (Chappel, 1997) suggest that

community participation may also be a response to the traditional sense of powerlessness felt by the general public when it comes to influencing government decisions: “people often feel that health and social services are beyond their control because the decisions are made outside their community. Involvement or community participation has become one of the important conditions and is essential for the implementation of programmes and projects and also a fundamental condition to attract projects and programmes. It is also considered as a method capable of solving problems of maintenance of essential services that some of our communities meet like inadequate access to water and sanitation and lack of public funds.

### **2.3 Project Design Principles and Community Participation**

Project design principles are those issues which are integrated in various aspects of the project’s operations and addressed, with a view to achieving the project goal. This section reviews project design principles which are usually integrated to address aspects of participation and ownership. These include gender mainstreaming, stakeholder approach/ engagement and participatory monitoring and evaluation. Moser & Moser,(2005) describe gender mainstreaming as a strategy for ensuring that the concerns of both women and men form a fundamental aspect of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that they can benefit equally. The ultimate goal of gender mainstreaming is to achieve gender equality Women and men exhibit distinct differences in their perspectives, and priorities concerning environmental quality, natural resource use, project activities and benefits and access to services.

The debate on gender mainstreaming, its theoretical concepts, as well as the manner in which it is implemented is highly complex and contested. There are as many proponents of gender

mainstreaming, as there are opponents. People-centered approaches do not always ensure that gender perspectives are taken into account. A research conducted by Ebila (2003), and cited by Mwenda, M (2012), reported that although Uganda was known for having a gender-sensitive approach to development, in the late 1990s there were not any clear guidelines on how to mainstream gender in this sector, despite the fact that gender cannot be divorced from effective water management and use.

A research by Souza (2003) of Brazil reported that a couple of women who started in the project left because of the lack of support from their husbands. In Egypt, in a similar research by Hammam (2004), it became clear that existing power structures hindered women's empowerment, particularly at the management level. Poku (2008) from Ghana embarked on a research and observed that although women are the key players in implementing changes in hygiene behavior, the contribution and roles of rural women are often overlooked or underutilized in the drafting of water and sanitation policies. Similarly, Majekodunmi of Nigeria in his research observed a major obstacle that the traditional village system was patriarchal, and endowed men with all decision-making powers (Majekodunmi, 2006). Carrying out a gender analysis and paying attention to gender issues at the planning and implementation stages does not necessarily mean that gender equality is being promoted. Tanja, (2000) says that it is only when those planning or implementing programmes, projects or policies act on the evidence of gender-differentiated impact thereby promoting equal access and benefits that gender equality is being pursued.

According to Lorber (1994), gender must be integrated in all the planning phases: from problem identification (situational analysis and needs assessment), through design, implementation,

monitoring and evaluation to the end-evaluation. One also has to emphasise that women have to take part on an equal basis with men in all the planning and project activities, such as sitting on management committees. Liberal feminists argue that women and men are essentially similar, and therefore women should be equally represented in public arenas dominated by men -- work, government, the professions, and the sciences. But if women and men are so interchangeable, one then wonders what difference it makes if a woman or a man does a particular job.

Boserup, (1989) observes that clearly, gender analysis is necessary in project implementation. Operationalising gender in policy analysis has been a critical element in gender and development (GAD) discourse. Unlike the women in development (WID) approach it seeks to challenge multiple forms of women's disempowerment and subordination (including gendered structures and institutions) Projects should include gender-sensitive strategies in the project framework and associated project description. The project team should assess whether appropriate strategies have been defined to address the gender issues within project component activities of the proposed project and whether the gender issues relating to the project would be effectively addressed by either a targeted intervention or activities mainstreamed in the project component activities.

According to African Development Bank (2009), project teams should verify whether all the quantifiable and non quantifiable, gender and social related direct and indirect benefits have been defined, and if they are realistic, and also assess whether the proposed project has a relocation site selection in the design and if this has taken into account both women and men's concerns such as safety of the sites and proximity to viable sources of livelihoods and access to basic social service. Assessing local time-use by gender is critical at the preparation stage, as it should

guide the design of the project activities such that it does not increase the burden on women or force them to pass some of their responsibilities to their daughters, whose schooling may then be negatively affected.

Stakeholder engagement is the process by which an organization involves people who may be affected by the decisions it makes or can influence the implementation of its decisions. The implementation of rural development projects is inherently complex, partly due to the need to satisfy multiple stakeholders. In light of this, the diversity of knowledge and values of the rural community have to be taken into consideration (Reed, 2008) and it is necessary to ensure that there is stakeholder participation in decision-making processes (Stringer, Reed, Dougill, Rokitzki, & Seely, 2007) and implementation. Stakeholder participation in decision making is a democratic right (see the United Nations Economic Commission for Europe's, 1998, Aarhus Convention), hence it is not uncommon that it is an operational framework mainly adopted by community development facilitators.

Substantial evidence suggests that reciprocal relationship between stakeholders increases their participation in rural development projects because they provide a platform for new relationships to be developed in addition to the existing ones—and they learn to appreciate the legitimacy of each other's views (Forester, 1999; Leeuwis & Pyburn, 2002). This makes the collaboration of stakeholders necessary for sustainability and the implementation of decisions to be addressed effectively (Richards, Blackstock, & Carter, 2004). One of the arguments that has been used to justify stakeholders' participation is that it results in a strong sense of ownership over the process and outcomes achieved (Reed,2008).

Stakeholder participation has its roots in community participation approaches; these approaches were influenced by the political debates of the late 1960s, and were more radical. Activists of community participation argued that if the local people are to really benefit from any programme aimed at changing their quality of life, they must be involved in its decision-making (Beetham, 1992; Midgley et al 1986). Community or stakeholder participation has thus been viewed as an approach that contributes to sustainable development because the views, opinions and perspectives of those affected are taken into consideration (Jaarsveld, 2001). There is a strong global belief, especially among NGO.s and other donor communities, that less state intervention and more community/stakeholder participation in managing society's projects and natural resources, frees up civil society to participate openly (Dube and Swatuk, 2002). Concepts such as community participation and public participation also came into use within the development discourse since the 1960s. Though the terms community and public participation have been used in project initiatives and implementation, the term stakeholder participation has also been used, since it encompasses everyone within a particular system, whether affected negatively or positively (Freeman, 1984). The community or the public referred to in a particular programme or project could be a group of stakeholders. On the other hand ,stakeholders within a particular system can be people from different communities.

Additionally, Yang et al. (2011) in their study on the typology of stakeholder analysis and engagement methods reiterated the importance of public participation in project implementation and execution. This reiteration was informed by their awareness of the basic rights of humans to participation. Their research showed that community participation facilitated the monitoring process by increasing the public's self confidence and skills learned throughout the project to help the participants to respond more effectively to local problems. Furthermore, the research

showed that community participation in local development projects not only improved economic conditions but the social conditions and networking as well.

Most projects are working towards integrating participation in monitoring and evaluation. Marisol Estrella notes that interest in participatory monitoring and evaluation (PM&E) developed due to the international development community's dissatisfaction with conventional approaches to monitoring and evaluation (M&E), characterized by its orientation towards the needs of funding agencies and policy makers. In an effort to maintain 'objectivity', outsiders are usually contracted in the conventional approach to carry out an evaluation (Estrella, 2000). Correspondingly, as Frances Rubin observes, stakeholders directly involved in, or affected by, the very development activities meant to benefit them have little or no input in the evaluation - either in the determination of questions asked or the types of information obtained, or in defining measures of 'success' (Rubin, 1995).

In a literature review of PM&E conducted together with John Gaventa, Estrella identified four broad 'principles' that contribute to good PM&E practice: participation, learning, negotiation, and flexibility (Estrella & Gaventa, 1998). A participatory approach allows various stakeholders to take part in M&E. Stakeholders are those who directly or indirectly become involved in deciding what a project or program should achieve and how it should be achieved. The concept of 'participation' is not only emphasized as an important element in development, but correspondingly it is recognized that M&E of development and other community-based initiatives should be participatory. Participation in M&E can be characterized in two ways: (1) by whom (distinguishes between M&E that is externally led, internally led, or jointly-led) it is initiated and conducted, and (2) whose perspectives (distinguishes between which stakeholders



are emphasized – all major stakeholders, beneficiaries, or marginalized groups) are particularly emphasized (Estrella & Gaventa, 1998).

The key emphasis of the concept of learning as an underlying principle of PM&E is on ‘practical’ or ‘action-oriented’ learning. Participants involved in the process of learning in PM&E gain skills which strengthen local capacities for planning, problem solving and decision making. “The concept of PM&E as an experiential learning cycle serves to emphasize the point that in PM&E participants together learn from experience and gain the abilities to evaluate their own needs, analyse their own priorities and objectives, and undertake action-oriented planning” (Estrella & Gaventa, 1998).

As multiple stakeholders come together in the monitoring and evaluation process, negotiation contributes towards the building of trust and changing perception, behaviors and “These may include beneficiaries, project or program staff and management at local, regional, national or International levels, researchers, government agencies, and donors.” Estrella and Gaventa 1998, attitudes among stakeholders, which affect the way they contribute to the project. Reaching consensus through negotiation becomes particularly evident during the the development of indicators and criteria for monitoring and evaluation, especially when determining whose perspectives are represented in selecting indicators (Estrella & Gaventa, 1998). Since there is no prescribed set of approaches to carrying out PM&E, the process continually evolves and adapts according to project-specific circumstances and needs.

Therefore it is critical that PM&E be contextual, and takes into account local conditions (socio-cultural, economic, political, institutional contexts). For this reason, the flexibility of PM&E has

led to its practice in a wide range of cases (Estrella & Gaventa, 1998). In recognition of the central role that local people can play in planning and managing their own development, 'participatory monitoring shifts the emphasis away from externally defined and driven programmes and stresses the importance of a locally-relevant process for gathering, analyzing and using the information' (Abbot & Guijt, 1998).

Reid (2002) confirmed the assertion that the active participation of stakeholders in the monitoring process was a very powerful empowerment tool. He observed that participation reduced alienation of the community by empowering the public to voice their opinions and suggestions on how the project could be improved or adapted to changing political, social, cultural, and economic environments. In his study on the power of community participation, Reid noted that community participation in the monitoring stage increased the level of volunteerism and community spirit because the public no longer felt alienated or marginalized by external agents.

It should therefore be noted that design principles should be considered during Planning ,project identification and design, which requires stakeholders to participate in decision-making that strengthens the project concept while also contributing to improving capacity. This process, through planning workshops, mobilizes local commitment and provides the basis for building a team that can provide the continuity inherently lacking in a donor's staffing rotation. Local ownership of the development activity is ensured, and the goal of developing effective implementing organizations is explicitly recognized (Ingle, 2005).

## **2.4 Resources Contribution and Community Participation**

Dongier et al (2003) looks at the definition of community-driven development (CDD) and what helps foster successful CDD projects. They found that community cash contributions help decrease the need for outside resources, build community ownership, ensure that choices aren't distorted by outside influences, and correctly ascertain the true demand of beneficiaries. No specific cases were listed, however, and no quantitative review was completed.

Isham and Kahkonen (1999) looked at the effectiveness of 1980s and 1990s Indonesian water projects with a focus on social capital which was defined subjectively as “the glue that holds societies together and without which there can be no economic growth or human well-being.” Quantitative and qualitative data were used from 44 villages collecting surveys from 1100 households and 44 water committees, as well as technical performance reviews and participatory exercises with male and female focus groups. They found that when households contributed to construction and/or operation and maintenance, and these contributions were monitored, projects performed well. They also found that allowing individual households to make the decision for the final design increased sustainability, but adequate cost and maintenance information must be provided to them. Critical to success was making individual household contributions transparent to all to decrease the problem of free riders. Social capital did prove to be helpful for piped-water projects that required more social cohesiveness, while social capital didn't seem to affect well projects. They surmised that this was due to the fact that well projects are less group-oriented than pipe-borne water projects.

Khawaja (2004) completed a study of the impact of community participation on development projects. The paper reviewed 132 case study infrastructure projects in Northern Pakistan. He

found that community participation is valuable for nontechnical project aspects. He found that community participation in general, and specifically both community cash contribution and labor, provided for a more sustainable (currently functioning) project.

Mansuri and Rao (2004) completed a literature review to analyze a causal relationship between project outcome and participatory elements of the project. They found upward commitment (community committed to project) critical for project success. In addition, downward accountability (project implementers held accountable to community) was required for sustainability. Projects with poor design and implementation were caused by inexperienced and poorly trained facilitators, especially in projects which were quickly ramped up. The authors found that project development needs to happen in a context-sensitive manner, with long time commitments, and with great monitoring and evaluation systems. In general, the literature reviewed showed that community participation is crucial for project sustainability, but specifics about cash contributions weren't included in the study.

Paddock (2013) reviewed 83 Engineers Without Borders USA (EWB-USA) infrastructure projects in Guatemala for project sustainability. Recommendations from the study included improving construction quality, requiring financial and implementation plans, improving the project screening process, increasing community input, ensuring water pump maintenance and support is available and including knowledgeable local project caretakers. Community contributions were not reviewed as a criterion for sustainability in the report.

Polak (2008) reviewed many case studies in his book about personal research that went into founding the non-profit organization International Development Enterprises (iDE). The book

asserts that there are some projects, like roads and education, that require outside assistance. However, based on case studies reviewed by the author, projects like water, business development, etc. require 100% community contribution. The author found that market forces were critical to making a project sustainable, proven by thousands of successful water supply projects around the world. He found that going directly to the communities to get their input for project solutions was necessary for project success. Several potential projects were tabled due to detailed market review before implementation, screening projects which were not economically viable.

Sigmon (2011) looked at five Engineers Without Borders USA (EWB-USA) water projects in Peru to find lessons learned. He found the following characteristics aided project success: strong local partner, involved local government, established regulations (including monitoring community cash contributions), community involvement and communication, and, measurable metrics. Of the literature reviewed, it appears that community cash contributions make up the most often-cited characteristic of successful projects, while community in-kind contributions, community input on decision-making and upfront project-screening were also cited several times.

In his study, Paddock (2013) further outlined the performance of some projects with community cash contributions and those without community cash contribution. An El Salvadoran bridge project included a large community cash contribution for a culvert as part of the construction. The project has been successful with respect to community and government contributions to design and construction, as well as to a quality finished product. The community cash contribution helped get key government officials involved and the municipality became the main

partner. A Honduran bridge project included a large cash contribution from the local municipality, as well as local labor from the community. The chapter noted that the community contribution expressed that the project was a priority for them and created a strong sense of ownership.

Paddock (2013) noted that a Bolivian latrine project without cash contributions but that did include labor and tools from the community didn't prove successful. Of five implemented latrines over two implementation trips, only three were operating, and these three were not being used as designed. The chapter realized this problem was due to lack of community ownership and knowledge, and has intended to provide more education and not provide further latrines without a cash contribution from the individual families.

As documented in the report of 2013 by Engineers without Borders USA (EWB-USA) there is agreement in the literature on and practices of the international development community that community cash and in-kind contributions improve long-term project sustainability. In a review of the literature, no studies were identified that demonstrate cash contributions as ineffective or counter-productive to project sustainability. Rather, the existing research addressing the subject supports the concept that cash contributions positively affect long-term project success. An overwhelming number of international development organization for which there was information available require both cash and in-kind contributions from beneficiary communities.

According to the World Bank report of 1996, Social funds have played an important role in placing a value on community contributions. In Malawi, for example, communities are involved in identification, preparation and financing with the intention of improving prioritisation and

efficiency in the use of resources. Community co-financing is seen as a way to ensure community ownership and as a true reflection of demand thus, the community is expected to contribute 20 percent of resources to the project, with contributions of labour and materials valued at their market rates. There are potential gender implications of this form of 'marketisation of community participation.

A study by Hassan & Oyebamiji, (2012) revealed that governments directly funds majority of developmental projects in various communities as part of their service to the citizenry. In this case it identifies the need of the local community, initiates and implements the programme without any financial, materials or labour support from the communities. The major problem with such a project is that the people may not even be consulted. They may not even participate in planning, implementing, monitoring and evaluating the success or failure of these projects. this view is supported by Abiona, (2009) ,who observes that this approach would end up derailing the psychological and moralistic feelings of the community, hence sustaining and managing the projects becomes a major problem,

Anyanwu, (1992) is of the opinion that the Integrated approach to community development emphasizes on a joint effort of government, non-governmental organization and the community to implement a project. All resources of the community, whether physical or monetary, are united with those of government or non-governmental organization in this approach. The approach involves coordination of all human and material resources available and the stake of the local people in the project is high .The approach also emphasizes on the concept of self-help which is also paramount in sustainable community development because it secures people's interest in the project of development and implementation.

Anyanwu, (1992) and Abiona, (2009) state that community members' levy is also a major source of fund in many communities, the decision for levy or voluntary contribution is often determined after community members have identified their felt-need or a problem which needs immediate solution and attention. Members often donate or decide a levy depending on cost implications of the project. This type of funding assures citizen participation, democratic values and cooperation among the community. It brings about the concept of self-help which is paramount in sustainable community development in that it secures people's interest in project since they have committed their financial resources

When a programme is initiated, planned and funded by the people through self-help efforts, the people are more committed to the success and sustainability of the programme. There is a strong link between self-help and sustainability of project. People participate for the sole reason that they have seen success achieved and have become enthusiastic enough to work towards achieving it (Hassan & Oyebamiji, 2012). According to Christine (1998) Community Participation in financing creates an enabling environment for sustainability by allowing users not only to select the level of services for which they are willing to pay, but also to make choices and commit resources in support of choices made by the community.

Kumar,(2002) argued that in the past success, of community participation was measured as amount of labour, upfront contribution by communities during project construction, but currently it means that community are actively involved in project development activities through making appropriate labour, time and financial contribution to both initial and long term operating and management of projects. Salles, (2002) also concurs that community contribution can also be in terms of Monetary investment, material equipment, skills and general participation in project



related committees and meeting moral support and rules and regulations that govern and assist in the process of repairing and maintaining social infrastructure. In the pursuit of sustainability, the capacity of local institutions to meet recurrent costs is determinant for their survival

## **2.5 Types of Implementation Approaches and Community Participation**

A study done by Oino et al (2015) reported that, in the world today, community based approaches for community development, have emerged as the best tools for achieving project sustainability. This view is supported by UNHCR report of 2008 which states that, a community-based approach is a way of working in partnership with persons of concern during all stages of project cycle. In this paper, we define community-based approaches as strategies that extend individual needs to the community and ensure consolidation of efforts among community members in advancing their effort towards community driven projects. Community-based approaches recognize the resilience (ARC, 2001), capacities, skills and resources of people concerned, and build on these to deliver protection and solutions that support the community's own goals (UNHCR, 2008).

In an effort to analyze the performance of water systems in six countries (Benin, Bolivia, Honduras, Indonesia, Pakistan, and Uganda), Karl (2000) found that the community-based approach significantly increased sustainability. The analysis found that there exist a strong linkage between participation of the community members and sustainability of the projects. Sustainability was achieved owing to the fact that community members were able to access information, capacity build at all levels, trained in operations and maintenance, control over funds, and good quality construction. In a different analysis by Newman et al. (1999) of eighteen rural water projects in two regions in Bolivia, they found that community-level training (for

example, on cleaning water tanks, repairing water tubes, and managing user funds) was critical for improving water quality.

In Zimbabwe, Cleaver (1999) found that the empowerment and long-term effectiveness of participation approaches was rather complex. Limitations of communities in mobilizing the necessary resources, either through collecting funds from community members or lobbying government officials, greatly affected project sustainability. Narayan (1995) analyzed lessons from 121 rural water-supply projects funded by different agencies in 49 developing countries and found that the participation of local communities was an important factor for project effectiveness and sustainability.

Wanjohi, (2010) while studying sustainability of CBOs, argued that adoption of more radical approaches in handling the theme of sustainability of community- based projects: new project sustainability models built on intrinsic sense of duty attained through individual and organizational based processes. Most development workers are familiar with cases where past projects can only be located by the project buildings, now serving some other purpose, or by the piles of rusting machinery, which lead to the question of continuity and sustainability. When a community is capable of maintaining the flow of results from a project for their own good, they will always have a feel of „we are capable“ and this enhances their self-esteem or ego, and thus will be more willing to get involved in any other project than ever before.

Similarly, Minkler et al. (2008) observed that community participation in project initiation was important because it strengthened community capacity and subsequently improved the overall wellbeing of the community. Their study on community-based participatory research (CBPR) on

environmental issues showed that the recognition of community participation in health and environmental issues was increasing. In particular, Minkler et al. (2008) reported that it was important to involve community members during the initiation stages of a project because it improved the community's capacity to identify problems, participate in decision-making, and translate problems into solutions or action. Consequently, they observed that participation in the project initiation phase helped the community address environmental, health, and social problems using practical solutions.

To add further, Freudenberg (2004) observed community participation should not be considered on a whim, but included in frameworks for development projects. The author observed that conceptualizing the community's participation was important because it helped project managers to identify the factors that affected the community's ability to implement development projects. A framework to help the conceptualization process was then proposed. This framework was based on Goodman et al.'s (1998) conceptualization of community participation. It was adapted to reveal the community's exposure to the developmental problem and highlight the factors affecting the community's ability or capacity to construct practical and efficient solutions.

Consequently, Freudenberg (2004) proposed that a framework for development projects be designed to strengthen community capacity. This capacity could be achieved by examining the community's environment (such as political systems, economic dynamics, and culture) and how these factors affect the participation and support of the community. Furthermore, the development framework would help the project team to understand the behavioural manifestations of a particular community.

Another author Minkler et al. (2008) extended Freudenberg's (2004) work by showing how a framework for development projects would help project teams design a community-based participative research model that promoted partnership and community participation in health-related projects. Parker et al. (2010) dissented to the effectiveness of Freudenberg's framework arguing that the effectiveness of community participation was impacted by the leadership of the project manager and the relationship between the community and the project team. Furthermore, they observed that tension between members of a community, unwillingness to compromise, and competing values and beliefs affected the level of community participation in development projects. Mulwa, (2008) observes that top-down approach to development believed that people were too ignorant and perhaps primitive to effectively discern and decide what was good and appropriate for them and as such were not expected to set up their own development priorities, rank them and identify the most felt need.

Department of Agriculture of Nepal (2000) indicated that the Nepali Government introduced the 'Participatory Bottom-up Planning' approach to agricultural development in 2000. In this approach, there is a collaborative involvement of service receivers and the service delivery agencies in planning and implementing extension programs. According to Keeling (2001), a key Nepalese development strategy since the 1990s has been to involve local communities in development programs. Pratt (2001) reported that the Nepali Government is favoring participatory approaches in all written documents, but in practice a bureaucratic working style still exists in many places. Vokes in (2000) contended that Nepali policy makers have remained dominated by conventional approaches to agricultural development and planning and that agricultural production has been unable to keep pace with the rapid growth of population in the country.

In supply-driven or top-down extension models, farmers do not necessarily share in the design of programs and are expected to adopt technologies promoted by the extension agencies (Webber & Ison, 1995). Criticisms of such 'top down' extension have led to the formulation of alternative models in extension. In the late 1970s, numerous participatory methodologies were developed and practiced. In some of these approaches, such as Rapid Rural Appraisal, the purpose of farmers' participation was limited mainly to providing information to researchers (Black, 2000). Others, such as 'Participatory Action Research' aimed to involve farmers with research and extension in identifying local needs, designing and implementing solutions and evaluating the impacts (Cornwall et al., 1993).

The top-down model has a significant philosophical and practice history, predating the bottom-up model. The top-down model is structured around the use of professional leadership provided by external resources that plan, implement, and evaluate development programs (Macdonald, 1995). Community development programs using this model typically focus on providing professional leadership to the development process coupled with supportive concrete services. Through the process of residents following the external leadership and accessing the services offered by the program, changes within community residents' perceptions, behaviors and ultimately their standard of living are believed to occur.

Both models, when used to structure community development programs, share a common set of stated and implied goals. These goals are: 1) to effect changes in community residents' perceptions about how to improve their standard of living; 2) to create community-oriented behaviors that are base upon the changes in community residents' perceptions; and 3) to improve the standard of living among a majority of community residents (Ewalt, 1997; Garza, et. al.,

1988; Navarro, 1994). To accomplish these goals, programs using either the top-down or the bottom-up model require residents to acknowledge the existence of problems and to show a willingness to participate in the community development program's process (Macdonald, 1995; Lecomte, 1986). For programs using the bottom-up model, this process features creating partnerships between community residents and professionals who provide technical support rather than leadership. For programs using the top-down model, the process is about community residents allowing professionals to provide leadership and services that support an externally created development plan.

Larrison. C.R (1999) conducted a study on two community development programs at the Universidad Veracruzana Proyecto UNIR (UNIR) and Brigadas Universitarias en Servicio Social (Brigadas). The studies operated under similar conditions in rural villages situated in the state of Veracruz, Mexico. The data collected revealed that there were statistically significant differences in the way that community resident perceived the two community development programs. The program structured by the bottom-up model of social development theory (UNIR) received higher scores on the satisfaction scale. The findings indicated that as a method of intervention, the bottom-up model was better at accomplishing the goals of community development in these sites. This is consistent with the wide range of recent literature that supports the use of the bottom-up model of social development theory as a preferable structure for community development programs

## **2.6 Capacity Building Strategies and Community Participation**

Capacity can be enforced with development projects through capacity building in order to have a more robust structure and to be adaptive to changes. Capacity building is therefore understood

not only as human resource development but also as organizational and institutional development (UNESCO, 2010). Support organizations can help local organizations in different areas, including: building technical, financial, business, and political skills, building social and institutional capital, upward influence and government capacity-building, facilitating finance, Increasing equity and transparency and building linkages and networks (WRI, 2008). There are different definitions of community capacity in the literature, some treating the concept as a generic attribute or generalized orientation and others arguing that it is only appropriate to assess capacity in relation to a specific object or objective of change (Maclellan-Wright et al., 2007).

Masango (2002) advocates for “public education, capacity building for participation, reforming attitudes towards participation, and publicizing local government affairs” as some of the important factors to be considered in any capacity building programme aimed at improving and sustaining public participation. Masango (2002) recommends a training programme that includes workshops for rural communities, and advocates for an education programme for the people on the nature and functions of their local authority, their rights, as well as introducing civics as a compulsory school subject at the General Education and Further Education and Training levels as a long-term strategy to enhance citizen participation.

Concern (2001) argues that to improve the participation of people staying in the rural areas in their own development, capacity building strategies should include aspects of broadening their awareness of the factors that have impact on their situation, so that they become more aware of their own abilities and have more self-confidence in their abilities, knowledge and experience. This will increase their interest in local government affairs and make these communities to have

confidence and knowledge required to participate actively and meaningfully in development planning of their own communities and in improving their own life situations.

Target groups for capacity building for effective participation in local government planning include community leaders, elected representatives, councillors, block committee members, Community Forum members and representatives of the marginalised groups like women and the disabled (Midgley et al., 2005). The representatives can then empower their own constituencies. Lombard (1991) argues that identifying leaders of groups and role models within the community whose involvement in local government activities will encourage the involvement and participation of other members should be considered. Development of Community leadership and “human potential” is also another strategy for empowering other members of the community.

Cook in Midgley et al. (2005) argues that capacity building should be holistic and it is about developing people’s skills, knowledge and attitudes to perform their tasks with competence. This model of capacity building was utilised by the Indian government with regard to empowering the elected representatives of the Panchayati Raj institutions in 1993, through the promulgation of the Constitution (73rd Amendment) Act of 1992 that provided constitutional rights to these institutions.

According to Bartle (2005) the training programme adopted by the Ugandan Government to develop communities to participate in rural development was focused more on skill transfer, awareness raising, information dispersal and reorganization. The training was non-formal, demand driven, on-the-job, context oriented, non classroom, non lecture, facilitative and participatory and there was no overall plan of action for training, however, it was not effective to



raise the quality of community participation in rural development and the impact could not be measured

Bartle (2005) further explains that lessons to be learnt from the implementation of Uganda Community Management Strategy developed between 1992 and 1998 indicate the importance of considerable awareness raising initiatives through information dissemination, skills transfer, training of Non Governmental Organisations and district officials. Training materials and awareness training programmes should explicitly focus on the necessity of monitoring and evaluation by the community and all stakeholders, especially during implementation of the plans.

## **2.7 Theoretical Frame Work**

This study was anchored in two theories namely, the community participation theory and the stakeholders' theory as explained below:

### **2.7.1 Community Participation Theory**

This study adopted the theory of community participation as propounded by Arnstein (1969) which explains different levels of participation and citizen control. Community participation theory is applied to a variety of situations, although not always appropriately. Michener (1998) suggested that participation has become a panacea. Chamala (1995) stated that 'community participation has been the hallmark of many successful development projects around the world'.

Michener (1998) however posited that the term is widely applied in academic and project documents without regard for implementation realities. Even within the project cycle there has been varying applications of participation. Estrella and Gaventa (1997) identified that there has been a growing emphasis on participation at the 'front-end' of development projects in appraisal

and implementation and now there is recognition of the importance of participatory processes in monitoring and evaluation of development and other community-based initiatives. As identified above, participation has increased in popularity to the point where it has become pervasive in development initiatives (at least in rhetoric).

Rural development agencies distinguish different dimensions, spaces, degrees and levels of community participation. The levels of community participation, which positions participation on a seven step ladder are useful in analyzing these degrees (Arnstein, 1969). The first four levels (passive participation; participation on information giving; participation by consultations and participation by material incentives) on the ladder can be interpreted as community participation as means while the last three levels (functional participation; interactive participation and self mobilization) fall under participation as an end.

Burton (2003) suggests that the manipulation which is often central to types one to four implies that they should be seen as types of non participation (Atkinson and Cope, 1997). Macfarlane (1993) conceptualizes these levels in terms of weak and strong participation. According to his views, weak participation involves informing and consulting while strong participation means partnership and control . They argue that, in practice agencies managing complex projects find it hard to move from the weak end of the continuum and tend to assume that, intended beneficiaries will be consulted during the project design to take into account their felt needs and aspirations. Skinner (1995) cautions that, information giving and consultation are often presented as participation leading to disillusionment among community interests.

Nevertheless, the problem with levels of participation is that they imply coherence, when most rural development organizations operate simultaneously in a wide range of participatory modes (Civil Renewal Unit, 2003). One level on the continuum is not necessarily better than any other as different levels are appropriate at different times and contexts to meet the expectations and interests of different stakeholders. Skinner (1995) cites an analysis of a Danish funded rural water and sanitation project in Uganda, where he observes that participation had ranged from nonparticipation and manipulation over information and consultation to some degree of partnership and delegation of power.

Arnstein (1969) concluded that, the level of community participation was limited to being informed what had already been decided by other key players which implied passive participation by consultation. From the discussion above, it is clear that there is a myriad of aspects of participation. This means that great care must be taken when using and interpreting the term. MacArthur (1996) observes that it should always be qualified by reference to the type of participation. In addition, observers seem to agree that the application of participatory approaches further calls for an appreciation of the social dynamics and diversities such as gender, age, social status, ethnicity, disability and power amongst others.

Under this theory, people are expected to be responsible for themselves and should, therefore, be active in public service decision- making. The theory is relevant to this study since an entrusted and independent control of resources assures ownership and is always the sure indicator and factor for sustainability of all the projects in communities. However, the limitation of Arnstein's framework is that each of the steps represents a very broad category within which there are likely to be a wide range of experiences. For example, at the level of 'informing' there could be

significant differences in the type and quality of the information being conveyed. Realistically therefore, levels of participation are likely to reflex a more complex continuum than a simple series of steps. This ladder also implies that more control is always better than less. However, increased control may not always be desired by the community and increased control without the support may result in failure.

### **2.7.2 Stakeholder Theory**

Stakeholder theory holds that maximizing the value of one's stakeholders will also maximize social responsibility and performance of individuals. This was the original thought of Freeman (1984), but there is still some doubt whether this is, in fact, true. So far the evidence linking stakeholder theory with improved performance is limited, and only few have attempted a thorough analysis of the relationship.

Mwaura et al (2014) on their study on Factors affecting performance of community based organizations projects in Kisii county Kenya, suggest that since community members are stakeholders in community projects, therefore it is important to involve them in projects activity from the start. Stakeholder's theory argues that every legitimate person or group participating in the activities of a firm or organization, do so obtain benefits, and that the priority of the interest of all legitimate stakeholders is not self-evident (Donaldson, and Preston, 1995).

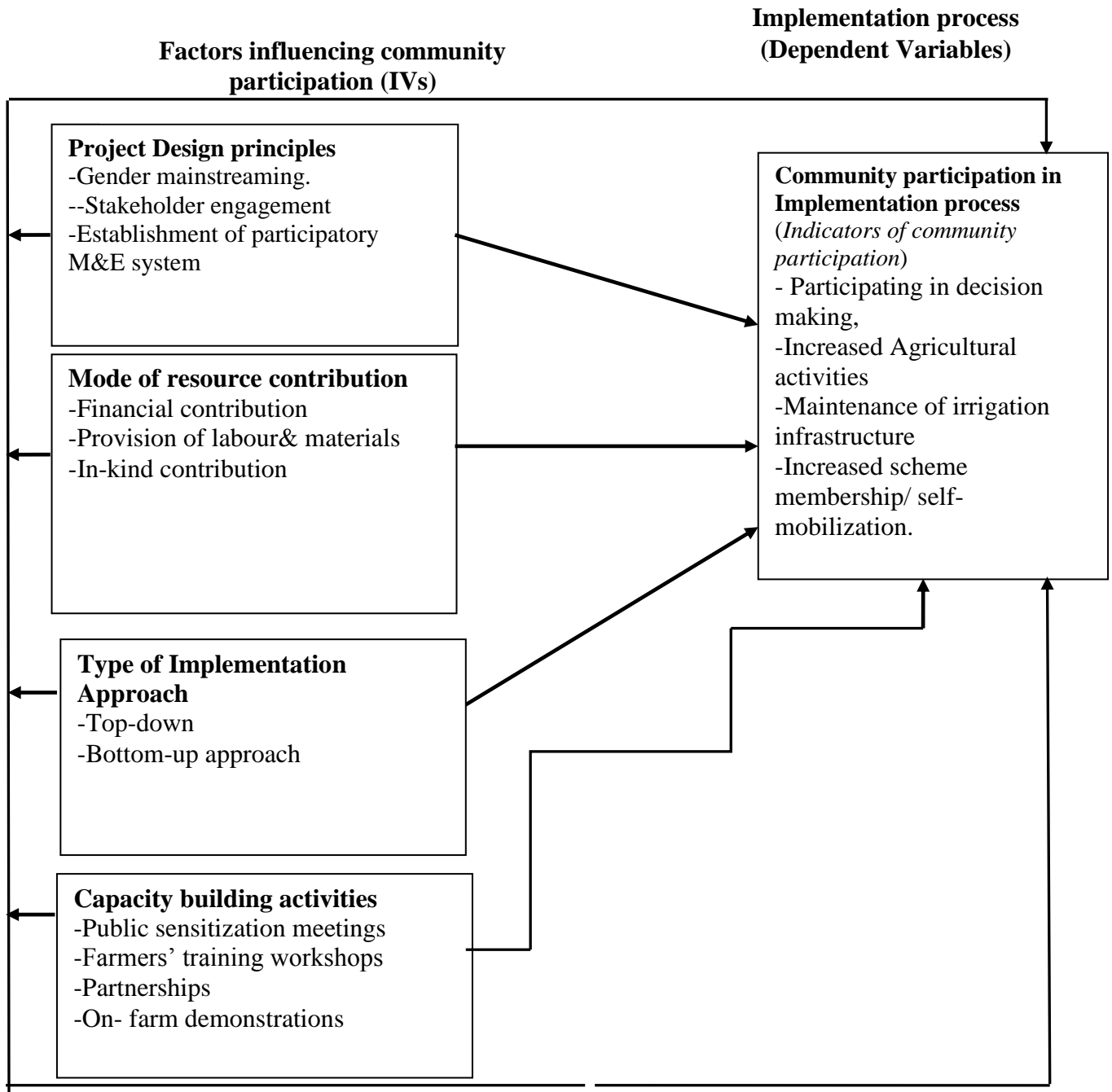
Stakeholder theory pays equal credence to both internal and external stakeholders; employees, managers and owners as well as financiers, customers, suppliers, governments, community and special interest groups. Community participation enhances social cohesion as they recognize the value of working in partnership with each other and organizations. It also adds economic value

both through the mobilization of voluntary contributions to deliver regeneration and through skills development, which enhances the opportunities for employment and an increase in community wealth, gives residents the opportunity to develop the skills and networks that are needed to address social exclusion.

Mwaura et al (2014) conclude that community groups (eg CBOs, self- help groups) must ensure the community members voluntarily and actively participate in the projects from the start. This theory also emphasizes that the community members also benefit from their participations. Community groups need to ensure the community members also participate in the decision making, their staffs are trained on handling the community members and also the community members' interests are considered. This theory will therefore assist in the better understanding of the importance of community participation in the success of community projects.

## 2.8 Conceptual Framework

The study was guided by the following conceptual framework



**Figure 1:**Conceptual Frame work

In this scheme, the independent variables are Participation in Project initiation phase, Type of Implementation Approach, Community empowerment strategies and Modes of project resources contribution, while the dependent variable is participation in the implementation of project. The scheme illustrates that the independent variables do influence the dependent variable. It also shows that the independent variables may singly or collectively influence the dependent variable.

## **2.9 Summary of the Literature**

This chapter has reviewed literature on various studies done in other parts of the world and Kenya. an overview of community participation in development has been offered. The literature is basically on community involvement in community- based development initiatives. This perspective opens into main focus of the study: community participation; where an overview of the literature concerning tasks and project implementation has been discussed. Through the levels of community participation, the chapter has thus opened into variables; ie project design, Types of Implementation Approach, Community capacity building strategies and Modes of project resources contribution. To offer the basis of the study and an effective comprehension, these variables have integrated literature which is based on the community participation that has been done in different parts of the world. This chapter has also offered a theoretical framework as a guide for the study and conceptual framework to explain the relationship between the variables.

### **2.9.1 The Knowledge Gap**

With the already documented empirical evidence of beneficiary community participation in development, there is underlying motivating as well as militating factors for people's participation. However, there is not much documented knowledge on factors that motivate

community members to participate in implementation of community- based projects, especially in the Kenyan context, a gap that informed the problem statement and necessitated need for this study. This study was therefore necessary as it was to strive to identify the factors which could influence community participation as well as the possible level of beneficiary involvement in the implementation of KOSFIP. This is the knowledge gap which the study intended to fill.



## **CHAPTER THREE:**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the overall methodology that was employed in the study. It provides an explicit description of the research design, target population, sample size and sampling procedures, data collection procedures, and data analysis.

#### **3.2 Research Design**

The research design to be employed for the study was descriptive survey. This design was appropriate for the study as it enabled the collection and analysis of both quantitative and qualitative data. Descriptive survey is a method of collecting information by interviewing or administering a questionnaire to sample of individuals. According to Orodho (2004) descriptive survey design allows researchers to gather information, summarize, present and interpret for the purpose of clarification. He further states that the design can be used when collecting information about peoples; attitude, opinions, habits or perceptions on various social issues. This design was appropriate for this study for it was to help the researcher obtain information from the farming community within the project area, by describing, and interpreting the variables, thus bringing out the conditions or the relationship that exists between them.

#### **3.3 The Target Population.**

The targeted population consisted of all the 3000 farmers who own plots and farm within the project area. The project area covers sections of two sub counties, namely Rachuonyo North, Rangwe, both of Homa Bay County.

### **3.4 Sampling Procedure and Sample Size**

The sample size and sampling procedure used to obtain the study sample of the population are discussed below:

#### **3.4.1 Sample Size**

The target population for the farming community within the project area as provided in the project membership registration records was 3000 farmers. In this study, the sample size from the population was determined based on the Krejcie and Morgan (1970) table. From the table, a formula is given, that a sample size when drawn randomly from a finite population size is such that the sample is within + or – 0.05 of the population proportional with 95% level of confidence. Therefore the sample size for the study will be 341, in addition to 10 farmer leaders who were interviewed

#### **3.4.2 Sampling Procedure**

Sample selection refers to the procedure to be used by the researcher to select the sample to be engaged for the study. The study employed random sampling procedure, where the respondents were selected from farming population within the project area. Random list of numbers correspondent with the number of farmers represented in the scheme was generated then the participating farmers picked at random from the list. The 341 farmers selected from the population were drawn from 97 irrigation farming units called blocks. (Oluch scheme has 53 while Kimira scheme has 44 blocks). To reduce bias in sample selection, the respondents were proportionately allocated (for purposes of representativeness), where each scheme produced about 170 farmers to be interviewed as respondents. Otherwise 5 farmer leaders were purposively chosen from each scheme and interviewed, using an interview schedule.

### **3.5 Research Instrument**

The study applied two sets of research instruments to obtain the required information. The tools used for data collection was an interview schedule (for scheme leaders) and structured questionnaire (for the local community). The selection of the tool was guided by the nature of data that was to be collected and the nature of the respondent to be selected from the project area. The tool was a self- administered questionnaire. The questionnaire was divided into 5 sections, (A-E), where by section A tackled demographic information, section B covered the theme of community participation in project development stages; while section C dealt with modes of project resources contribution. Section D with types of Implementation approaches, while section E was on community empowerment strategies.

#### **3.5.1 Pilot Testing**

According to Nachmias and Nachmias (1996), pilot- testing is an important step in the research process because it reveals vague questions and unclear instructions in the instruments. It also captures important comments and suggestions from the respondents that enables the researcher to improve efficiency of instruments, adjust strategies and approaches to maximize the response rate.

Pilot- testing was done by administering the instruments to a sample population with a similar characteristic to elicit desired response. The pilot testing of the research instruments which was used for the study was done at Wahambla irrigation scheme, which is outside the targeted project area, but within Homa Bay County. This was to help in preventing cases of undue influence on the targeted population. For this study, 80 participants which is equivalent to 20% of the total sample size from the target respondents were interviewed during the pilot study. After 10 days,

the same participants were requested to respond to the same questions but without prior notification in order to ascertain any variation in the responses of the first and second test. The data from the pilot- testing were not be included in the study, but were used to make the research instruments better.

### **3.5.2 Validity of the Research Instruments**

A research instrument is valid if it actually measures what it is supposed to measure, and when the data collected through it accurately represents the respondents' opinion (Amin, 2005). The validity of the instruments was ascertained during the pilot study. This ensured that all the instructions were clear and all possible responses to each question are captured. Content validity of a measuring instrument is the extent to which it provides adequate coverage of the investigative questions guiding the study (Mugenda & Mugenda, 2003). In this study, content validity was determined by consulting the judgment of the research supervisors within the University. The supervisors helped in reviewing the instruments, gave recommendations for improvement and verified whether the instruments would be able to address the study objectives.

### **3.5.3 Reliability of the Research Instruments**

Reliability is the measure of the degree to which a research instrument yields consistent results or data after repeated trials. According to Cook (2007), a test measures what it is measuring to the degree. It is influenced by random error. As random error increases, reliability decreases. Although reliability is always present to a certain extent, there would generally be a good deal of consistency in the results of a quality instrument gathered at different times. Cook et al (2007) observes that, the tendency towards consistency found in repeated measurements is referred to as reliability. To measure reliability, the study carried out test and a re-test on the research

instruments within the irrigation scheme in Homa Bay County. Test and pre-test involved selection of 80 respondents from the small Wahambla irrigation scheme. The procedure used to identify the respondents and collect data was similar to those that were employed in the main study. This was done to avoid discrepancy and create consistency in the study.

### **3.6 Data Collection Procedure**

The tools used for data collection was an interview schedule (for scheme leaders) and structured questionnaire (for the local community). The questionnaire was prepared based on thematic topics to collect the information. For primary data, the researcher collected first hand information from the farmers on factors which may influence their participation in the project. Trained research assistants were engaged to collect the data using the prescribed data collection instruments. On the other hand, secondary data was collected from the documented progress reports filed at the project documentation section.

The respondents were reached during the community meetings. The pre- selected respondents were singled out and the questionnaire personally distributed by the researcher to the farmers to complete. The research assistants completed the questionnaire through interviews for those who were not able to read and /or write. The completed questionnaires were collected on the same day of issue, while on- spot checks were done for completeness, omission, or commission errors. The respondents had the opportunity to seek clarification from the research assistants during collection.

### **3.7 Data Analysis Procedures**

Descriptive statistics was employed as the method for data analysis, since data collected would be based on the questions generated from both qualitative and quantitative information. Data

was then analyzed with the help of the Statistical Packages of Social Sciences (SPSS) package. The data was edited, coded, classified and presented as frequency and percentage distribution to examine the relation between the independent and dependent variables. A narrative explanation was offered in addition to the analyzed data. This method helped in determining the factors which mostly influences the participation, as well as the effect of all the factors combined. Reliability of data collection was ensured by the relatively small sample size of 170 respondents per irrigation scheme. This was done to make variations among the respondents minimal and make sample error minimal.

### **3.8 Operationalisation of the Variables**

If the community participates in design of the project, they are likely to have some sense of ownership since they would have appreciated the origin of the project. Further participation in contribution of the resources would have positive impact since if resources are not available, then the project would not take off. Where the type of implementation approach is participatory, there is likely to be positive impact in the project success as all stakeholders would have been brought on board. If people adopt acceptance attitude, then the whole problem would be minimized to a reasonable proportion. Capacity building of community through training and awareness creation would be required to increase knowledge and skills to help people participate.

### **3.9 Ethical Considerations**

The researcher sought permission from the University of Nairobi, the National Council for Science, Technology & Innovation (NACOSTI) and the Ministry of Education- Homa Bay County, before commencing the study. All the ethical aspects of the research which include getting informed consent of the respondents to participate in the study, ensuring anonymity,

privacy and confidentiality, were adequately observed. Respondents were treated with utmost confidentiality; they were also interviewed on their willingness and allowed to withdraw from participating if they so wished.

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS**

#### **4.1 Introduction**

This section is a presentation of analyzed data from the field. The findings are based on the responses obtained from the returned questionnaires, while the results, explanations and discussions are presented according to the research objectives. The analysis is preceded by a presentation of the demographic characteristics of the sample surveyed. Thereafter, the analysis and discussion is based on the themes of the study namely: Whether project design principles mode of community resource contribution, types of project implementation approaches and community capacity building strategies have any influence on the community participation in the implementation of KOSFIP as agricultural projects.

#### **4.2 Questionnaire Return Rate**

The researcher collected data using questionnaires and entered results as already indicated in chapter three. During the study, 341 questionnaires were sent out to the community respondents who were selected from the two schemes (Kimira and Oluch), in accordance with the selection criteria. A total of 280 questionnaires (representing 82.1% return rate), were duly filled and returned. Table 4.1 explains the response rate.



**Table 4 1: Questionnaire Response rate**

<b>Response rate</b>	<b>Frequency</b>	<b>Percentage</b>
Returned	280	82.11%
Not Returned	61	17.89%
<b>Total</b>	<b>341</b>	<b>100%</b>

(Survey data, 2016)

The results show a total of 280 (82.1%) responded to the questionnaires while 61 (17.9%) did not respond. According to Mugenda and Mugenda (2003), a response rate of 50% is adequate for analysis and reporting; a response rate of 60% is good and that of 70% and above is very good. Thus, the return rate of this survey was relatively higher and was therefore deemed acceptable for the study. The relatively high questionnaire return rate was attributed to the administration of the questionnaires by volunteer research assistants, who ensured that the duly filled questionnaires were returned on the same day.

### **4.3 Demographic Characteristics of Respondents**

The study looked at the respondent's characteristics of age group and gender so as to assess whether they have influence on the participation of the community on the implementation of the project. These were further discussed in the subsequent sections.

#### **4.3.1 Distribution of the respondents by Gender**

In order to get gender distribution across the projects, respondents were asked to indicate their Gender, which was analyzed as indicated in Table 4.2.

**Table 4 2: Distribution of respondents by Gender**

<b>Response rate</b>	<b>Frequency</b>	<b>Percentage</b>
Male	159	56.79%
Female	121	43.21%
<b>Total</b>	<b>280</b>	<b>100%</b>

(Survey data, 2016)

Majority 159 (57%) of the respondents were male while (121) 43% were females. Meaning that in terms of gender, the study indicates that the number of men was a bit higher than women. The close range in numbers implies that the selection of the respondents was almost proportionate based on gender. It was also noted that the higher number of males indicated their availability and the fact that they formed the highest number of registered members of the irrigation schemes. In addition, the researcher was interested in dealing directly with people who were mostly engaged in the farms. From the findings, this affirms that under normal circumstances, men are still considered in this community as the bona fide farm owners, thus will have great influence on the household participation in the project activities.

Women in particular were noted to be least involved in the on going project activities. The possible reason for this was that Kenya is a patriarch society, hence issues of development in rural Kenya tend to be discussed as a preserve of male, unless the project is specific about enhanced participation by the womenfolk.

#### **4.3.2 Distribution of Respondents by Age**

Respondents were asked to select the age group to which they belonged. This is shown in table 4.3 below

**Table 4 3: Distribution of Respondents by Age**

<b>Age set</b>	<b>Frequency</b>	<b>Percentage</b>
20- 29	29	10.36%
30- 39	78	27.86%
40- 49	83	29.64%
50 and Above	90	32.14%
<b>Total</b>	<b>280</b>	<b>100%</b>

(Survey data, 2016)

The age distribution of the respondents varied from 20 to above 50 years. Of these respondents, 10% fell between 20 to 29 years. 78 (28%) were between ages 30 to 39 years, 30% of the respondents were between 40 to 49 years, 32% were from 50 years and above. The fact that there is no equal representation in age group in the sample makes any generalization about age influence on community participation impossible. However, majority of the farmers belong to the older age bracket since most youths have not fully qualified as land owners as most land is still being held in trust for them by their parents. This scenario determines the participation of different age sets in the project implementation activities.

#### **4.3.3 Distribution of Respondents by Educational level**

The study sought to establish whether educational levels of the respondents influence their participation in the project implementation. The study acknowledges that the general level of education of the people has a significant influence on their understanding of the importance of participation in development activities. To determine this, the respondents were asked to state their levels of education, where the results were as indicated in Table 4.4 below.

**Table 4 4: Distribution of Respondents by Educational level**

<b>Educational level</b>	<b>Frequency</b>	<b>Percentage</b>
Primary level	99	35.36%
Secondary	134	47.86%
Tertiary	47	16.79%
<b>Total</b>	<b>280</b>	<b>100%</b>

(Survey data, 2016)

A total of 35% of the respondents reported to have up to primary level of education. A further 48% had acquired secondary level. It was only 17% of the respondents who reported to have attended tertiary institutions where they have acquired certificate, diplomas and degrees. Findings revealed that some relationship exist significantly between socio-demographic characteristics such as educational level and the attitude of individuals towards community development projects. The implication of this finding is that as one attains a higher level of education, attitude towards participating in community development projects is likely to be more favorable. In essence the higher the educational level attained the more favorable the attitude towards making necessary decisions.

The study shows that since majority of respondents had elementary education and above, the community was highly literate. However the low number of graduates in the farms was attributed to the fact that most of them were either engaged in other economic activities other than farming, or were away from the project area. These findings are in line with the World Bank report of 2008, which observed that a participation process is easily built where participations have a high level of education and information about the issue(s).

#### 4.4 Project Design principles and Community Participation

The first objective sought to examine how project design principles influence community participation in project implementation. In order to establish this, respondents were required to provide their responses in sections of the questionnaire as explained below.

##### 4.4.1 Responses on community participation in the components of the project design

Asked to name the component of the project design in which they felt the community had been adequately involved. The participants gave responses as analyzed in Table 4.5

**Table 4 5: Community involvement in the project design components.**

<b>Components</b>	<b>Frequency</b>	<b>Percentage</b>
Project Identification	161	57.51%
Formulation	18	6.42%
Planning for Implementation	58	20.71%
Planning of M&E	43	15.36
<b>Total</b>	<b>280</b>	<b>100%</b>

(Survey data, 2016).

The results in table 4.5 show that 161 (57.51%) of the respondents reported adequate community involvement in project identification, while 18(6.42%) picked on formulation stage. A further 58 representing 20.71% chose implementation planning while 43(15.36%) of the respondents stated there was adequate participation in planning of monitoring and evaluation.

#### 4.4.2 Responses on the integrated project design principles

When asked to rate how the project design principles integrated in the project operation were influencing participation of the local community, the respondents gave responses which are summarized in Table 4.6 below.

**Table 4 6: Implemented aspects of the project design principles**

<b>The design principles integrated in the project implementation</b>	<b>Frequency</b>	<b>Percentage</b>
Stakeholder engagement	172	61.41%
Gender mainstreaming	35	12.52%
Strengthening of IWUAs	59	21.07%
Establishment of a participatory M&E	14	5.0%
<b>Total</b>	<b>280</b>	<b>100%</b>

(Survey data, 2016)

Results in Table 4.6 indicate that, majority of the respondents, 172(61.41%), responded that the stakeholder engagement was rated highly as a design principle which enhances participation. 35 respondents representing 12.52% observed that gender issues were well mainstreamed and were enhancing participation during implementation. The study revealed that the Project was addressing gender gaps by deliberately targeting women to fully participate in scheme activities including planning and decision-making. However, from the study findings, it was noted that the youth were significantly left out on issues of decision making at the grass root level. A total of 59 respondents (21.07%) were of the opinion that strengthening of IWUA would help in realizing a functional farmers'-managed schemes. Project reports indicated that efforts were being made to continuously reinforce the capacity of farmer organizations (IWUAs) to operate and maintain the irrigation systems throughout the whole implementation period. On the other

hand, 14(5.0%) regarded establishment of a participatory Monitoring & Evaluation a reasonable integrated design principle which was enhancing participation.. The study established that prior to the end of the project implementation period, essential parts of the M&E system were to be transferred to the two farmer organizations ( namely Kimira- IWUA and Oluch- IWUA), so that these organizations could collect data to allow long-term evaluation of the project impact. The respondents lamented that although this was to be the case, none of the two farmer organizations had been provided with the M& E system. This disconnect could be attributed to the fact that the M&E system developed for the project was still being applied as a test-run by the project implementation team ,with a view to strengthening its components, before giving it out to the farmers for use.

A study done by Brown (2008) observed that genuine participation is a necessity in order to enable all constituent groups of local community involved at all stages of project from design to evaluation. This is also in concurrence with the study done by Feroze and Hassin (2000) who emphasized that involvement of the local community in the project identification phase is important as a crucial design principle in programmes and projects.

#### **4.5: Mode of Resources Contribution and community Participation**

The second objective sought to determine whether mode of resource contribution influences of participation of the community in the implementation of the project. In order to establish this, the respondents provided answers to sections of the questionnaire as explained below.

##### **4.5.1 Response on Whether the Community Members Contributed Project Resources**

When asked to state whether they had contributed any resources towards project implementation, the respondents gave answers which are presented in the table 4.7 below.

**Table 4 7: Contribution of resources by community**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	251	89.64%
No	29	10.36%
<b>Total</b>	<b>280</b>	<b>100%</b>

(Survey data, 2016)

The results in Table 4.7 indicated that 251 (89.64%) responded that they contributed resources towards the project implementation while 29 (10.36%) had not contributed any resource. To inculcate sense of ownership and project acceptability, the local community was to make contribution towards the project implementation process.

#### **4.5.2 Response on the types of resources the community contributed**

The respondents who indicated to have contributed resources were asked to identify what they considered as the key resource the community was expected to contribute. Analysis was done and the Table 4.8 represents the results:

**Table 4 8: Forms of resources for the implementation of project activities.**

<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
Money	0	0.00%
Land	119	42.5%
Labour	161	57.5%
Materials	0	0.00%
<b>Total</b>	<b>280</b>	<b>100%</b>

(survey data, 2016)



The results shown in Table 4.8, indicate that 161(57.5%) of the respondents considered labor as the key community resources contribution. However, 119 (42.5%) of the respondents stated that forfeiting sections of the land for construction of irrigation infrastructure by individuals was the key community contribution. None of the respondents identified money or materials as requirements for community contribution. It was established from the project document that the contribution of the resources was a requirement that the beneficiaries contributes approximately 1.76% of the total project cost through provision of labor during construction period, and as opportunity cost for forfeiting sections of their land for construction of irrigation infrastructure.

That farmers' contribution was in-kind, by providing the right-of-way of the construction of irrigation system on their land and provision of labor during construction. On the other hand, the African Development Bank (the donor) and the Government of Kenya provided cash financing towards development of the two schemes,(Kimira and Oluch). From the foregoing, this project therefore qualifies to be classified as 'without community- cash contribution project'.

#### **4.5.3 Contribution towards maintenance of the irrigation infrastructure**

When the respondents were asked whether they were aware of how the irrigation system was being maintained, they gave responses as presented in Table 4.9 below.

**Table 4 9: Contribution towards maintenance of the irrigation infrastructure**

<b>Structure</b>	<b>Project Staff</b>		<b>Farmer</b>		<b>Contractor</b>	
	No	%	No	%	No	%
Water intake	223	(79.64)	42	(15.00)	15	(5.36)
Main Canals	269	(96.07)	8	(2.86)	3	(1.07)
Tertiary Canals	25	(8.93)	4	(1.43)	251	(89.64)
Drainage Canals	241	(86.07)	33	(11.79)	6	(2.14)

(survey data, 2016)

The results from the respondents summarized in the table above indicate that the project staff took lead in maintaining the main structures, ie, the weir at 79.64%, the drainage at 86.07% and the main canals at 96.07%. The contractors were considered to be maintaining the tertiary canals at 89.64%, because the structures were still under construction, while the contribution of the farmers in system maintenance was noted to be generally minimal in all the structures considered. The respondents explained that the apparent minimal involvement of the farmers in infrastructure maintenance was unavoidable since some structures were still under construction.

In a further analysis of the study results, a cross tabulation was done between provision of labor and maintenance of irrigation infrastructure to illustrate the relationship between those factors and community participation. Table 4.10 shows the summary of the results.

**Table 4 10: Provision of labour and maintenance of irrigation infrastructure**

Response	Provision of labour		No	
	YES		Freq	(%)
	Freq	(%)		
Yes	12	(4.28)	0	(0)
No	149	(53.22)	119	(42.5)
<b>Total</b>	<b>161</b>	<b>(57.5)</b>	<b>119</b>	<b>(42.5)</b>

(Survey data, 2016)

The study results reveal that out of 161 people who considered provision of labour as the key community contribution, only 12 respondents (representing 7.45 %,) were found to be engaged in the maintenance of irrigation system.

Discussion with the scheme leaders illustrated their understanding of the project resource contribution arrangement as stated by one official and quoted below;

*‘There is a policy of resource contribution. The local community was not expected to contribute funds since the project financing is adequately taken up by the Donor and the Government of Kenya as per the financing arrangement. The issue of lack of funds could be referring to the delays witnessed in the disbursement of funds by the government towards completion of the construction of the irrigation system, an issue which has considerably affected the implementation schedule.’*

The findings of the study showed that whereas the community members (all irrigation water users) were expected to contribute labour by maintaining the irrigation canals through manual cleaning and desilting of canals, there appeared to be differential commitment among users

(farmers) towards maintenance of the irrigation system. Individual irrigators who were required to be responsible for cleaning the canal sections passing within their vicinity (proximity) were hardly participating in the exercise. However, the researcher's personal observations during study revealed that those whose land on which the main irrigation system passed were likely to contribute more labour than other users who did not host the main irrigation system. During the discussion with the scheme leaders, one leader quoted, explained what was required of the community as follows;

*'The agreement was that beginning from the uppermost part of the schemes (headworks), every user has to contribute labour until the lower-most canal that serves for a common use of any group of irrigators has been cleaned.'*

A study done by Darout (2004) in Ethiopia revealed that farmers at the tail-end of the canal (tail-enders) usually have to contribute more labour than those at the head of the irrigation system (head-enders). Thus what is practiced in reality is that there is a tendency of the head-enders to flee maintenance work once the head-end part has been done. The rest of the work is up to the tail-enders. This may be an indication that relying fully on farmer labour for maintenance has some drawbacks. According to Freeman and Lowdermilk (1991), relying only on farmer labour allows much opportunity for 'free riding.' It may appear rational for certain individual farmers to schedule other activities during the time that labour is to be mobilized so as to avoid contributing their labour share. A study of forty water course commands in Pakistan, in which Freeman and Lowdermilk participated, found a generally low level of maintenance. Everywhere, large landlords and other village influential individuals could escape maintenance duties and the quality of maintenance was low. Sanctions against a free rider who wished to use irrigation water without providing a fair proportion of labour were divisive and difficult to enforce.

When the scheme leaders were asked about their role maintenance of the irrigation system, one official captured the perception of most local community members as quoted below;

*‘During the construction period for the irrigation infrastructure, the project team took the responsibility of maintaining the system regularly. Apparently, this practice had given many of the users (farmers) the impression that the scheme belongs to the project staff and the government, and it should be the two entities that are responsible for the maintenance. The perception has been maintained and still pervades despite the fact that the project is soon winding up, in readiness for handover of the schemes to the farmers. This has invariably lessened the commitment of the farmers for scheme maintenance’.*

Therefore it can be inferred that the in-kind community contribution of land and labour were not effective in inculcating sense of ownership and enhancing their participation in project implementation activities. From the foregoing, the study considered the impression by Sigmon (2011) who observes that projects where community makes cash contributions often have the cited characteristic of being successful. Secondly, low farmer participation in the maintenance of the irrigation infrastructure was a sign of an ineffective farmer organizations (IWUAs), which are unable to mobilize their members to provide labour (as part of community contribution), to participate in operation and to maintenance the irrigation system.

#### **4.6: Types of Implementation Approaches and Community Participation**

The third objective sought to establish how types of the implementation approaches influence community participation in project implementation.

#### **4.6.1 Responses on the implementation approaches adopted in the execution of the project**

Asked to give their opinion about the type of approach they felt was applied for the implementation of this project, they gave responses which were summarized in Table 4.11 below.

**Table 4 11: Responses on the implementation approaches adopted for the project**

<b>Approaches</b>	<b>Frequency</b>	<b>Percentage</b>
Top- Down	62	22.14%
Bottom- up	218	77.86%
<b>Total</b>	<b>280</b>	<b>100%</b>

(Survey data, 2016).

Results shown in Table 4.11 indicate that majority 218 (77.86%) of the local community were of the view that the irrigation project undertaken was being implemented by the government through consultation and participation with the local community (bottom-up). In this approach community/beneficiaries were encouraged to identify and plan the projects themselves with or without outsiders. 62 respondents, representing 22.14% indicated that the project was implemented from the top as a government initiative (top-down).

#### **4.6.2 Responses on factors that constrains community participation in project implementation**

When asked about reasons constraining the involvement of the community in project activities. The respondents gave reasons which were summarized in Table 4.12 below.

**Table 4 12: Responses on factors that constrain community participation**

<b>Factor</b>	<b>Frequency</b>	<b>Percentage</b>
Poor planning by the IWUA leadership	137	48.93%
Lack of sense of ownership	84	30.00%
Lack of sustainability & progress	20	7.14%
Lack of funds	39	13.92%
<b>Total</b>	<b>280</b>	<b>100%</b>

(Survey data, 2016)

Results shown in Table 4.12 indicate that poor planning by the IUWAs was rated at 48.93%, as the greatest reason why local community was lethargic towards participating in project implementation activities. Further details revealed that from the time of their formation, the farmer organizations (Kimira-IWUA and Oluch-IWUA) have demonstrated little effort to fully identify with the local farmers whom they are supposed to lead. As such obtaining information about planned project activities from the IWUAs was seen as a big challenge to the farmers. Lack of sense of ownership by the community was ranked second highest at 30.00%, followed by lack of funds at 13.92% and lastly by 20 respondents (7.14%) who believed that the project would not be sustainable, after all. From the results, a total of 211 respondents (representing 86.08%) saw these challenges as having direct association with the IWUA leadership and management. It is interesting to note that 13.92% regarded lack of funds as the biggest factor constraining community participation. This begs the question on the expected community contribution towards project implementation.

### Responses on the indicators of community participation

When asked to identify one factor that they feel would signify active involvement of the local community in project implementation, the respondents provided responses which were summarized as shown in Table 4.13 below.

**Table 4 13: Indicators of community participation**

<b>Indicators of participation</b>	<b>Frequency</b>	<b>Percentage</b>
Increased agricultural activities	95	33.93%
Increased scheme membership/ Registration/ self-mobilization	158	56.43%
Efficient use of irrigation infrastructure	7	2.50%
Participation in decision making process	20	7.14%
<b>Total</b>	<b>280</b>	<b>100%</b>

(Survey data, 2016).

The results in the table above show that 95 (33.93%) of the respondents said that increased agricultural activities would signify that the local community was activity involved in the project implementation activities, 158(56.43%) equated participation to increased registration for scheme membership, 7 (2.50%) saw participation in terms of efficient use of irrigation infrastructure, while 20 (7.14%) suggested that active participation could be considered in terms of increased participation in project decision-making process.

In a further analysis of the study results, a cross tabulation was done between bottom- up as an implementation approach and participation in project decision- making processes, to illustrate



how the relationship between those factors influence community participation. Table 4.14 shows the summary of the results.

**Table 4 14: Decision-making process and Bottom- up approach**

Response	Bottom-up approach			
	YES		No	
	Freq	(%)	Freq	(%)
Yes	143	(51.07)	0	(0)
No	75	(26.7)	62	(22.1)
<b>Total</b>	<b>218</b>	<b>(77.8)</b>	<b>62</b>	<b>(22.1)</b>

(Survey data, 2016)

From the results shown in Table 4.14, out of 218 respondents who said that the implementation approach was participatory since bottom- up approach was used, 143 (representing 65.56%) observed that the local community was adequately involved in decision-making processes during project implementation. This indicated that there was a feeling among the farmers that the approach was consultative, thereby enhancing their participation in the project activities.

The results show that majority of the community members were involved in one way or the other in deciding the implementation framework. This was significant because when community is adequately involved in all stages of the project cycle, they are likely to have high sense of ownership, hence participate effectively in project activities.

Field observation made during the study revealed that the project has a massive infrastructural lay out, such that bottom up approach was really the most ideal way to manage the large infrastructure. However, this position contradicts that of FAO (1991), which observes that most

of the existing irrigation projects are usually developed using a top-down approach with limited farmer participation development interventions with tendency to focus on resource and knowledge transfer to beneficiary communities.

From the study, it was therefore established that the bottom- up approach adopted for the project implementation was participatory; hence it provided the community with opportunity to participate in decision-making during implementation process.

#### **4.7 Capacity Building Strategies and Community Participation**

The fourth objective of the study sought to assess how capacity building strategies influence community participation in the implementation of the project.

##### **4.7.1 Responses on how different aspect of capacity building influence participation.**

When asked to identify the aspect of capacity building which they considered as appropriate in encouraging participation, the respondents gave responses as summarized in Table 4.15 below.

**Table 4 15; Response on the preferred capacity building method**

<b>Aspect of capacity building</b>	<b>Frequency</b>	<b>Percentage</b>
Community mobilization /sensitization meetings	143	50.07%
Training workshops/ seminars	62	22.14%
On- farm demonstrations	48	17.14%
Partnerships	27	0.96%
<b>Total</b>	<b>280</b>	<b>100%</b>

(Survey data, 2016)

The results on Table 4.15 revealed that 50.07% of the community participation in the project activities was mostly through community meetings. The sensitization meetings are usually held within the project area in order to bring attention to the local residents about the progress of project activities. About 22.14% were in support of training workshops or seminars as a means of capacity building the local community. A further 17.14% preferred participating in on- farm demonstrations, while 0.96% thought that capacity building through partnerships was the most appropriate.

#### **4.7.2 Responses on the aspects of community trainings**

The respondents were further asked to identify the aspect of community training in which they had participated as project beneficiaries. The results are shown in Table 4.16 below.

**Table 4 16: Responses on the aspects of community training**

<b>Aspect of community training</b>	<b>Frequency</b>	<b>Percentage</b>
Scheme management	25	8.93%
Production & marketing	162	57.86%
Operation & maintenance (O&M)	93	33.21%
<b>Total</b>	<b>280</b>	<b>100%</b>

(Survey data, 2016)

The results indicate that majority of the local community represented by 162 (57.86%) had participated in the aspect of crop production. The participants were being empowered through classroom training and visiting of established practical on-farm demonstrations to improve their skills on new agricultural production techniques. 93 (33.21%) were trained on operation and maintenance, which is an aspect of technological enhancement. The least aspect of capacity

building activity undertaken by the farmers was on scheme management by 25 respondents, representing 8.93%.

#### 4.7.3 Responses on participation level of community in the project activities

Respondents were asked to rank the level of participation of local community in project activities. Table 4.17 displays the perceptions of the respondents with regards to the level of community participation.

**Table 4 17: Participation level of community in the project activities**

<b>Level of community participation at KOSFIP</b>	<b>Frequency</b>	<b>Percentage</b>
Lowest level	188	67.14%
Average level	79	28.21%
High level	13	4.62%
<b>Total</b>	<b>280</b>	<b>100%</b>

(Survey data, 2016)

The results in Table 4.17 above indicate that 188 (67.14%) of the respondents interviewed perceived community participation in project activities to be at the lowest level, seventy nine (28.21%) indicated average level of community participation and only 4.62% perceived high levels.

From the study findings the message of low level of community participation in the project activities is loud, a clear indication that the project leadership is far from achieving involvement of communities at grass root level in realizing the project common objectives. Low beneficiary participation in local decision-making reflects their limited awareness of project goals and the limited belief in the importance of community engagement at individual or house hold level. Respondents indicated a general consensus that receiving information about on- going project activities from the IWUAs is not easy, illustrating a lack of transparency at IWUA leadership, hence limiting community participation in project decision- making process.

In a further analysis of the study results, a cross tabulation was done between sensitization meetings as a capacity building strategy against membership registration, to indicate the relationship between those factors and community participation. Table 4.18 shows the summary of the results.

**Table 4 18: Scheme membership and sensitization meetings**

Response	Sensitization Meetings		NO	
	YES		Freq	(%)
	Freq	(%)		
Yes	21	(7.5)	0	(0)
No	122	(43.5)	137	(48.9)
<b>Total</b>	<b>143</b>	<b>(51.07)</b>	<b>137</b>	<b>(48.9)</b>

(Survey data, 2016)

The results in the table above depicts that out of 143 community members who were capacity built through Sensitization meetings, only 21 (representing 14.68%), had registered as members of the farmer organizations. The registration as members of Irrigation Water Users Association (IWUAs), was aimed at enabling the local community to fully participate in the operation and management of the irrigation schemes. The low membership registration gives enough evidence that the community capacity building mechanisms have not been effective in transforming the attitude of the community towards project acceptability and ownership.

From the study findings, it was noted that community sensitization meetings had the highest participation level compared to other methods of capacity building. This was attributed to the fact that the awareness creation meetings were largely informal and spearheaded by the project staff. However, it was apparent that farmer training workshops were held for small groups of farmers, especially those who had active involvement in project activities. This was aimed at

assist farmers, especially those who were actively engaged in production of some agricultural commodities to acquire relevant entrepreneurial skills. To a greater extent, such farmers were noted to develop the willingness to become members of the schemes. While on the other hand, training in O&M had mainly benefitted the scheme leaders, who were expected to control the water distribution. During discussion with the scheme officials, one of the officials while responding to challenges they experience with regard to community participation reiterated that:

*'The project staff has conducted continuous mobilization sessions and community trainings in order to enhance sense of project ownership. However, we have been unable to effectively recruit the local community into the membership of the scheme despite those numerous sensitization meetings.'*

A review of the project document further revealed that the management structure was designed to maximize the involvement of farmers and other stakeholders at project level through adequate representation and regular consultations. The inclusion of farmer representatives in the project steering committee (PSC) was done to ensure that the beneficiaries were adequately involved in decision- making process. These study findings implied that despite sensitizing the local community on the project goal, the capacity building methods used by the project had little effect in cultivating sense of scheme ownership and enhancing the participation.

The study considered the impression of Mosse, (2001) who observed that sensitizing and raising the levels of awareness of the community helps to promote local level participation and participatory approach. Raising the levels of awareness can contribute to community involvement in that it helps people formulate their interests, knowledge and understanding as being a precondition for real participation of the community in the project management cycle.

The position is also supported by Sibanda (2011), who posits that capacity building enhances empowerment and ownership, thus sustainability of the project. In addition, the beneficiaries also go through experience of a positive change.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents a summary of the research findings, conclusion and draws recommendations based on the research findings. The chapter is sub divided into four main sections namely summary of research findings, conclusion, recommendations, and suggestions for further study.

#### **5.2 Summary of Research findings**

The purpose of this study was to investigate the factors influencing community participation in the implementation of Kimira Oluch smallholder Farm Improvement Project (KOSFIP). Four research objectives were formulated to guide the study. The research Objective one sought to examine how project design influences community participation in implementation the project; objective two sought to determine how mode of resources contribution influences community participation in implementation the project; objective three sought to establish how types of implementation approaches influence community participation in implementation of the project; while objective four sought to assess how community capacity building strategies influence their participation in implementation of the project. Therefore, this section presents a summary of the research findings as grouped according to the objectives of the study.

The study targeted 3000 community members from the two irrigation schemes (Kimira and Oluch). A total of 280 respondents were interviewed as the sample size and their responses duly analyzed. The demographic data revealed that majority 159 (57%) of those actively involved in



project activities were male while (121) 43% were females. The higher number of males indicated the fact that they formed the majority of the registered members of the irrigation schemes and was the bona fide farm owners. On the age distribution it was found that majority of the farmers were falling between 40 years and above. The notable low involvement of the youthful population in the project activities was attributed to the fact that most of them did not own land as most land was still being held in trust for them by their parents. On the educational levels, every respondent had acquired primary level of education and above, an indication that the community was largely literate, hence was capable of appreciating the project objectives.

### **5.2.1 Project Design Principles and Community Participation**

The first objective sought to examine how the project design principles would influence community participation in implementation of the project. The study considered those principles of the design which were linked to promotion of project ownership and acceptability among the stakeholders, more so, the farmers as primary beneficiaries. The principles considered included the project stakeholder engagement; gender mainstreaming, and establishment of a participatory M&E system. The study results identified stakeholder engagement rated at 61.41% by the respondents as the most effective principles which encouraged participation of key stakeholders in project implementation.

As such it is notable that the design of this project was done through an extensive and unique participatory approach, which provided adequate avenues for the community to participate project activity implementation. Farmers of the two schemes had a say in the design of the two schemes (Kimira and Oluch) throughout all preparatory phases especially identification stage, rated by respondents at 57.51%. As indicated by the responses on the aspects of the design, the

beneficiary participation was considered, right from the initial phases throughout implementation up to management phase, so as to enhance ownership of the project once it is implemented. It is worth noting that the local community also had representation in the Project Steering Committee (PSC), which is the highest project organ, tasked with policy guidance and decision making at the project management level.

Accordingly, the project concept resulted into establishment of schemes that are entirely farmer-managed. It therefore suffices to say that, the design provided for the involvement of the two Irrigation Water Users Associations (IWUA) in planning, and implementation of the Project activities, which ensured built-in-mechanism for Project sustainability. As part of the stakeholder engagement, there were efforts to continuously reinforce the capacity of farmer organizations to operate and maintain the irrigation systems throughout the whole implementation period, a function that the farmer organizations (IWUAs) have not achieved as intended.

The study findings revealed that the participatory manner in which the design of the project was prepared provided the local community with an avenue to effectively participate in the project activities. However, the drive to participate in project activities is still wanting as the community does not seem to have inculcated sense of ownership towards the project.

### **5.2.2 Mode of Resources Contribution and community Participation.**

The second objective sought to examine the influence of resource contribution on participation of the community in the implementation of the project. The study findings show that the local community was to make a contribution towards schemes development by ceding portions of their land for construction of irrigation infrastructure and by providing labour during

construction and towards maintenance of the infrastructure. The results revealed that provision of labour rated at 57.5% was considered as the most essential contribution made by the community, followed by land at 42.5%. There was no financial contribution made by the community thus qualifying the project to be classified as 'without- community cash- project'. Further it was revealed that much as the community members (all irrigation water users) were expected to contribute labour by maintaining the irrigation canals through manual cleaning and desilting of canals, there appeared to be differential commitment among users (farmers) towards maintenance of the irrigation system. This is because the individual irrigators who were required to be responsible for cleaning the canal sections passing within their vicinity (proximity) were hardly engaging in the exercise. The study showed that only 7.45% of the farmers, who regarded provision of labour as necessary, were engaged in cleaning of the system. It may be inferred that probably the community attached less value to the in-kind contribution since they did not seem to have 'felt the weight' of resource commitment. In any case, the project was pursuing a smallholder approach, where those whose lands were acquired for construction of main structures were compensated.

It is therefore observed that in- kind contribution has not enhanced community participation or inculcated acceptability of the project. This is evidenced by the fact that the beneficiaries were largely unwilling to commit themselves in providing labour for cleaning and maintenance of the water canals. It can therefore be reasonably concluded that where the beneficiaries have made in-kind contribution towards project implementation, there is likelihood of low participation in the project activities. This observation concurs with the findings of Sigmon (2011) who observed that projects where community makes cash contributions often have the characteristic of high success rate unlike 'without- community –cash –projects',

### **5.2.3 Types of Implementation Approaches and Community Participation**

The third objective sought to examine whether the types of implementation approaches used in executing the project had influence on community participation. The study considered two types of implementation approaches, bottom- up and top- bottom. Study results showed that majority (77.86% ) rated the implementation as a bottom-up approach. This is because were viewing the project as being implemented by the government in a consultative manner with the local community. Further, the management structure of the project was found to have been designed to maximize the involvement of farmers and other stakeholders at project level through adequate representation and regular consultations. From the study, it can therefore be inferred that bottom-up as an aspect of implementation approaches was participatory. The results show that majority of the community members were involved in one way or the other in deciding the implementation framework. This was significant because when community is adequately involved in all stages of the project cycle, they are likely to have high sense of ownership, hence participate effectively in project activities. However, the farmer organizations (Kimira-IWUA and Oluch-IWUA) were said to have failed to embrace the bottom- up approach because from the time of their formation they have demonstrated little effort to fully identify with the local farmers.

Field observation made during the study revealed that the project has a massive infrastructural lay out, such that bottom up approach was really the most ideal way to manage the large infrastructure. However, this position contradicts that of FAO (1991), which observes that most of the existing irrigation projects are usually developed using a top-down approach with limited farmer participation development interventions with tendency to focus on resource and knowledge transfer to beneficiary communities. Therefore because of the regular consultative

forums organized by the project implementation team, the concept of bottom-up approach adopted in the implementation of this project has helped to enhance community participation.

#### **5.2.4 Community Capacity Building Strategies and Community Participation**

The fourth objective of the study sought to assess how capacity building strategies influence community participation in the implementation of the project. The study considered four approaches of capacity building which are currently being used by the project team to enhance participation of the relevant stakeholders. It was noted that community sensitization meetings had the highest participation level rated at 50.07%. This was attributed to the fact that the awareness creation meetings were largely informal and spearheaded by the project staff. However, it was apparent that farmer training workshops rated at 22.14% were held for small groups of farmers, especially those who were actively engaged in production of some agricultural commodities. This was aimed at assisting them to acquire relevant entrepreneurial skills or enhance their knowledge on agricultural production through irrigated agriculture. Capacity building through established on- farm demonstrations was rated at 17.14%, while those through partnerships were rated lowest at 0.96%.

A review of the project progress reports revealed that the project had conducted continuous community trainings in order to enhance sense of project ownership. However, further analysis of the study results show that out of 143 farmers who had participated in community sensitization meetings, only 21 (representing 14.68%) had registered as scheme members. It was therefore observed that despite numerous capacity building strategies, the efforts have not translated into much success as reflected by failure of the majority of the sensitized farmers to register and become members of the farmer organizations (IWUAs). From the study findings the

message of low level of community participation in the project activities (rated at 67.14%) is loud, a clear indication that the project leadership is far from achieving involvement of communities at grass root level in realizing the project common objectives.

In overall, the study findings reveal that the community capacity building strategies were not effective in enhancing project ownership and acceptability since they were not community-centered. The low level of community participation could be largely attributed to lack of cohesion among the farmers, resulting from ineffective community capacity building strategies. This is because the implementation of those strategies was mostly spearheaded and championed by the project management team, with little input from the IWUA representatives. As reflected in the study, the IWUAs were not taking lead in mobilizing the farmers as expected. However, the fact that the community embraced the project to be implemented in their midst is an indication of some level of acceptability. This positive aspect therefore gives the IWUAs considerable room to become more engaged in raising public awareness and mobilizing the community to participate in scheme operations and management.

### **5.3 Conclusion.**

The purpose of this study was to investigate the factors influencing community participation in the implementation of Kimira Oluch Smallholder Farm Improvement Project (KOSFIP). The factors investigated included the influence of project design principles; mode of resources contribution; types of implementation approaches and community capacity building strategies. Based on the findings, the study concluded that factors studied influenced community participation in different ways:

That the design of this project was done through an extensive and unique participatory manner, which integrated principles that promote participation and inculcate project ownership. As such, the aspects of participation were included from project identification, preparation and design stages, in order to foster ownership among the beneficiaries; the management structure was designed to maximize the involvement of farmers and other stakeholders at project level through adequate representation and regular consultations; and there was provision of continuous participatory planning during project implementation. This provided adequate avenues for the community to participate in project activity implementation, thereby ensuring ownership and sustainability. On mode of resource contribution, it can be concluded that the in-kind community contribution of land and labour had not been effective in inculcating sense of ownership and enhancing their participation in project implementation activities. The study reveals that, there is likelihood of low participation in project activities, where the beneficiaries have made in-kind contribution towards implementation.

On the types of implementation approaches, it is concluded that the practice of bottom-up approach reflected in the regular consultative forums organized by the project implementation team, has helped to enhance community participation. However, the study provides sufficient evidence to point out that the apparent low level of community participation and failure by the local community to self- mobilize for effective participation during the project implementation phase, can be largely attributed to lack of cohesion among the farmers, resulting from ineffective community capacity building strategies deployed by the project to mobilize the participation of the community.

## 5.4 Recommendations

Based on the findings, the following were the recommendations of the study

1. As an affirmative action, the design of the project has deliberately focused on encouraging women participation in project activities with a view to enhancing involvement. It is equally crucial to expand the scope of the design to also focus on the youthful segment of the community so as to put them in a better position to engage fully in project activities.
2. There is need for the local community to work towards finding ways of mobilizing their own resources, by identifying possible revenue sources including through external funding to ensure sustainability of the project. To realize this, the IWUA office should be strengthened or made fully functional in readiness to assume the management of the Kimira and Oluch schemes, upon project completion and handing over. As such the IWUA leadership should have an increased role in mobilizing the community to honour their obligation of contributing towards schemes development and management.
3. The leadership of farmer organizations (Kimira-IWUA and Oluch-IWUA) should endeavor to promote the participatory approach of bottom- up by creating forums to regularly consult and engage with the farmers to chart way forward for the management of both Kimira and Oluch irrigation schemes.
4. There is need to review the structure and content of the current capacity building strategies, with a view to incorporating those appropriate strategies which are community- centered. Such strategies should divorce expectations for short term benefits as propellants for participation by local communities and instead, be geared towards inculcating ownership and responsibility as core motivating factors.



### **5.5 Suggestions for further study**

This study sought to investigate factors influencing community participation in the implementation of KOSFIP. Upon conclusion of the research with the given research questions and the scope, it is observed that some significant and important concerns were not covered by this research. In view of the findings of the study, the researcher offers some suggestions which should act as a basis for further work on a comparable or similar study on community participation. Further studies can be done to investigate how community financing would influence the sustainability of both Kimira and Oluch irrigation schemes. A study may also be done to investigate what factors would influence participation of youth in development projects, with reference to Kimira –Oluch smallholder farm Improvement Project.

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## APPENDICES

### Appendix 1: LETTER OF TRANSMITTAL

-----  
\_\_\_\_\_  
\_\_\_\_\_

Dear Sir / Madam,

**RE: RESEARCH PROJECT**

I am a postgraduate student at the Department of Extra-mural studies of University of Nairobi, Kisumu campus. I wish to carry out a research study on **The Factors Influencing Community Participation In The Implementation Of Agricultural Projects; A Case Of Kimira- Oluch Smallholder Farm Improvement Project In Homa Bay County**. It is my hope that this study will result into understanding of those factors with a view to helping the project achieves its stated objectives.

Thank you in advance.

**Yours faithfully,**

**Ouma George Otieno**  
**RegNo.L50/76403/ 2014**  
**0726796325**

## Appendix 2: Questionnaire for Local Community

Dear Respondent,

The purpose of this study is to establish the factors influencing community participation in the implementation of agricultural projects; A case of Kimira- Oluch Smallholder Farm Improvement project, in Homa Bay county.

You have been selected as one of the respondents as your contribution is considered significant in this study. Kindly provide the correct information as honestly as possible. Your contribution will be highly appreciated and information obtained will be treated with confidentiality.

Indicate your choice by a tick (√). Kindly answer all the questions

### SECTION A: DEMOGRAPHIC INFORMATION:

#### 1. Please indicate your gender

Male  Female

#### 2. Indicate your age

20 – 29 years  30 – 39 years  40 – 49 years  50 and above

#### 3. Educational Status

Primary School {  } Secondary School {  } Degree and Above {  }

### SECTION B: Project design principles and community participation

4. Name the component of the project design in which you feel the community was adequately involved.

Description	Tick (√).
Project identification	
Formulation	
Planning for implementation	
Planning for M&E	

5. Identify one principle integrated in the project design which has effectively promoted participation?

<b>Principles integrated in the project design</b>	<b>Tick (√).</b>
Stakeholder engagement	
Gender mainstreaming	
Strengthening of IWUA	
Establishment of participatory M&E system	
<b>Total</b>	

6. In the institutional arrangement, which people do you frequently interact with?

<b>Aspects integrated in the implementation framework</b>	<b>Tick (√).</b>
PSC members	
Project staff	
Govt ministry staff	
IWUA officials	
<b>Total</b>	

**SECTION C: The mode of resources contribution and Community participation**

7. Did you contribute any resources towards the implementation of the project?

Yes ( ) No ( )

(a) If no, state why.....

(b) If yes, please state the type of resources which you contributed towards the project implementation.

8. Identify the main group which maintains the irrigation structures below.



<b>Irrigation structure</b>	<b>Project staff</b>	<b>Farmers</b>	<b>Contractors</b>
Water intake			
Main canals			
Tertiary canals			
Drainage			
<b>Total</b>			

#### **SECTION D: Types of Implementation Approaches and Community Participation**

9. In your opinion, which type of approach was adopted for the project implementation?

Approaches	Tick (√).
Top- Down	
Bottom- up	

10. Please, identify the main factors that may constrain community from participating in project implementation.

Factor	Tick (√).
Poor leadership by IWUA	
Lack of sense of ownership	
Sustainability & progress	
Lack of funds	

11. According to your knowledge, which factor indicates active involvement of the community in project activities?

Factor	Tick (√).
Increased agricultural activities	
Increased scheme membership	
Efficient use of irrigation infrastructure	
Participating in decision-making process.	

## SECTION E: Capacity building strategies and community participation

12. Please, identify your preferred capacity building platform through which the community participates in project implementation.

Response	Tick (√).
Sensitization meetings	
Training workshops/ seminars	
On-farm demonstrations	
Partnerships	

13. Identify one training aspect have you participated in and applied the skills?

Aspects of training	Tick (√).
Scheme management	
Production & marketing	
Operation & maintenance (O&M)	

### **Appendix 3: Interview Guide for the Scheme Leaders**

1. What do you understand by the term community participation?
2. What was the role of the community in the project design and planning stage at the village level?
3. How does this affect the success of the project?
4. How was the current community leaders elected in this community?
5. What mechanisms could be used to motivate the community to participate in meetings where issues affecting you and the community are discussed?
6. How effective are the communication channels between the scheme leaders and the community members?
7. What do community members say about their experience of being involved in project activities?
8. How appropriate are the community mobilization strategies currently being used by the project?
9. To what extent have you been participating in deciding the arrangements of how the irrigation infrastructure should be effectively utilized?
10. As a leader, how have you participated in the maintenance of the irrigation system?
11. What was the arrangement for resource contribution towards project implementation?
12. If you wanted to know what has been contributed by the community so far towards project development, would it be difficult to gain such information?
13. What should the current community leaders do to ensure that participation in project implementation by the community members is enhanced and/or maintained?
14. To what extent has the community been participating with regard to decision – making with regard to project activities?
15. What challenges have you experienced regarding community participation?
16. What do community members expect from the project management team?

17. Are participants satisfied with the level of support received as part of capacity building?
18. Is there sufficient organizational capacity for community participation?

## Appendix 4: KREJCIE AND MORGAN TABLE

Table for Determining Sample Size for a Finite Population

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.

0 Source: Krejcie & Morgan, 1970

## Appendix 5: UNIVERSITY RESEARCH AUTHORIZATION LETTER 1



**UNIVERSITY OF NAIROBI**  
COLLEGE OF EDUCATION AND EXTERNAL STUDIES  
SCHOOL OF CONTINUING AND DISTANCE EDUCATION  
KISUMU CAMPUS

The Secretary  
National Council for Science and Technology  
P.O Box 30623-00100  
**NAIROBI, KENYA**

18<sup>th</sup> March, 2016

Dear Sir/Madam,

**RE: OUMA GEORGE OTIENO - REG NO: L50/76403/2014**

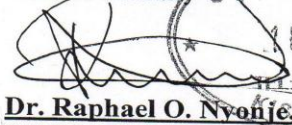
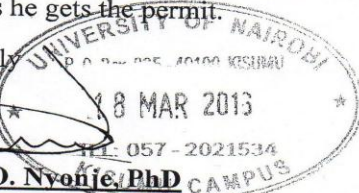
This is to inform you that **Ouma George Otieno** named above is a student in the University of Nairobi, College of Education and External Studies, School of Continuing and Distance Education, Kisumu Campus.

The purpose of this letter is to inform you that **George** has successfully completed his Masters Course work and Examinations in the programme, has developed Research Proposal and submitted before the School Board of Examiners which he successfully defended and made corrections as required by the School Board of Examiners.

The research title approved by the School Board of Examiners is: ***“Factors Influencing Community Participation in the Implementation of Agriculture Projects: A Case of Kimira-Oluch Smallholder Farm Improvement Project (KOSFIP), Homa-Bay County-Kenya”***. The Project is part of the pre-requisite of the course and therefore, we would appreciate if the student is issued with a research permit to enable him collect data and write a report. Research project reflect integration of practice and demonstrate writing skills and publishing ability. It also demonstrates the learners’ readiness to advance knowledge and practice in the world of business.

We hope to receive positive response so that the student can move to the field to collect data as soon as he gets the permit.

Yours Faithfully

**Dr. Raphael O. Nyonje, PhD**  
SENIOR LECTURER & RESIDENT LECTURER  
DEPARTMENT OF EXTRA-MURAL STUDIES  
KISUMU CAMPUS

## Appendix 6: UNIVERSITY RESEARCH AUTHORIZATION LETTER 2



**UNIVERSITY OF NAIROBI  
COLLEGE OF EDUCATION AND EXTERNAL STUDIES  
SCHOOL OF CONTINUING AND DISTANCE EDUCATION**

Our Ref.: UON/CEES/KSM/1/16

University Of Nairobi Plaza  
Oginga Odinga Street  
P.O. Box 825,  
KISUMU. Kenya

Telephone: Kisumu 057-2021534

18<sup>th</sup> March, 2016

TO WHOM IT MAY CONCERN

**RE: OUMA GEORGE OTIENO – REG. NO: L50/76403/2014**

This is to inform you that the above named **Ouma George Otieno** is a student at the University of Nairobi, College of Education and External Studies, School of Continuing and Distance Education, Department of Extra Mural Studies pursuing Masters in project planning and management.

**George** has completed his course work and examinations successfully and now undertaking his Research Project which is a pre-requisite for the course. The Research Project is entitled: ***“Factors Influencing Community Participation in the Implementation of Agricultural Projects: A Case of Kimira Oluch Smallholders Farm Improvement Project (KOSFIP) in Homabay County - Kenya”***. The purpose of this letter therefore is to request you to allow the student to access the data or information she may need for the purpose of this study. The data is required for his academic purposes only and not for any other reasons.

We would appreciate any assistance that may be given to enable him carry out the study.

Yours faithfully,



**Dr. RAPHAEL O. NYONJE, PhD**  
**RESIDENT LECTURER**  
KISUMU CAMPUS

**ISO 9001: 2008 CERTIFIED**

*The Fountain of Knowledge Providing Leadership in Academic Excellence*

## Appendix 7: NACOSTI AUTHORIZATION LETTER



### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,  
2241349,3310571,2219420  
Fax: +254-20-318245,318249  
Email: dg@nacosti.go.ke  
Website: www.nacosti.go.ke  
when replying please quote

9<sup>th</sup> Floor, Utalii House  
Uhuru Highway  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref. No.  
**NACOSTI/P/16/34641/10380**

Date:

**4<sup>th</sup> May, 2016**

George Otieno Ouma  
University of Nairobi  
P.O. Box 30197-00100  
**NAIROBI.**

#### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on *“Factors influencing community participation in the implementation of agricultural projects: A case of Kimira-Oluch Small Holder Farm Improvement Project in Homa-Bay County,”* I am pleased to inform you that you have been authorized to undertake research in **Homa Bay County** for the period ending **29<sup>th</sup> April, 2017.**

You are advised to report to **the County Commissioner and the County Director of Education, Homa Bay County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

A handwritten signature in black ink, appearing to read 'Dr. Stephen K. Kibiru', is positioned above the typed name of the Director-General/CEO.

**DR. STEPHEN K. KIBIRU, PhD.**  
**FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner  
Homa Bay County.

The County Director of Education  
Homa Bay County.



**Appendix 8: NACOSTI PERMIT 1**

**THIS IS TO CERTIFY THAT:**

**MR. GEORGE OTIENO OUMA**  
**of UNIVERSITY OF NAIROBI, 293-40300**  
**HOMA BAY, has been permitted to**  
**conduct research in Homabay County**  
**on the topic: FACTORS INFLUENCING**  
**COMMUNITY PARTICIPATION IN THE**  
**IMPLEMENTATION OF AGRICULTURAL**  
**PROJECTS: A CASE OF KIMIRA-OLUCH**  
**SMALL HOLDER FARM IMPROVEMENT**  
**PROJECT IN HOMA-BAY COUNTY**  
**for the period ending:**  
**29th April 2017**

**Permit No: NACOSTI/P/16/34641/10380**  
**Date of Issue: 4th May, 2016**  
**Fee Received: USD 9.6**

**Applicant's Signature**

**Director General**  
**National Commission for Science,**  
**Technology & Innovation**

**Appendix 9: MINISTRY OF EDUCATION AUTHORIZATION LETTER**

**MINISTRY OF EDUCATION SCIENCE & TECHNOLOGY  
STATE DEPARTMENT OF EDUCATION**



Telegrams: "SCHOOLING", Homa Bay  
Telephone: +254726961531  
When replying please quote

**COUNTY DIRECTOR OF EDUCATION OFFICE  
HOMA BAY COUNTY  
P.O. BOX 710  
HOMA BAY.  
DATE: 17<sup>TH</sup> <sup>MAY</sup> MARCH, 2016.**

REF: MOEST/CDE/HBC/ADM/11/VOL.1/154

**Ouma George Otieno  
University of Nairobi  
Po Box 30197-00100  
NAIROBI.**

**RE: RESEARCH AUHTORIZATION.**

In response to the letter from the National Commission for Science, Technology and Innovation dated 4<sup>th</sup> May, 2016 giving you authority to carry out the research on "*Factors influencing community participation in the implementation of agricultural projects: A case of Kimira-Oluch Small Holder Farm Improvement Project*", I hereby give you permission to carry out the research in Homa Bay County.

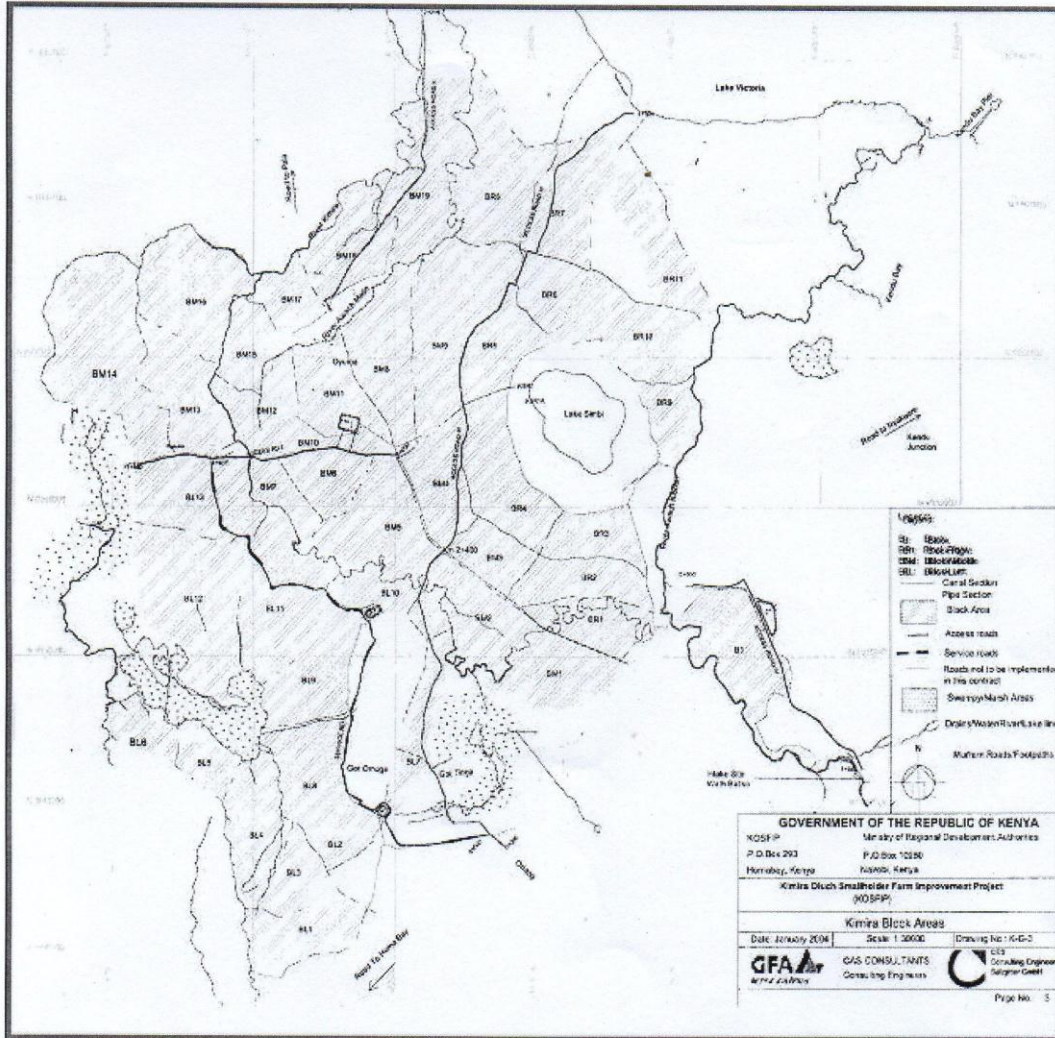
Please submit a copy of your findings both in soft and hard copies to us.

A handwritten signature in black ink, appearing to read 'S. M. Ochola'.

**S. M. OCHOLA  
FOR: COUNTY DIRECTOR OF EDUCATION  
HOMA BAY COUNTY.**

# Appendix 10: MAP OF THE STUDY AREA (KIMIRA SCHEME)

Map of Project Area showing Extend of Kimira Scheme



# Appendix 10: MAP OF THE STUDY AREA (OLUCH SCHEME)

