

**FACTORS INFLUENCING IMPLEMENTATION OF NATURAL  
RESOURCE MANAGEMENT PROJECTS IN KENYA.  
A CASE OF MOUNT KENYA EAST PILOT PROJECT  
IN EASTERN PROVINCE**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENT FOR THE AWARD OF MASTERS IN BUSINESS  
ADMINISTRATION SUBMITTED TO SCHOOL OF BUSINESS  
KENYATTA UNIVERSITY DEPARTMENT OF MANAGEMENT  
SCIENCE.**

Githinji, Joseph  
*Factors influencing  
implementation of*

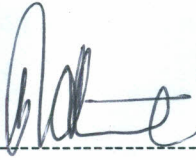


2013/423085

**MAY 2011**

## DECLARATION

This Research project is my original work and has not been submitted for a Degree in any other University.

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## ACKNOWLEDGEMENT

I acknowledge with appreciation the enormous contribution by lecturers in Kenyatta University, Kenya, in assisting me to acquire knowledge in business administration. Special thanks to the Chairman Management Science department, Mr. Paul Sang and Lecturers- Gladys Kimutai and Rosemary Muthoni James for instructing and guiding me through the undertaking of this project. My thanks go to the Management of Mount Kenya East Pilot Project for their cooperation and support and to the Provincial Head of Veterinary Department Eastern province for the assistance extended to me during the study period.

I wish also to thank my family for the support and encouragement and finally, but not the least, my gratitude to Rose Masika and Pauline Murugi Ndwiga who assisted in typesetting this document.

## **DEDICATION**

This research project is dedicated to my wife Eunice, my children- Nephath, Esther and Michael, my mum Esther Nyambura and my late sister Florence.

## ABSTRACT

The success of projects depends to a great extent on the efficient and effective management of the physical resources of man, material and machinery and how the project is organized. Project implementation is a highly complex process and it involves relationships amongst several systems and variables. All project implementers desire to succeed in project implementation; attributes of successfully implemented project if well captured become important information to aid future project undertaking.

The aim of this study was to identify factors that influenced the implementation of Natural Resource Projects in Eastern Province of Kenya and to examine how the factors influenced the project implementation. The study focused on Mt Kenya East Pilot Project for Natural Resource Management (MKEPP), because of the uniqueness of the project in relation to the project performance, project size, integration, location, funding and the anticipated project outputs of poverty alleviation and improving household incomes to the beneficiaries. The findings of the study are useful to project implementers, donors and financiers in guiding project implementation process and to academia as source of literature to be reviewed by future researchers.

The study was conducted through review of literature, collection of secondary data from the Project Management Unit and participating Government departments and collection of primary data through administering questionnaires to a representative random samples of 5 project Coordinators, 47 District facilitating team members, 26 Chairmen of Focal development area Committees and 30 beneficiaries stakeholders. This was followed by data processing through the stages of data cleaning, data coding, data entry in a computer and data analysis by aid of the computer software of Statistical Package for Social Sciences. The findings of the study indicated that, managerial skills, project planning, organization, communication, financial management and budgeting and stakeholder involvement were important factors in project implementation. It further revealed that all these factors did influence project implementation at varied levels. Recommendations were made based on objective analysis of the data. Among the recommendations made was that in project implementation, there is need for training of project implementers in project management skills and to involve the stakeholders in the entire project life cycle.

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## LIST OF ABBREVIATIONS

GOK	Government of Kenya
GEF	Global Environment Facility
IFAD	International Fund for Agricultural Development
FDAC	Focal Development Area Committee
F/Y	Financial Year
DAO	District Agricultural Officer
DC	District Commissioner
DFO	District Fisheries Officer
DF	District Forester
DFT	District Facilitation team
DIO	District Irrigation Officer
DIT	Divisional Implementation Team
DLPO	District Livestock Production officer
DPCC	District Project Coordinating Committee
DVO	District Veterinary Officer
DWO	District Works Officer
MOV	Means of Verification
NA	Network Analysis
OVI	Objectively Verifiable Indicator
PERT	Programme Evaluation and Review Technique
PMU	<i>Project Management Unit</i>
PRA	Project Rural Appraisal
PSC	Project Steering Committee
WBS	Work Break down Structure
SMART	Specific, Measurable, Achievable, Reliable, Time bound.

## OPERATIONAL DEFINATION OF TERMS

<b>Project</b>	A unique Endeavour to produce a set of deliverables within clearly specified time, cost and quality.
<b>Project management</b>	The art and science of managing all aspects of the Project to achieve the project objective.
<b>Evaluation</b>	A systematic and independent examination of a project in order to determine its efficiency, effectiveness, impact sustainability and the relevance of its objective.
<b>Quality</b>	The degree to which a set of inherent characteristics of the final deliverable conforms to the customer require
<b>Project identification</b>	It is the process of checking if candidate projects should be undertaken by the organization.
<b>Implementation</b>	A process by which a set of predetermined activities are carried out in a planned manner with a view of achieving an established objective
<b>Risk</b>	Any event which is likely to adversely affect the ability of the project to achieve the defined objective.
<b>Work breakdown Structure</b>	A formal description of all the activities required to Complete a project, shown as a hierarchy of tasks in the project.

**Network**

It is a graphic flow plan of the activities that must be accomplished for completing the project; the activities are arranged in logical sequence.

**Critical path**

The path through the network that takes the longest total time from commencement to completion of the project. It is the earliest possible time in which the project can be completed.

**Project success-**

A successful project is one which is finished on time, within the Budget and meeting the requirement.

**Project failure -**

A project failing to achieve its mission of creating a facility within the specified cost and time.

# CHAPTER ONE

## 1.0 INTRODUCTION

### 1.1 Background to the study

The aim of every project implementer is to succeed in creating the product or services or a specified outcome, to the satisfaction of the customer or beneficiary. However many projects fail to meet their objectives because of various factors. To improve on project performance of future projects there is need to study and understand the factors influencing the success or failure of current projects.

Project implementation is the carrying out, execution, or practice of a plan, method, or any design for doing something (Patricia, 2002). The phase is about executing the plans created during the project planning phase. During the implementation phase the project aims at executing the work plan and taking corrective action including re-planning, where necessary, in order to achieve the objective. Implementation is about co-coordinating and managing people and resources in order to achieve the objective. Projects are dynamic in nature and hence flexibility during project implementation is essential so that the overall objectives of the project are met. Henry Lucas says that implementation terminates when the system is successfully integrated with the operations of the organization. Implementation is the longest phase of project life cycle; the way implementation is undertaken has a great contribution to project success or failure. A project is considered successful if it accomplishes its objective. Every project implementer would wish to have a great success story to tell. Often a smoothly run project gets a black eye because of problems during implementation (Mochal, 2003).

According to Connell (2007), "Projects that take longer than expected have become pretty much a cliché in the modern world, hardly a day goes by that we do not read or hear about some project somewhere that has been delayed missed the deadline or abandoned. Governments, companies' large and small organizations in the public and private sector, individuals, nobody seems immune from this terrible condition". Kohli and Chitkara (2008) stated that "Few projects are completed in time and within the original budget". This is happening despite the abundant literature and knowledge available on project management.

In 2006, Tacoma Narrow Bridge in United States collapsed. On 8<sup>th</sup> February 2007 Minneapolis Bridge in USA collapsed and on 1<sup>st</sup> August 2007 Mississippi River Bridge (Bridge93400)

collapsed. In Kenya, Daily Nation and citizen Radio, on 18<sup>th</sup> June 2009, reported on collapse of a multistory building in Kisii town. Daily Nation, of 20<sup>th</sup> October 2009 reported of collapse of a multistory building at Kiambu and Daily Nation of 24<sup>th</sup> January 2006 reported of collapse of another multistory building in Ronald Ngala Street, Nairobi. Project implementation by various ministries has been a concern to the Government. In one of the project implementation surveys, it was stated, "The status of project implementation by ministries showed that there existed many problems for ministries to tackle. Apart from the low disbursement of funds that result in serious delays in the implementation of projects, there were numerous other problems found to have affected project implementation in general" (Project implementation Review 1985, Kenya). Similar findings seem to recur in more recent reports.

In a Annual report, on Provincial Planning Monitoring and Evaluation, Eastern Province, 2009/2010, under report on Ministry of Education stated that "Challenges in implementing the economic stimulus were:-Most of the schools had not awarded contracts, some District Education Boards chose as many as 5 centers, hence missing the main objective of the project goals which was to have a school in the model of a national school in the area, the Ministry of Works officials had not been readily available to give technical advice, the selection of some centers had been hampered by sectarian interests, many school managers lacked skills in management of projects of such a high magnitude". In a monitoring and evaluation report of Tseikuru District, Ref: TSE/ESP/VOL1 (1), (2011) the overall economic stimulus project performance in implementation was rated below 56%. The report highlighted the need for redress on issues such as:-lack of timely disbursement of funds, vetting of project beneficiaries, Project implementers to use participatory approach for monitoring and evaluation, Community members to be enlightened about the project so that they can give full support, Project implementers to stick to project time frame, additional funds to be availed for sustainability of the project. Low Utilization of donor funds had been reported by treasury and also by project supervision missions in many projects reports, GOK/ IFAD mission, (2010). The Daily Nation of 26 January, 2011 report on community development fund (CDF), stated, "Millions lying in banks unused".

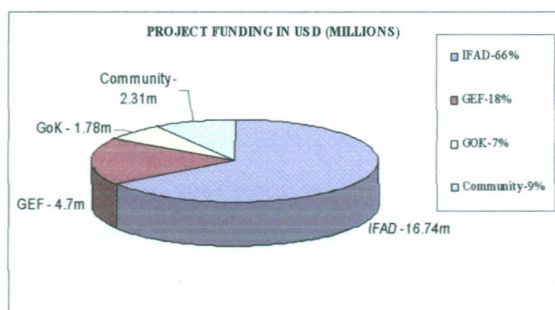
Low utilization of funds could be an indicator that the rate of project implementation in CDF Projects was low. In determining causes of project failure or success, one would wish to look at the project Implementation process to establish whether project Management techniques and processes are applied and the factors that influence effective project implementation.

Project management is accomplished through the use of the processes such as initiating, planning, executing, controlling and closing (Cook and Tate, 2008). Thus project management involves balancing competing demands among scope, time, costs, risk and quality and on the other hand stakeholders with different needs, identified requirements and expectations. The benefits of managing a project are: Quicker completion, more effective execution, more reliable cost and schedule estimates, reduced risks and reduced cost. A project is undertaken to achieve a purpose. Planning is an important step in project life cycle and as the adage says “failure to plan is to plan to fail’ (Method 123, 2010). Planning involves creating a: project plan outlining the activities, tasks dependencies and timeframe, resource plan, financial plan, quality plan, risk plan, acceptance plan, communication plan and procurement plan. The Implementation of the plans results in the production of the deliverables. A lot of literature has been written on the study of project management yet the issue of project failures due to poor implementation still remains a common occurrence. Ensuring success in project implementation remains a concern to the Financiers, Donors and Stakeholders. While as some projects have performed poorly others have been successful and as the saying goes “in the midst of the turbulent waters there are sailors”. Mount Kenya East pilot Project had been reported to have performed well.

### 1.1.1 Mount Kenya East Pilot Project for Natural Resource Management (MKEPP).

The project was a seven-year project funded by the Government of Kenya (GOK), International Fund for Agriculture Development (IFAD), Global Environmental Facility (GEF) and the local community.

**Fig.1. 1: Breakdown of Project Funding by Source**



*Source: Appraisal Report, 2003*

The project was being implemented in 11 Districts in the region East of Mount Kenya. The overall goal of the project was to reduce poverty through improved food security and improving levels of income to farmers. This was to be achieved by promoting more effective use of natural resources, improving access to water and introducing better farming and water management practices for sustainable use of land and water resources.

The project was a government led initiative and was in the final year of implementation. It aimed at reducing poverty of a target group of 580,000 people - very poor, poor and at risk of falling into poverty while promoting a more effective use of natural resources and improved agricultural practices. The project covered selected river basins within Mount Kenya East Region. The project design directly addressed issues of millennium Development Goals(MDG) 1,3 and 7 and the frame indirectly also addressed all other MDGs. The project was in line with GOKs' poverty reduction strategy paper 2001(PRSP), Economic Recovery strategy(ERS), Strategy for Revitalization of Agriculture(SRA), Agricultural sector development strategy(ASDS) and vision 2030. Mount Kenya East Project had been rated to be a project on the right path to success.

The provincial supervision mission of 19<sup>th</sup> April – 28<sup>th</sup> April 2010 in their back to office report stated that *'The project coordination was very efficient and effective in service delivery to the community'*. Also the project midterm review report, on the overall project performance and outreach, stated that- *'The midterm review evaluates the performance of the project as satisfactory and that there was likelihood the project goal and objects set at appraisal would be achieved to a great extend'* hence the researcher was interested in finding out about what were the factors that influence project success and how they influenced project implementation. The study aimed at examining the project implementation process with a focusing on the Mt Kenya East Pilot Project for Natural Resource management (MKEPP). It was to identify and analyze attributes that greatly influenced successful implementation of the project. The background understanding was that applicable lessons learnt from a successful project when well captured and analyzed become useful input in the planning, design, implementation and closing up of future projects.

## **1.2 Statement of the problem**

The project concept was not new and it dates back to the time of the caveman (Kohli and Chitkara, 2008). Most facilities, products and services are created through projects. A project is a temporary endeavor undertaken to create a unique product, service or result (American National standard, ANSI/PMI 99-001-2004). A project has a life cycle, which involves project initiation, project-planning process; project execution and project close out. Project management is the planning, monitoring and controlling of all aspects of a project and motivation of all those involved in it to achieve the project objective on time and to the specified costs, quality and performance.

Successful projects are notable, like the good roads/superhighways, the outstanding construction facilities we see around us and the effective and efficient service delivery systems we observe. Every project manager would wish to implement a successful project. But numerous incomplete projects (white elephants) 'abandoned projects, poorly constructed projects (roads, buildings), and other Project failures are common features in our print and electronic media, this is despite the projects having consumed large sums of public or private money resources.

Project failure is a costly affair and destabilizes the organization as a whole. Project failure leads to unfulfilled goals, waste of resources, time and disappointment to the potential beneficiaries. On the other hand project success creates desirable facilities or provision of services, delivered in time, within budget and of the required quality. A successful project results in a satisfied client/customer. There was need therefore to understand clearly the factors that affect project success and how they influence the implementation of projects.

Mugambi (2008), researched on challenges of project implementation of a declining community based goat breeding project in Meru. Muchai, (2003) investigated on causes of failure and ways of improving performance of small enterprises in Limuru. Fred Angel (2011) wrote on "leading a successful customer information system". Evolutionary consulting Inc presented "the secret to a successful Structural adjustment programme implementation'. The researchers' concern was to know the secret of project success in a project in natural resource management, what were the factors that influenced successful implementation of a natural resource project and how were the factors influencing the success of project implementation?

Mount Kenya East pilot project was an ongoing project in the final year of implementation and had been described by various assessors as a project that was on a success course. The GOK/IFAD supervision mission of 14<sup>th</sup> – 24<sup>th</sup> October 2010 in their *aide-memoire* stated ' *The overall performance of the project was rated satisfactory and as a pilot, the project had generated lessons which if well captured and analyzed would enhance the design of similar projects for sustainable natural resources management and rural poverty reduction*' The researcher established that no academic study had been undertaken on Mount Kenya East Pilot Project in Eastern province; the project performance, the project environment, location and the multidisciplinary nature of the project attracted the attention for a study.

The purpose of the study was to identify factors influencing project implementation and to establish how these factors influenced effective project implementation. The findings of the study are useful to future project implementers and other stakeholders, in guiding the project management process toward successful project undertaking.

### **1.3 Objective of the Study**

#### **1.3.1 General Objective**

The General objective of the study was to identify factors influencing the implementation of Natural resource management projects in Kenya and establish how the factors influenced project implementation with a focus on Mt Kenya East Pilot Project (MKEPP).

#### **1.3.2 Specific Objective to the Study**

The specific objectives of the study were:-

- i. To determine how knowledge on project management skills influenced project implementation of MKEPP.
- ii. To find out how project planning, organization and communication influenced project implementation of MKEPP.
- iii. To examine how financial management and budgeting influenced project implementation of MKEPP.
- iv. To find out how stakeholder involvement influenced project implementation of MKEPP.

### **1.4 Research Questions**

The research was guided by the following research questions:-

- (i) How did application of project management skill influence project implementation?
- (ii) How did effective planning, Organization and communication influence project implementation?
- (iii) How did financial management and budgeting influence project implementation?
- (iv) How did stakeholder involvement influence effective project implementation?

## **1.5 Significance of the Study**

The study was to identify factors that influenced project implementation and to demonstrate how effective management of these factors would contribute to success in project implementation. The findings of the study are useful to: - Project managers and project implementers in ensuring successful Project undertaking, Donors-in deciding on funding priorities, Development partners-in guiding project processes, Government departments-when implementing similar projects, Stakeholders and other interested project management teams in understanding the important factors that influence project success, the academia for the literature is useful for review by future researchers.

## **1.6 Scope of the study**

The study was on project implementation process focusing on Mt Kenya East Pilot Project for Natural resource management. The project was being implemented in 11 Districts lying on East of Mt Kenya. The Districts were - Embu West, Embu East, Mbeere South, Mbeere North, Meru South, Maara, Tharaka South, Tharaka North, Imenti South, Meru Central and Imenti North. It involved the River basins of – Kapingazi, Ena, Tungu, Mutonga and Kathita. These rivers originated from Mount Kenya and flowed down to drain into Tana River.

In the course of the flow of the rivers through the Districts there was environmental degradation leading to erosion and river pollution. This was affecting the water volume and subsequently affecting the communities downstream who relied on the water for consumption and for their Livestock.

## **1.7 Limitation and assumption of the study**

### **1.7.1 Limitations**

The limitation to the study included - the utilization secondary data collected from Project management unit and the government departments implementing the project. The accuracy and reliability of secondary data could not be ascertained. The area of project coverage was large (covering 11 large districts) hence Financial resources to cover the entire region were limiting. Time factor was limiting as it took long to cover implementers and stakeholders in the region. Some areas in the region were not easily accessible due to the state of rural roads. However, most of the limitations were mitigated through the selection of an acceptable representative study sample.

### **1.7.2 Assumption**

The following were the assumptions to the study; (i) that respondent would cooperate and be willing to fill the Questionnaires (ii) that the responses would be Truthful (iii) that the Questionnaires would be returned back for analysis.

## CHAPTER TWO

### 2.0 LITERATURE REVIEW

The literature review involved careful study of Academic journals, books, government records, conference proceedings and other relevant literature. The goal of literature review was to assist the researcher in developing a thorough understanding and insight into previous works and trends that have emerged. The literature sources were the internet, text books, journals, project records, government reports and conference papers.

#### 2.1 Introduction

A project is a temporary endeavor undertaken to create a unique product, service or result. Cooke and Tate (2008), state that projects are temporary (have a defined beginning and a defined end) and are unique as compared to operations which are ongoing and repetitive-routine business activities.

According to Nagarajan (2010), major characteristics of a project are: (a) has objective or mission (b) has a Life Cycle (c) has defined time limit. (d) Uniqueness-every project is unique (e) Implemented with Team Work. (f) Complexity –it's a complex set of activities (g) Sub-Contracting- some activities are entrusted to sub-contractors (h) has risk and Uncertainty (i) Customer Specific Nature (J) Change –A project is not rigid in its life span (k) Response to Environment-it takes shape in response to environment (l) forecasting (m) rational choice – chosen among the available avenues of investment (n) Principle of succession- more about the project known with passage of time (o) Optimality-always aimed at optimum utilization of resources. (p) has Control Mechanism.-To ensure completion in time, within cost, of quality and reliability (q) Multi- disciplinary in nature.(r) Conflict do occur in the process of implementation. (s) Projects are part of a larger entity.

The resources required for completing a project are men, material, money and time. Projects are categorized in many ways as by Type nature of work, project completion time, project budget cost, level of risk and mode of procurement. Project management is today being identified by many sectors as a new key business process. Project management of U.S.A. describes project management as the application of knowledge, skills, tools and techniques to project activities to meet project requirement.

The British standard (BS 6079, 2000), describe project management as the planning, monitoring and controlling of all aspects of a project and motivation of all those involve in it to achieve the project objective on time and to the specified costs, quality and performance. Thus project management involves balancing competing demands among scope, time, costs, risk and quality and on the other hand stakeholders with different needs, identified requirements and expectations. Project management is accomplished through the use of the processes such as initiating, planning, executing, controlling and closing (Helen and Karen, 2008).The benefits of managing a project are: Quicker completion, more effective execution, more reliable cost and schedule estimates reduced risks and reduced cost.

## **2.2 Project life cycle**

All projects go through a life cycle comprising of the following phases: - Project conception (identification), Project design (planning and organization), Project implementation and Project close out. Westland, (2007) refers to four stages of Project life cycle as-project initiation, project planning, Project execution and project closure. .

### **2.2.1 Project identification**

It is the first step in the project management cycle. Project identification is the process of checking if candidate projects should be undertaken by the organization. The aim is to identify an issue that a project could address. As the saying goes” if you do not know where you are going any road will take you there” or as in what in the Ancient Rome, Pliny said that “If you do not know what port you are sailing to, then any wind is a fair wind” .Project identification is a very important step in the project cycle. It has been said that the number one reason why projects fail is that they were never actually possible in the first place, Connell(2007). Worthwhile project on Project identification are subjected to project preparation which includes: - pre- feasibility studies, Functional support studies, Feasibility studies and detailed project analysis. The feasibility studies target areas like -Economic, Technical, Managerial Organizational, commercial and social acceptance.

### **2.2.2 Project design (planning)**

Project planning involves four very important variables –What, when, work and quality. A plan involves building the sequence of events. Project design can be expressed as “Thinking a project through ”.

A project design is the conceptual structure within which a project is conducted. It constitutes the blue print for the project and includes an outline of what will be done. According to Devendra, (2008), project design attempts to answer the following Questions:- What is the project expected to accomplish? ,Why is the project being undertaken?, How is the project to be implemented?, Who is responsible for project implementation?, Who are the intended beneficiaries?, Time within which the project will be accomplished., What are the resources required?, What external factors are necessary for project success?

Project design is commonly presented in a Logical framework (log frame). This is a management tool which facilitates planning, execution and evaluation of a project. It provides a summary of a Project in the form of a matrix which remains valid during project implementation but can be modified. The log frame has horizontal and vertical axis. The vertical axis expresses the Goal of the project, the purpose, objectives, outputs and activities. The horizontal axis consists of - the Narrative summary, the objectively verifiable indicators the means of identification and the assumptions. The indicators have to be specific, measurable, and achievable, realistic and time bound (SMART).

### **2.2.3 Project implementation**

This may be regarded as a process by which a set of predetermined activities is carried out in a planned manner with a view of achieving certain established objective. It is the process of actual effort to the fulfillment of plans and policies through concrete actions and measures. The project implementation phase is typically the longest phase of project life cycle.

According to Devendra (2008),Factors affecting project implementation are (i)Technical- a production function involved in skill and experiences and is technical in nature(ii)Economic and financial- need for investment and effect on community economic level (iii)Commercial factors- Marketing of products implying buying and selling(iv)Social-Cultural factors- About religion, custom, traditions, taboos (v)Political factors –political good will is required (vi)Managerial factor- managerial skill required(vii) Peoples participation – should have active and wide spread participation of it's clientele(viii)Integrated and co ordination- various Government and non government. Organization (ix) Undertaking development project in the same area.

Project implementation is not without constraint. Some of the constraints encountered are:- unrealistic deadline, resource availability, Human Factor, Communication problem and optimistic estimates.

#### **2.2.4 Project close out**

After completion of the project the contractor or project team hands over the project to the client (Kohli and Chitkara, 2008). It involves releasing the final deliverables to the customer. The work completed, the final deliverables or product, as well as the resources are handed over to the client/beneficiaries. Any lessons learned are recorded, and files are stored for future reference.

### **2.3 Project Implementation Management**

Project implementation involves a series of management processes to monitor and control the activities being undertaken by the project team. Implementation is the realization of an application, or execution of a plan, idea, model, design, specification, standard algorithm or policy, (Wikipedia) According to Free Merriam Webster, implementation is carrying out, accomplishing, especially to give practical effect to and ensure of actual fulfillment by concrete measures. Hut (2008) says that projects take shape during the implementation phase; the phase involves the construction of actual project results. Thus implementation is the stage where all the planned activities are put into action. The project implementers should be guided by the question, "How best can we get there?"

Project implementation is achieved thorough management of, skills, planning, budgeting and scheduling, financial resources, organizational structure, communication, team work, risk, quality, stakeholder support and monitoring and evaluation.

#### **2.3.1 Project management skills**

Project managers should have the managerial skills of planning, organizing, delegating and controlling. Since projects are dynamic in nature, planning is an ongoing activity in projects. Project managers should have the skills to – plan, schedule activities, ensure resources are made available, motivate, monitor, identify deviations, ensure corrective actions are taken, communicate, manage conflicts, maintain good liaison, prepare progress reports and make decision, Project management is a carefully planned and organized effort to accomplish a successful project (Lonergan,2007).

Project management hence is the art and science of managing all aspects of the projects to achieve the project mission and objectives, within the specified time, budget costs and predefined quality specifications; working efficiently, effectively and ethically in the changing project environment (Kohli and Chitkara ,2008 )

### **2.3.2 Project planning, budgeting and scheduling**

Project planning involves detailing the project into activities, estimating Resources and Time for each activity and describing activity interrelationships. The tool of Work Breakdown Structure (WBS) supports this. Scheduling requires the details of starting and completion dates for each activity; this can be illustrated in a network. A network is a graphic representation of a project showing the flow and sequence of activities and events. There are two network models – project evaluation and review techniques (PERT) and critical path method (CPM). The two networks are useful tools in planning, analyzing, scheduling and controlling the progress and completion of project e.g. construction of a highway or a multistory building.

A **budget** is a statement of monetary plans that is prepared in advance of a forthcoming period, usually one year (Brookson, 2000). Budgets create a framework within which organizations can work. They encourage individuals and departments to look and plan ahead using a standard agenda. The basic elements of budget are:-a comprehensive and coordinated plan, expressed in financial terms, a plan for the firms operations and resources and that it is a future plan for a specified period. The Six main aims of budgets are: - Planning, Coordination, Communication, Motivation, Control and Evaluation.

### **2.3.3 Project financial management**

A project requires resources. Funds are required to be set aside to create resources for the **execution** of the project. Without Finance there would probably be no project. Funds are required for capital cost and for working capital requirement for operations and maintenance.

There two broad sources of finance available to a firm:- i) Shareholders fund (Equity fund) (ii) Loan funds (Debt fund), (Chandra, 2008) Project owners aim at raising finances for the following reasons: - To raise the necessary amount of money required at the time and in currencies required by the Project, to minimize cost, to minimize risks by shearing them with other parties in the project, to maintain flexibility and control, including the possibility of rescheduling if necessary,

to be able to pay dividend to shareholders. The Main sources of debt finances are: - Commercial banks, Multilateral lending institutions e.g. World Bank, Suppliers of equipment and services for the project, Suppliers of raw materials for the project, buyers of Output from the project, Aid Institutions. Capital budgeting techniques are used for investment project evaluation and selection. They Include: - (i) Pay back period (ii) Internal rate of return (iii) Net present value (iv) Profitability index. Return on investment can be viewed from the project point of view or shareholders/ beneficiary point of view (including creating social amenities).

### **Project procurement management**

It is the process of purchasing goods in a systematic and methodical way. A project should have a procurement plan. The procurement plan provides a detailed description of products to be acquired from the suppliers, the justification of acquiring each product from the source and the schedule for product delivery.

### **2.3.4 Project organization management**

Organization is the function of dividing and grouping the activities of the organization and establishing the authority-responsibility relationship between them (Nagarajan, 2010). Organization structure is about the allocation of tasks and establishment of authority-responsibility relationship between the members of the organization.

#### **The project organizational structure could be:-**

**Functional organization**-it brings together in one department all those who are engaged in related activities.

**Production organization**-All the activities, skills and expertise required to produce and market a particular product are grouped together under a single head.

**Matrix organization** –is an attempt to combine the merits of functional and product forms of organization.

**Modified Matrix Organization**-A manager of project managers (director) is entrusted with exclusive charge of the projects handled by the organization. The director reports to the general manager and controls all the project managers.

**Pure project organization**-In this organization structure the project manager is in total control of all other departments.

### **2.3.5 Communication Management**

Constant effective communication among all project stakeholders is necessary for project implementation (Godfrey, 2006). Communication is the process whereby information is transferred from a sender to a receiver. It includes – reporting on project status to the customers, holding regular project status meeting with team members to keep them informed of the progress made towards the goalpost and what lies ahead. Communication may happen verbally, or through email, as well as through charters, project plan, addenda, letters and status reports. A project should have a communication strategy. One of the roles of Project managers is to set the pace and tone for work by communicating what is expected of the team. Sharing knowledge is empowering project stakeholders.

### **2.3.6 Stakeholders support**

Project stakeholders are those individuals and organizations that are actively involved in the project implementation process. The stakeholders include the project implementers, the beneficiaries, the suppliers, donors, Government and development partners. Customer role need to be managed carefully. According to Cooke and Tate (2008), it is important for project managers to address and manage customer expectation, define customer criteria for product acceptance, manage customer requirement, select tools and techniques for customer involvement.

### **2.3.7 Team Development.**

Working as a team produces synergy. To create a team one should decide on what kind of a team is best suited to the work of the project. The team is created by deciding how many individual or groups will be needed and their composition. It is important to define how they will work together including- their roles, responsibility, assignment of deliverables, level of authority organization chart indicating reporting relationship. Henry Ford said “coming together is a beginning, keeping together is progress and working together is success”.

### **2.3.8 project risk management**

Project risk is the possibility that the project may go wrong or at least not produce the desired results. Project risk management is the systematic process of identifying analyzing and responding to risk by applying risk management principles and processes. Risk analysis is the process of identifying where the hot spots on the project are likely to be.

Risk response development falls into the following: -**Avoidance**, **mitigation** and **Acceptance**. The management may respond to risk in the following ways: -Use preventive measures to minimize risk, implementing contingency plans, may reduce doubts by investigation through use full information, may transfer risk to another asset, through risk allocations in contractual agreements by setting contingencies to budget allocation.

**Types of project risk are:**-Financial-e.g. Price increases interest rate adjustments, Withdrawal of funding, increase in taxes, Legal- e.g. legal requirements, claims from contractors, Organizational- e.g. lack of project procedure, modified procedures, Technical-e.g. Incorrect assessment of technology, new innovation, substandard work, Social-e.g. Community involvement, strikes, Political-e.g. Changes in political climate and/ or, legislation Environmental-e.g. unusual climate condition, heavier pollution.

### **2.3.9 Quality Management**

Quality is generally defined as a measure of excellence or state of being free from defects, deficiencies and significant variation from the expected. It is about meeting the agreed on customer requirement. It has also been defined as “The totality of features and characteristics of a product or service that bears its ability to satisfy stated implied needs” ISO 8402, (1986) Quality objectives are defined in terms of the specifications and its end use. Quality planning involves identifying the quality standards that are relevant to the project and determining how conformance to these standards can be met. Quality could be based on:-perception, product attribute, good for use, conforms to specification and best value. ISO 9000, (2000) of international organization for standards is a major step forward in establishing a quality management system that can be adopted by any organization.

### **2.4 Project monitoring and evaluation**

Project monitoring is an ongoing process in which project activities are constantly assessed. It is about collecting information about what is happening in the project; also described as systematic and continuous assessment of progress over a given period of time and takes place throughout the implementation period of the project. Evaluation is a periodic assessment of the efficiency, effectiveness, impact, sustainability and relevance of a project in the context of stated objectives. It is usually undertaken as an independent examination with a view to drawing lessons that may guide future decision-making.

An important tool employed in undertaking project evaluation is the assessment of project strength, weakness, opportunity and threats (SWOT analysis). It is a systematic determination of merit, worth and significance of something or someone using criteria against a set of standard (Wikipedia). Evaluation has also been defined as an assessment or judgment of the value of a piece of work; an organization or a service. Its main purpose is to help an organization reflect what it is trying to achieve, assessing how far it is succeeding and identify required changes (Sarah, 2002).

Evaluation has also been defined as a systematic acquisition and assessment of information to provide useful feedback about some object (Trochim, 2006). Thus, Project evaluation represents a systematic and objective assessment of ongoing or completed project or programs in terms of their design implementation and results. Evaluation also deals with strategic issues such as project relevance, effectiveness, efficiency in the light of specified objective as well as project impact and sustainability.

In general, there are two main categories of evaluation of development projects:-

(i) Formative Evaluation – examines the development of the project and may lead to changes in the way the project is structured and carried out, (ii) Summative Evaluation – It looks at what a Project has actually accomplished in terms of its stated goals. It could be, end evaluation and aim to establish the situation when external aid is terminated and to identify the possible need for follow-up activities either by the Government, donors or project staff or ex-post evaluation - carried out two to five years after external support is terminated. The main purpose is to assess what lasting impact the project would have.

## **2.5 Project success**

A successful project is one, which is finished on time, within the budget and meeting the requirement. Hence a successful project is all about happy stakeholders. According to Martin Marana, the characteristics of successful project are:- Clear definition of the situation or problem that the project attempts to improve or solve, with project objectives stated clearly and succinctly, description of the local environment, special attention given to the design phase of the project by consulting local stakeholders and beneficiaries and assessing their capability to contribute to project implementation, use extensive experience gained in similar projects and

activities, good project document, containing clearly stated objectives, responsibilities, deliverables and expectations, detailed work plan and time table for implementation of the project activities and the inclusion of a budget that is adequate to carry out those activities, roles of project staff clearly defined, clear accountability of the all project staff, information sharing during all phases of the project cycle with all project staff and stakeholders, capacity development for different stakeholders relating to project implementation, participation of local consultants during the entire project life cycle, pay attention to all stakeholders involved in project design and implementation, potential beneficiaries as well as other potentially affected be consulted and informed through out the project life cycle, adequate training for project staff, monitor project results and perform mid –term and end term evaluation. Fred Angel (2011), presents three basic strategies to make Customer Information System successful;- Set expectations and communicate effectively, manage and resolve risk and give good leadership. Evolutionary consulting Inc presents eight secretes to a successful structural adjustment program as:-Communication, Full corporate management support, Take project plan and methodology as guidance and helping tool, Make a proper scope, Motivate, Appreciate, Reward your people, Manage change ,Beware of politics and Find excellent resources.

Lourdes Godfrey (2006) states that Key success factors to effective project management are:- Effective project management, realistic expectations, a realistic project plan, knowledge-able resources, recognize risks and plan accordingly, stakeholder management, team management, change management, test everything and communicate.

## **2.6 Project failure**

This is about a project failing to achieve its mission of creating a facility or service within the specified cost, time and specification. Connel, (2007), gives twelve reasons why a project fails as follows: (i)The project was never actually possible in the first place (ii).The goal of the project was not defined properly (iii)The goal of the project was defined properly but the changes to it were not controlled (iv) Stakeholder or stakeholder’s win conditions were not identified (v)The project was planned properly, but then it was not resourced as planned(vi)The project was planned properly but with no contingency(vii) The project was not planned properly(viii)The project was not led properly(ix)The expectations of project participants were not managed(x) The project was planned properly but the progress against the plan was not monitored properly(xi)The project was planned properly but the progress against the play was not monitored

properly(xii)Project reporting was inadequate or non existent(xiii)When the project got into trouble, people believed the problem could be solved by some simple action e.g. Work harder, extend the deadline or add more resources.

Devendra (2008), presented 15 reasons for failure of projects as;- Real problem of beneficiaries not addressed, Social-cultural values of the people not respected, Less involvement of stakeholders in the design of the project, objectives not clearly and realistically defined, no distinction between specific objectives and the means to arrive at those objectives, insufficient analysis of project ideas before deciding to move to the feasibility phase, project not embedded in a rational supporting framework, Use of inappropriate techniques, Local management knowledge not taken into account, risk not anticipated., economic and financial aspects of the projects not elaborated, lack of adequate information and effective monitoring, too many 'managers' in different places responsible for the same project cycle, insufficient clarity regarding the division of responsibility and application of rules and procedures rather than managing projects.

According to Kohli and Chitkara (2008), the main causes of project failures are:-Inadequate project formulation, poor planning for implementation, lack of proper contract planning and management and lack of project management during execution.

## **2.7 Review of previous studies**

Mugambi (2008) undertook a study on challenges of project implementation of community based goat breeding project in Meru. The project was motivated by concerns raised by the community and policy makers on the declining performance of the project. Among his findings was that Leadership was ineffective, financial management was wanting and information communication was a problem.

Muchai (2003) undertook a study on investigation of the causes of failure and ways of improving performance of small Enterprises. The researcher concluded that finance was a challenge to small dairy farmers, that lack of business related training and poor management practices were the cause of the failure in the performance of the enterprise.

Asule (1999) undertook a study on Land Use Management for house hold food security in Sabatia Division of Vihiga District. Among the findings were that farmers lacked income, there was over reliance of own food production and were not utilizing alternative sources of foods.

In the determination of the causes of project failure or success, one would wish to look at the project implementation process to establish whether project management techniques and processes are applied and the factors that influence effective project implementation.

It was established that there had not been any academic study carried out on the factors that influence project implementation on Mount Kenya East Pilot Project for Natural Resource Management.

## **2.8 Chapter summary and gaps to be filled by the study.**

The chapter highlighted that projects are temporary (have a defined beginning and a defined end) and are unique as compared to operations which are ongoing and repetitive-routine business activities. A Project has a life cycle which involves project initiation, project planning process; project execution and project close out. Project management is the art and science of managing all aspects of the projects to achieve the project mission and objectives, within the specified time, budget costs and predefined quality specifications ; working efficiently, effectively and ethically in the changing project environment. Thus success of a project depends to a great extent on the efficient and effective management of the physical resources of man, material and machinery and how the project is organized. Media reports on abandoned projects, collapsing buildings and bridges, newly constructed roads having potholes and other project failures have become a frequent occurrence.

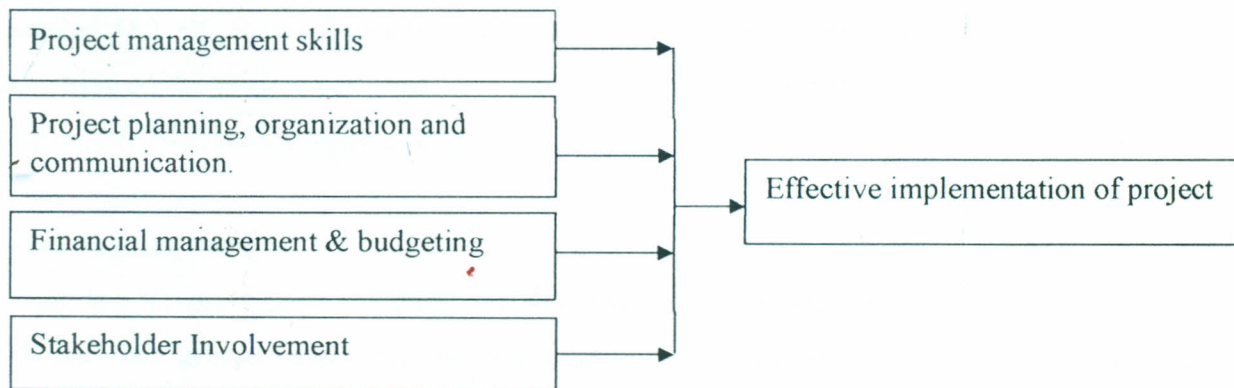
Further more many projects have been accomplished leaving no tangible outcome or impact in the community of the intended beneficiaries. There are also projects that are completed successfully to the satisfaction of the client/beneficiary. Project success is an admirable thing to all project implementers. By studying a successful project the researcher is able to capture important factors that influence project implementation and these would assist future project implementers in ensuring success of their projects. MKEEP had been rated as such a project on the right course.

The GOK/IFAD mission of 14-24 October (2010), had this to say about the project. “The overall performance of the project was rated satisfactory and as a pilot, the project had generated lessons which if well captured and analyzed would enhance the design of a similar project for sustainable natural resource management and rural poverty reduction” No study had been undertaken to capture and analysis these attributes. The researcher therefore aimed at finding out how various management factors influence the success of this project.

The study on the project identified factors that influenced project implementation and revealed how project management processes were being employed in natural resource management to contribute to the success of the project.

**2.9 Conceptual framework:** Independent variables considered were: project managements Skills, Project planning, organization and communication, Project Financial management and budgeting and Stakeholder Involvement. The dependent variable is the effective Implementation of project.

**Figure 2.1: The conceptual framework**



**Independent variable**

**Dependent variable**

Indicators of effective implementations are –completion time, within budget, of Required Quality and a satisfied customer.

Source: Researcher 2011.

## CHAPTER THREE

### **3.0 RESEARCH METHODOLOGY**

This chapter discusses the procedure and strategies that were used in the research study. The research methodology was presented under, Research design, target population; sampling design, process of data collection-Tools, Techniques and Data analysis.

#### **3.1 Research design**

The study was conducted by descriptive and exploratory research; it was conducted through review of literature, collection of secondary data from the project management unit and participating departments, collection of primary data through administration of questionnaires to representative random samples of implementers and beneficiary stakeholders. This was followed by data analysis, interpretation of the findings, drawing conclusions from the findings and finally making recommendations based on objective analysis of the data.

#### **3.2 Target population**

The target population involved: - **5** Project coordinators, **96** District facilitating team members and **45** Chairmen of Focal area development committees. Thus there were a total of **146** potential respondents in these three groups. There was also the group of stakeholders which include the targeted 580,000 potential beneficiaries, from whom the researcher sought an opinion as to how they viewed the project performance. (Source of data: MKEPP Project Implementation manual, (2005), MKEPP annual report (2010).

#### **3.3 Sampling design**

A random or probability sampling method was applied. Considering that the population was divided into groups, depending on the roles members played in project implementation, a stratified random sampling method was the most appropriate for the study. The method ensured that the sample was representative for the various groups and that there were adequate cases for subgroup analysis.

The strata considered were the various groups i.e. Project coordinators, District facilitating teams, chairmen of Focal development area committee (FDAC) and the stakeholders. The sample size was adequate to give a scientifically acceptable level of representation of the population.

According to Brewerton and Millard (2006) where the population is less than 50, it is recommended that the sample size should be taken to be the entire population. They further stated that in economic studies a sampling size of 30 is considered adequate. Mugenda and Mugenda (2003) stated that, Gay suggested that for correlation research, 30 cases or more are required.

**Table 3.1 Sample size**

<b>GROUP</b>	<b>Population</b>	<b>Sample size</b>
Project Coordinators	5	5
District facilitating team members	96	47
Focal area development Committee chairmen	45	26
Stakeholders		30
<b>TOTAL</b>		<b>108</b>

Source: (Researcher 2011)

**Decision on sample size:**

- For project coordinators they were 5 (thus less than 50) and hence the researcher used the whole group.
- For Chairmen of FDAC they were 45 hence because of wide distribution of respondents across the 11 districts, a sample of six Districts was randomly selected and these Districts had a total of 26 FDAC Chairmen.
- For DFT members the actual sample size was calculated using the indicated method.

Extract from the table in Brewerton literature was as follows:-

Population	sample size @95% confidence level
50	44
100	79
150	108
200	132

For DFT -  $\frac{44 \times 100}{95} = 46.3$  (assuming 95% response rate). (Also see appendix 2)

95

Stakeholders for the purpose of this research were taken to be the targeted beneficiaries who were 580,000. Since for this group the researcher sought an opinion from stakeholders about the performance of the project, the researcher used a sample size of 30 respondents i.e. About 5 respondents from each of the 6 Districts (randomly selected from the beneficiary stakeholders).

There were 11 implementing districts, taking the maximum number of DFT members per district were 9, then the required sample size was  $47/9 = 5.22$  – about 6 districts.

**Total numbers of questionnaires issued were: 5+47+26+30=108**

To determine the respondents from each District and for each Group, a simple random approach was adapted.

### **3.4 Data collection tools and techniques**

Secondary data was sourced from Project reports at the Project Management Unit and Government records held in the offices of the departments of various ministries that were implementing the project. Primary data was collected by administering questionnaires, of closed and open ended questions, to selected representative random sample of respondents. The project coordinating team, project Facilitating team, the FDAC chairmen, and Stakeholders filled the questionnaires. Drop and pick method of questionnaire administration was applied.

### **3.5 Data analysis.**

Data analysis involved 5 stages namely: data coding, data entry, descriptive analysis, cross tabulation and testing relationships between variables. Correlation is an inter-relationship or association between variables. The variables could be, perfectly correlated (move in perfect unison), partly correlated (some inter-relationship but not exact) or uncorrelated (no relationship between their movement). Data analysis was done using both quantitative and qualitative analysis. Likert scale for attitude measurement was used. Descriptive statistical methods, which included - measures of central tendency (mean, mode, median), Measures of dispersion (variance and standard deviation) and Percentages were used. Statistical Package for Social Sciences (SPSS) was used to aid in research analysis.

Data was **presented** using tables, pie charts and graphs in order to support easy to read, quick comprehension and comparison of data.

## CHAPTER FOUR

### 4.0 DATA ANALYSIS AND FINDINGS

#### 4.1 Introduction

This chapter is about data analysis and findings. Data analysis involves a careful and detailed examination of data in order to understand more about it. The collected data was subjected to the process involving the stages of; data cleaning, coding, data entry in a computer and data analysis using the Statistical Package for Social Sciences (SPSS). The data analysis process also involved a number of closely related operations such as establishment of categories, then the application of these categories to raw data through coding, tabulation and then drawing statistical inferences. (Kothari, 2008). Findings are the explanation on the meaning of the processed data.

MKEEP project was being implemented in 11 Districts of the Eastern Province of Kenya, in the region falling to the East of Mt Kenya. After considering the various limitations as stated in Chapter three, a representative sample size of 6 Districts was randomly selected for the purpose of this study. Data was collected from respondents in the Project Management Unit and from the six randomly selected Districts. The selected Districts were: - (i) Mbeere North (ii) Meru South (iii) Maara (iv) Meru South (v) Meru Central and (vi) Imenti North

Two questionnaires were used; one of which was administered to the project coordinators, the District Facilitating Team (DFT) and the Chairmen of Focal Development Area Committees (FDACs); the second Questionnaire was administered to the group of beneficiary stakeholders.

#### 4.2 Background information

##### 4.2.1 Response rate

A total of 108 Questionnaires were issued to; 5 Project coordinators, 47 District facilitating team members, 26 Chairmen of FDACs and to 30 beneficiary stakeholders.

**Table 4.1: Response rate**

Questionnaires	No	percentage
Returned Questionnaires	106	98.1
Questionnaires Not returned	2	1.9

Source: (Researcher 2011)

Response rate to the Questionnaires was good at 98.1 %. The two questionnaires that were not returned were of Chairmen of FDAC group. The Focal Development Areas were widely spread out in the rural area. This presented a challenge on time, financial recourses and travelling on rough rural roads to reach the various chairmen. The number of FDAs in districts varied between 3 and 6. Random sampling of Districts to obtain the six districts for the study selected the following districts which had the corresponding number of FDAs.

**Table 4.2: Number of FDAs in the selected districts**

<b>DISTRICT</b>	<b>NUMBER OF FDAs</b>
Mbeere North	4
Meru South	4
Maara	4
Imenti South	6
Meru Central	3
Imenti North	5
<b>Total</b>	<b>26</b>

Source: (Researcher 2011)

The total number of potential respondents from the chairmen of FDACs group was 26 and not the earlier anticipated 30.

#### **4.2.2 Designation**

The five respondents from the Project Management Unit (PMU) were designated as Project coordinators. They were charged with responsibility of coordinating activities of the five MKEPP components; the components were: - the Water Resource management, the Environment conservation, the Rural Livelihoods, the Community empowerment and Coordination and management component. The District Facilitating Team (DFT) was composed of District Departmental heads from the participating districts in the implementation of MKEPP. The DFT respondents to the questionnaires were distributed as indicated in Table 4.3 below.

**Table 4.3: Distribution of DFT members**

Designation	Frequency	Percentage
DAO	6	12.8
DSDO	6	12.8
DVO	7	14.9
DDO	6	12.8
DLPO	6	12.8
DFO	5	10.6
DPC (water)	4	8.5
DEO	3	6.4
DWO (roads)	2	4.2
Not Indicated	2	4.2
<b>Total</b>	<b>47</b>	<b>100</b>

Source: (Researcher 2011)

There was no designation for Stakeholders and chairmen of FDAC. The District Works officer and the District environment officers were regional based as compared to District Agricultural officers and District veterinary officers that were District based. The results indicate that the Questionnaires were well and widely distributed according to the proposal as all the 9 Government departments forming the DFT were represented. The 5 project coordinators also responded to the enquiry.

#### 4.2.3 Position in MKEPP

Respondents were in three MKEPP implementation positions of Coordinators, District Facilitating Team and Chairmen of FDACs. Table 4.4 indicates the distribution.

**Table 4.4: Position in MKEPP.**

Position	Frequency	Percentage
Coordinators	5	6.6
DFT	47	61.8
Chairmen FDACs	24	31.6
<b>Total</b>	<b>76</b>	<b>100</b>

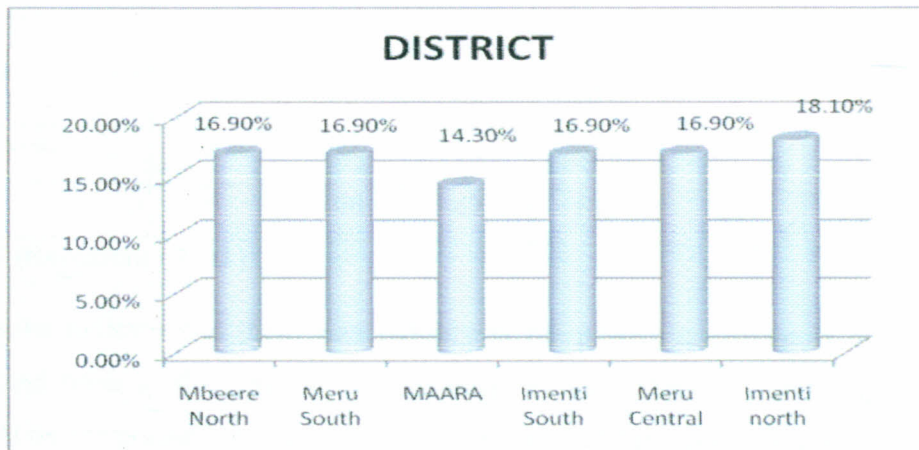
Source: (Researcher 2011)

There was a higher representation of the DFT group (61.8%) which comprised of the steering technical implementation group at the District level. The Coordinators were five, all based at the Project Management Unit (PMU); they were the technical group of middle management level coordinating activities at component level. The Chairmen of FDAC and the stakeholder respondents represented the community who were the beneficiaries of the Project.

#### 4.2.4 Districts

The following was the distribution of the returned questionnaires according to the source District.

**Figure 4.1: District Return**



Source: (Researcher 2011)

The filling of Questionnaires at District level targeted - 47 DFT Members, 26 FDAC Chairmen and 30 beneficiary stakeholders. As observed from Figure 4.1, the distribution was almost equal for all considered Districts.

#### 4.2.5 Involvement in MKEPP

The period the Coordinators, DFT members and Chairmen of FDACs had been involved in MKEPP activities was as in Table 4.5

**Table 4.5: Involvement with MKEPP**

Year	Frequency	Percentage
1	11	14.5
2	11	14.5
3	17	22.4
4	4	5.3
5	8	10.5
Over 5 years	25	32.8
<b>Total</b>	<b>76</b>	<b>100</b>

Source: (Researcher 2011)

Response on this enquiry indicated that 43.3%% of the respondents had been involved in MKEPP activities for five years and over. Further examination of the involvement according to the various groupings provided the data in Table 4.6 below;

**Table 4.6 involvement in MKEPP (Groups)**

Year	Coordinator		DFT		FDA Chairmen		Stakeholders	
	No	%	No	%	No	%	No	%
1	1	20	10	21.3	1	4.2	2	6.7
2			7	14.9	4	16.7	5	16.7
3			8	17.0	8	33.3	10	33.3
4			3	6.4	1	4.2	1	3.3
5	1	20	5	10.6	2	8.3	5	16.7
Over 5 years	3	60	14	29.8	8	33.3	7	23.3
<b>Total</b>	<b>5</b>	<b>100</b>	<b>47</b>	<b>100</b>	<b>24</b>	<b>100</b>	<b>30</b>	<b>100</b>

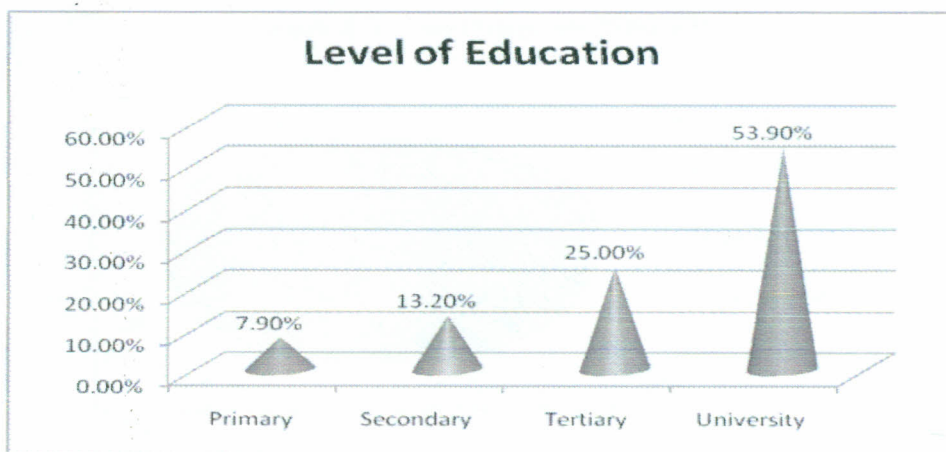
Source: (Researcher 2011)

The results indicate that there was stability in the project coordinators group as most of them (80%) had been in the project for five years or more but the DFT group displayed a wide variation on the period they had been involved in MKEPP. This indicated that there was frequent DFT staff Changes (movement) which could be attributed to Government regular staff transfers.

**4.2.6 Level of Education**

Figure 4.2 and Table 4.7 illustrates the Findings on level of Education for coordinators, DFT members and chairmen of FDACS.

**Figure 4.2: Level of Education**



Source: (Researcher 2011)

It was established that 53.9% of the respondent in the three groups of respondent (the project Coordinators, DFT members and FDAC Chairmen) had university level of education. Only a small proportion of 7.9% of the respondents had primary level of education.

**Table 4.7 level of education (Groups)**

Level	Coordinator		DFT		Chairmen FDAC	
	No	Percentage	No	Percentage	No	Percentage
Primary					6	25.0
Secondary					10	41.7
Tertiary			13	27.7	6	25.0
University	5	100	34	72.3	2	8.3
<b>Total</b>	<b>5</b>	<b>100</b>	<b>47</b>	<b>100</b>	<b>24</b>	<b>100</b>

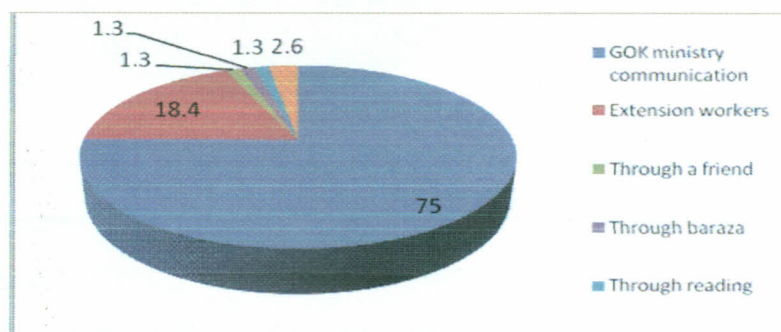
Source: (Researcher2011)

Further examination of Table 4.7 revealed that all the coordinators had university level of Education, the majority of the DFT members (72.3%) had university level of Education and the rest (27.7%) were of Tertiary level. However the majority (66.7%) of FDAC chairmen were of low level of Education (secondary and primary). The results indicated that the middle level managers had good Education background.

#### 4.2.7 Knowledge about MKEPP

Figure 4.3 indicates how the respondents in the groups of the coordinators, DFT members and FDAC Chairmen came to know about MKEPP.

**Figure 4.3: Awareness on MKEPP**



Source: (Researcher 2011)

Majority of the respondents in this category (75%) came to know about MKEPP through government communication while 18.4% of the respondents got to know about MKEPP through extension workers. The response from the beneficiary stakeholders was slightly different as indicated on table 4.8.

**Table 4.8 Stakeholders awareness of MKEPP**

Means	Frequency	Percentage
GOK Ministry communication	6	20
Extension workers	15	50
Through Friends	2	6.7
Through Baraza	7	23.3
<b>Total</b>	<b>30</b>	<b>100</b>

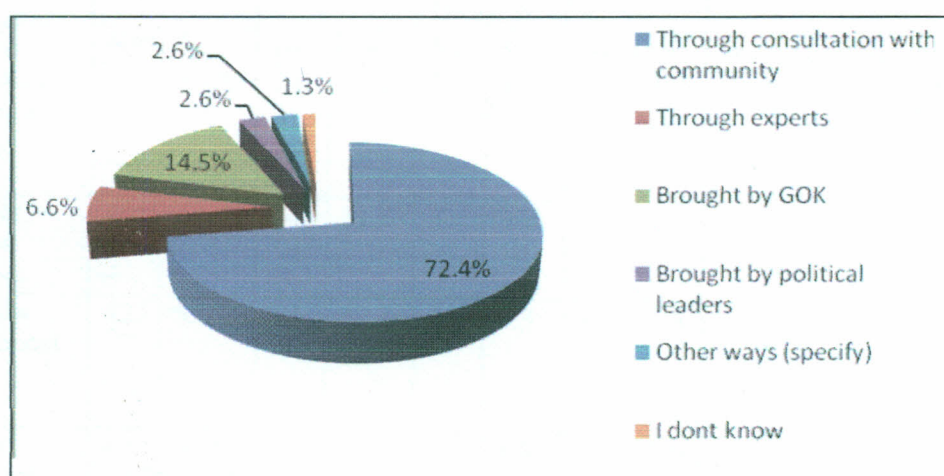
Source: (Researcher 2011)

50% of beneficiary stakeholders got to know about MKEPP through extension workers and another 23.3% through public meetings (Baraza).

#### 4.2.8 Project identification

Figure 4.4 indicates how the groups of Coordinators, DFT members and FDAC Chairmen responded on how MKEPP was identified.

**Figure 4.4: Project Identification**



Source: (researcher 2011)

The findings indicate that 72.4% of the respondents indicated that the project was identified through consultation with community. Another 14.5% of the respondents indicated that the project was identified by the Government. The results concurred with the findings from the stakeholder group on the same issue as indicated on Table 4.9 below.

**Table 4.9 Project identification- stakeholders' view**

Means	Frequency	Percentage
Through Consultation With community	24	80
Through Experts	1	3.3
Brought by GOK	5	16.7
<b>Total</b>	<b>30</b>	<b>100</b>

Source: (researcher 2011)

80% of the stakeholder respondents indicated that MKEPP was identified through consultation with community, 16.7% indicated that the project was identified by Government and only 3.3% of this group of respondents indicated that the project was identified through experts.

### 4.3 FACTORS INFLUENCING PROJECT IMPLEMENTATION

The scale for the purpose of data analysis, under this section was as follows:- strongly agree – 6, Agree – 5, Neither agree or disagree – 4, disagree – 3, Strongly disagree – 2, Not known – 1.

**4.3.1 Management skills** – Table 4.10 represents the responses on Management skills enquiry.

**Table 4.10 Management skills**

Statement	Strongly Agree		Agree		Neither Agree Nor Disagree		Disagree		Strongly Disagree		Not Known		Mean	SD
	No	%	No	%	No	%	No	%	No	%	No	%		
MKEEP implementers are regularly trained to improve on their performance.	49	64.5	24	31.6	1	1.3	1	1.3			1	1.3	5.4	0.6
The project supports capacity building of project implementers	48	63.2	24	31.6	3	3.9					1	1.3	5.6	0.6
There is provision for Backstopping. (technical support to project implementers)	42	55.3	32	42.1	1	1.3	1	1.3					5.5	0.6
All coordinators and District facilitators are trained in their areas of operation.	49	64.5	21	27.6	3	3.9	3	3.9					5.5	0.8
There is regular monitoring and Evaluation of the project.	42	55.3	28	36.8	4	5.3	2	2.6					5.5	0.7

Source: (researcher 2011)

The research findings on managerial skills indicated that none of the respondents strongly disagreed with any of the statements and that 96.1% of the respondents at least agreed that MKEPP implementers were regularly trained to improve on their performance. 94.8% of the respondents at least agreed that the project supported capacity building of project implementers. As indicated in Table 4.10, majority (92.1-97.4%) of respondents were in agreement that there was provision for backstopping, that coordinators and district facilitators were trained in their areas of operation and that there was regular monitoring and evaluation of the project. The range for the mean was 5.4-5.6 while the standard deviation range was 0.6-0.8. The results on managerial skills indicate a very high acceptance among the respondents that MKEPP administration had appropriately ensured that the project implementers acquired necessary management skills.

On the basis of the research findings the researcher observed that MKEPP project management considered management skills as an important factor in project implementation.

#### 4.3.2 Project planning and budgeting

Responses to questionnaire statements on project planning and budgeting were summarized as contained in Table 4.11.

**Table 4.11 Project planning and budgeting**

Statement	Strongly Agree		Agree		Neither Agree Nor Disagree		Disagree		Strongly disagree		Not Known		Mean	SD
	No	%	No	%	No	%	No	%	No	%	No	%		
A work plan for project implementation is available	53	69.7	19	25.0	3	3.9					1	1.3	5.7	0.6
There is a Logical Framework indicating what is to be done by who, when, where, at what within what time, and the expected outcome.	47	61.8	21	27.6	7	9.2	1	1.3					5.5	0.7
In every year of implementation an annual work plan and budget is prepared.	57	75	14	18.4	2	2.6			3	3.9			5.6	0.9
The project is strictly implemented according to the work plan and budget	43	56.6	25	32.9	2	2.6	2	2.6	3	3.9	1	1.3	5.4	1.0
There is in place a work schedule indicating what to be done, when, where and by who	45	59.2	26	34.2	4	5.3					1	1.3	5.6	0.6
There is in place a project close out plan	28	36.8	26	34.2	19	25.0	2	2.6			1	1.3	5.1	0.9

Source: (researcher 2011)

Findings on project planning and budgeting factors indicated that majority of the respondents (94.7%) were aware that a work plan for project implementation was available and 89.4% of the respondents at least agreed that there was a logical framework indicating what was to be done ,by who, when, where, within what time, and the expected outcome.

A high proportion of respondents (93.4%) at least agreed that in every year of implementation an annual work plan and budget was prepared; However on a supplementary question only 43.4% of the respondents agreed that they had been involved in the annual planning and budgeting, 89.5 % of the respondents indicated that the project was strictly implemented according to the work plan and budget and 93.4% of the respondents were also in acceptance that there was in place a work schedule. The response of the presence of a project close out plan had a lower rating at 71.0%.However, three respondents strongly disagreed that in every year of implementation an annual work plan and budget was prepared and that the project was strictly implemented according to work plan and budget. The mean for the responses as indicated in table 4.11 had a range of 5.1-5.7 while the range for the standard deviation was 0.6-1.0 .The findings indicated that majority of MKEPP implementers considered project planning and budgeting as important factors in project implementation.

### 4.3.3 Project organization

Responses on statements on the questionnaire on project organization were presented as in Table 4.12

**Table 4.12: Project organization**

Statement	Strongly Agree		Agree		Neither Agree Nor Disagree		Disagree		Strongly disagree		Not Known		Mean	SD
	No	%	No	%	No	%	No	%	No	%	No	%		
There is a clear project organization pattern which is displayed in a flow chart.	38	50	31	40.8	6	7.9					1	1.3	5.5	0.7
There is an established chain of command in project administration.	50	65.8	25	32	1	1.3							5.6	0.5
The project has departments based on type of operations and/or roles played.	54	71.1	22	28.9									5.7	0.5
Implementers are positioned according to their skills	41	53.9	30	39.5	2	2.6					3	3.9	5.5	0.8

Source: (researcher 2011)

Findings on project organization indicated that 90.8% of respondents at least agreed that MKEPP had a clear project organization pattern which was displayed on a flow chart (see Appendix 2). A very high number of respondents (97.8%) at least agreed that MKEPP had an established chain of command in project administration while 100% of the respondents at least agreed that the project had departments based on type of operation and/or roles played by the implementers. None of the respondents strongly disagreed with any statement posed on project organization. The mean for the responses had a range of 5.5-5.7 while the range for standard deviation was 0.5-0.8. The findings indicate that project organization was clearly articulated and applied in the project implementation. Project organization was projected as an important factor in project implementation.

### 4.3.4 Financial management

Table 4.13 presents the responses to statements on financial management.

**Table 4.13: Financial management**

Statement	Strongly Agree		Agree		Neither Agree Nor Disagree		Disagree		Strongly Disagree		Not Known		Mean	SD
	No	%	No	%	No	%	No	%	No	%	No	%		
Funds are readily available for the activities to be implemented on the AWPB	22	28.9	35	46.1	12	15.8	6	7.9			1	1.3	5.0	0.9
Books of Accounts are well kept.	36	47.4	26	34.2	12	15.8	1	1.3			1	1.3	5.2	0.9
Flow of funds for project activities is smooth and streamlined.	15	19.7	38	50	16	21.1	4	5.3	1	1.3	2	2.6	4.7	1.1
Project Financial records are regularly Audited.	37	48.7	23	30.3	12	15.8	4	5.3					5.2	0.9
There is an established internal control of resource utilization	40	52.6	20	26.3	10	13.2	5	6.6			1	1.3	5.3	1.0
Beneficiaries contribute to the overall project funding	34	44.7	26	34.2	5	6.6	10	13.2	1	1.3			5.1	1.1
There is project ownership by the beneficiaries.	39	51.3	24	31.6	7	9.2	4	5.3			2	2.6	5.4	0.8
Procurement of resources is done in an open, transparent and Honest manner	43	56.6	18	23.7	13	17.1	2	2.6					5.4	0.8

Source: (researcher 2011)

Findings on enquiry on financial management were as follows;-75% of the respondent at least agreed that funds were readily available for the activities planned for implementation in MKEPP and 81.6% of the respondents at least agreed that books of account were well kept. It was also noted that 79% of respondent supported the proposition that project financial records were regularly audited. On a supplementary question, National audit office was indicated to be the main auditors for the project however it was established that Price Water house Coopers were engaged in the early stages of project implementation to lay foundation on project audit process. 78.9% of respondents at least agreed that beneficiaries contributed to the overall funding of the project. On a supplementary question, the beneficiary contribution was indicated to be in unskilled labour, local materials, in kind and to a very small extent (7.9%) in monetary form.

82.9% of respondents (as indicated in Table 4.13) at least agreed that there was project ownership by the beneficiaries and 80.3% that procurement of resources was done in an open, transparent and honest manner; however only 69.7 % of the respondents agreed that flow of funds for the project activities was smooth and streamlined. The mean for the section had a range of 4.7-5.4 while the standard deviation had a range of 0.8-1.1.

One respondent strongly disagreed that flow of funds was smooth and streamlined and that beneficiary contributed to the overall project funding. This indicated that flow of funds although satisfactorily handled Presented some challenge in implementation. The findings indicate that project management was applied in MKEPP implementation and financial management was regarded as an important factor in project implementation.

#### 4.3.5 Communication and information flow

Summary on responses on the statements concerning communication and information flow was presented as in table 4.14.

**Table 4.14: communication and information flow**

Statement	Strongly Agree		Agree		Neither Agree Nor Disagree		Disagree		Strongly Disagree		Not Known		Mean	SD
	No	%	No	%	No	%	No	%	No	%	No	%		
Records of every activity undertaken about the project are well kept.	37	48.7	33	43.4	4	5.3					2	2.6	5.4	0.8
Project communications is effective.	34	44.7	35	46.1	4	5.3			1	1.3	2	2.6	5.4	0.8
All implementers are informed and are familiar with the contents of the work plan.	42	55.3	29	38.2	4	5.3					1	1.3	5.5	0.8
There is an operational computer information system.	28	36.8	20	26.3	18	23.7	4	5.3	3	3.9	3	3.9	5.0	1.1
Emerging issues are communicated and address without delay.	23	30.3	40	52.6	10	13.2			1	1.3	1	1.3	5.1	0.8

Source: (researcher 2011)

From Table 4.14, it was observed that 92.1% of the respondents at least agreed that records of every activity undertaken about the project were well kept, that 90.8% of the respondents strongly agreed or agreed that project communication was effective and 93.5% of the respondents at least agreed that all implementers were familiar with the contents of the work plan.

Majority of respondents (82.9%) at least agreed that emerging issues were communicated and addressed without delay; however only 63.1% of respondents were in agreement that there was an operational computer information system in place. Three respondents strongly disagreed that there was an operational computer information system. One respondent strongly disagreed that emerging issues were communicated and addressed without delay. It was further established that although most of the project coordinators (100%) and the DFT members (78.5%) had knowledge of the information system, many of the chairmen of FDACs (75%) were not aware of the existence of the programme. The mean for the section had a range of 5.0-5.5 while the standard deviation had a range of 0.8-1.0.

From the findings, respondents presented communication and information flow as an important factor in project implementation, however the operational information system was not well expanded to reach many of the FDACS Chairmen.

#### 4.3.6 Stakeholders involvement

Responses to statements on stakeholder involvement were as presented in Table 4.15

**Table 4.15: stakeholder involvement**

Statement	Strongly Agree		Agree		Neither Agree Nor Disagree		Disagree		Strongly Disagree		Not Known		Mean	SD
	No	%	No	%	No.	%	No	%	No	%	%	No		
Stakeholders support is necessary for project implementation.	56	73.7	17	22.4	2	2.6					1	1.3	5.7	0.7
There is stakeholder involvement in the implementation of MKEPP project	42	55.3	29	38.2	4	5.3					1	1.3	5.5	0.8

Source: (researcher 2011)

The study findings on stakeholder involvement was that 96.1% of respondents at least agreed that stakeholders support was necessary for project implementation and that 93.5% at least agreed that there was stakeholder involvement in the implementation of MKEPP. None of the respondents strongly disagreed with the statements posed. The mean for the section had a range of 5.5-5.7 while the standard deviation had a range of 0.7-0.8. It was observed that MKEPP management considered stakeholder involvement as an important factor in the implementation of the project.

### 4.3.7 Overall project implementation

Responses on the overall project implementation were summarized as indicated in Table 4.16

**Table 4.16: Overall project implementation**

Statement	Strongly Agree		Agree		Neither Agree Nor Disagree		Disagree		Strongly Disagree		Not Known		Mean	SD
	No	%	No	%	No	%	No	%	No	%	No	%		
MKEEP activities are on schedule according to plan	30	39.5	35	46.1	8	10.5	2	2.6			1	1.3	5.2	0.8
MKEEP project is likely to be completed in time as per the work plan	20	26.3	33	43.4	12	15.8	8	10.5	1	1.3	2	2.6	4.9	1.0
MKEEP activities are implemented strictly according to the work plan and budget	42	55.3	19	25.0	12	15.8	2	2.6			1	1.3	5.3	0.9
Funds utilization are monitored and controlled to ensure compliance with the budget.	45	59.2	16	21.1	11	14.5	2	2.6			2	2.6	5.3	1.0
Quality of inputs and products is maintained at the required standards	39	51.3	24	31.6	9	11.8	2	2.6			2	2.6	5.3	0.9
Project implementation controls are in place to ensure that quality of the products and service is maintained.	34	44.7	28	36.8	10	13.2					4	5.2	5.3	1.0

Source: (researcher 2011)

From Table 4.16, it was observed that majority of respondents (85.6%) at least agreed that MKEPP activities were on schedule according to the work plan and 80.3% MKEPP activities were implemented strictly according to the work plan and budget, 80.3% of respondents at least agreed that funds utilization were monitored and controlled to ensure compliance with the budget while 82.9% at least agreed that Quality of inputs and products was maintained at the required standards.

From Fig 4.5 it was observed that 76.7% of stakeholder respondent rated the performance of the project they were involved in as good or excellent and according to figure 4.6 about 86.7% of the stakeholders rated the general performance of MKEPP as good or excellent.

According to the findings of the study the project performance was good when examined against the parameters of time, cost, and quality and customer satisfaction. The performance of the project is reported in the physical gross summary achievement as Indicated on appendix 1 (source: MKEPP annual Report2009/2010). From the findings the overall project implementation performance of MKEPP was highly rated by the respondent.

#### 4.4 Ranking on influence in project implementation.

The ranking indicated the level of influence and the score for the level. The following levels and score were used for the purpose of the analysis:- Greatly Influence- 6, Partially Influence- 5, Moderate Influence- 4, mild Influence- 3 Influences- 2, and Low Influence -1

Table 4.17 presents the summary of the ranking of factors by the respondents.

**Table4.17: Ranking on influence of factors in project implementation**

Influence	Managerial Skills		Project Planning & Budgeting		Project Organization		Financial Management		communication & Information Flow		Stakeholder Stakeholder Involvement	
	No	%	No	%	No	%	No	%	No	%	No	%
Greatly Influence	21	27.6	28	<b>36.8</b>	8	10.5	14	18.4	8	10.5	28	<b>36.8</b>
Partially Influence	8	10.5	19	25	23	<b>30.3</b>	12	15.8	12	15.8	14	18.4
moderate Influence	15	19.7	15	19.7	6	7.9	10	13.2	8	10.5	12	15.8
Mild Influence	12	15.8	6	7.9	15	19.7	12	15.8	8	10.5	7	9.2
Influence	9	11.8	2	2.6	19	25	19	25	10	13.2	6	7.9
Low Influence	10	13.2	5	6.6	4	5.3	8	10.5	29	<b>38.2</b>	8	10.5
I don't know	1	1.3	1	1.3	1	1.3	1	1.3	1	1.3	1	1.3
Total	76	100	76	100	76	100	76	100	76	100	76	100

Source: (researcher 2011)

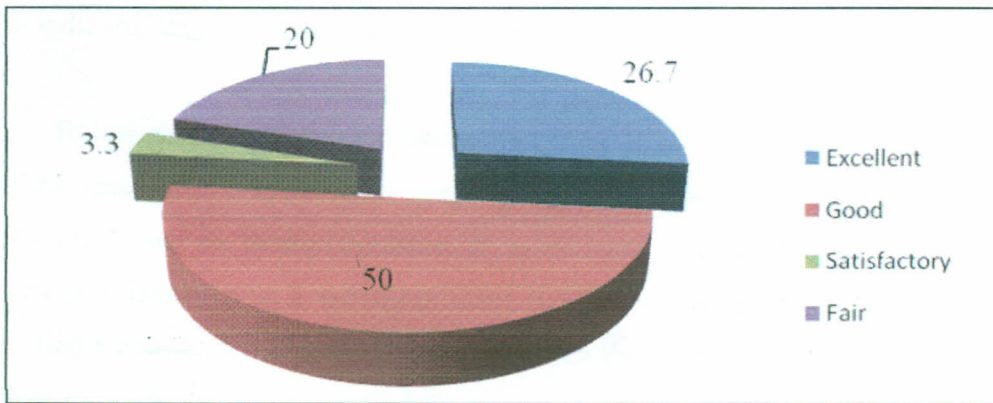
The observation from Table 4.17 was that Project planning and budgeting, closely followed by; stakeholder involvement were rated to have great influence on project implementation. Project organization was rated to have partial influence on implementation .Communication and information flow was indicated to have a low influence in project implementation, however it was noted that from Table4.14 communication and information flow was indicated as an important factor to influence project implementation.

**4.5 Stakeholders Response.** This section presents the stakeholder view on questionnaire enquiry on the respective matter.

**4.5.1 Stakeholder rating on activity performance.**

Figure 4.5 presents the stakeholder view on the performance of the particular activity they were involved in.

**Figure 4.5: Activity performance**



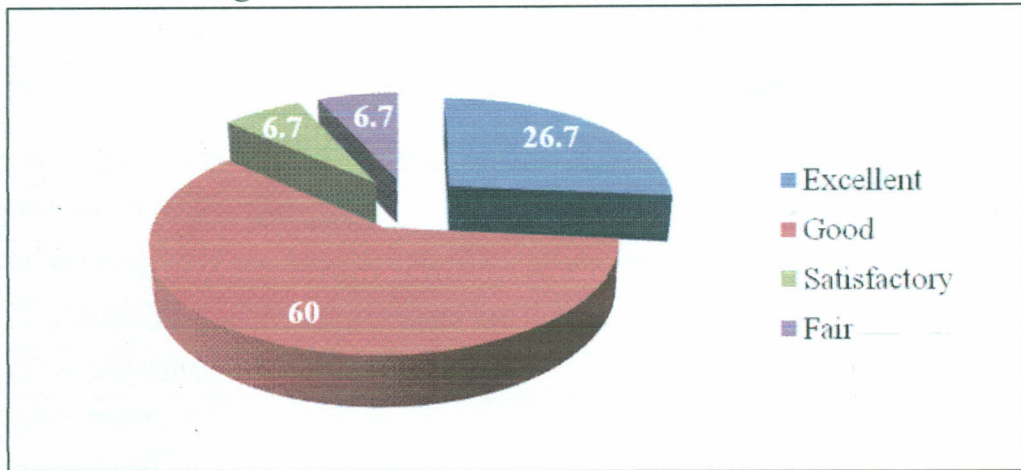
Source: (researcher 2011)

As presented in Figure 4.5, 50% of beneficiary stakeholders indicated that the performance of their activity was good while an additional 26.7% of respondents indicated that the performance was Excellent.

#### 4.5.2 General performance of the MKEPP

Figure 4.6 presents the stakeholder view on general performance of MKEPP

**Figure 4.6: Stakeholders satisfaction on MKEPP**



Source: (researcher 2011)

According to Figure 4.6 the stakeholders view on the general performance of MKEPP indicate that the majority (60%) of respondents indicated that the performance was good and a further 26.7% indicated that the performance was Excellent.

#### 4.6 Relationship between variables

When the value of one variable is related to the value of another, they are said to be correlated. Correlation means an interrelationship or association (Lacey, 2002). Variables may be: (i) perfectly correlated (move in perfect unison), (ii) Partly correlated (some interrelationship but not exact). (iii) Uncorrelated (No relationship between their movements). Positive correlation means that they move in same direction while negative correlation means that they move on opposite direction.

##### 4.6.1 Tests on correlation of Dependent and independent variables

SPSS was used in testing the relationship between variables.

According to the conceptual framework indicators of dependent variables were **completion time, costs, quality and customer satisfaction**. The following correlation tests were performed on the independent variables against the dependent variables.

**Table 4 18: Pearson Correlation analysis on Completion time**

Independent variable	Dependent variable
	MKEPP activities are on schedule according to the work plan
Records of every activity undertaken about the project are well kept	0.56
There Is a log frame indicating activities and responsibilities	0.29
Communication is effective	0.61
Stakeholder support is necessary for project implementation	0.59
There is stakeholder involvement in MKEPP	0.62
MKEPP implementers are regularly trained	0.10

Source: Researcher 2011.

All the considered factors had significant and positive correlation. This meant they were moving together in same direction. The statement that there was stakeholder involvement in MKEPP related highly (0.62) with the dependent variable of activities being on schedule according to the work plan,. Effective communication also had a high correlation (0.61) with the dependent variable; however the relationship with the statement that MKEPP implementers are regularly trained had lower (0.10) correlation.

**Table 4.19: Pearson Correlation analysis on Cost**

Independent variable	Dependent variable
	MKEPP activities are implemented strictly according to the work plan and budget
Books of accounts were well kept	0.44
Financial records are audited	0.46
A log frame is available	0.50
A work plan is available	0.54
There is a clear project organization pattern.	0.53
Project communication was effective	0.63
There was stakeholder involvement	0.59

Source: Researcher 2011.

All the considered factors had significant and positive correlation. The implication is that the considered variables were moving together in the same direction. The highest relationship (0.63) was with effective communication. Stakeholder involvement had a correlation of 0.59.

Financial records being audited and Books of account being well kept had a lower (though positive) correlation of 0.44 and 0.46 respectively.

**Table 4.20: Pearson Correlation analysis on Quality**

Independent variable	Dependent variable
	Quality of inputs and products is maintained at the required standards
Organization chart is available	0.32
There is regular monitoring and Evaluation	0.36
All coordinators and DFT are trained in their areas of operation	0.28
MKEPP activities are on schedule according to plan	0.59
Project communication is effective	0.72
There is stakeholder involvement	0.56
Books of account are well kept	0.33

Source: Researcher 2011.

All the considered factors had significant and positive correlation. There was strong relationship (0.72) between communication being effective and quality of inputs and products being maintained at the required standard. MKEPP activities being on schedule according to plan had a correlation coefficient of 0.59. All coordinator and DFT being trained had a low (0.28) correlation with the dependent variable.

#### **4.7 Comparative view of MKEPP**

The beneficiary stakeholders views on how MKEPP was different from other projects that had been implemented in the same area indicated that; in MKEPP there was provision for required facilities, equipment and materials, MKEPP provided training and motivation to project implementers, There were committed staff members, the Project catered for information dissemination and exchange tours, there was continuing support for tree planting and there was good management.

#### **4.8 Comments about MKEPP**

Comments on MKEPP by respondents included; funding to be released on time, project should be extended beyond river basin, project to increase trainings and community involvement, improve linkages and collaboration, empower the community to meet their expectation and thorough stakeholder analyses was required.

#### **4.9 Recommendation**

Recommendations on MKEPP as presented by the coordinators, DFT Members, Chairmen of the FDACs and beneficiary Stakeholders included; that project life should be extended to allow completion of the started activities, management to increase funding that directly support communities, involve community more on issues of sustainability and decision making, improve monitoring and evaluation of the project, include construction of schools in the work plan and upscale road maintenance, more training and facilitation to project implementers and beneficiaries, assist community to find ready market for their produce, improve management of the project and baseline survey should be conducted before start of future Projects.

## CHAPTER FIVE

### 5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.1 Introduction

Chapter Five presents the summary, the conclusion and the recommendation made based on the findings, data analysis and interpretation. The summary gives a shorter version of the report, the conclusion involves the summing up of the points and statements of opinion or decision reached while in the recommendation the researcher gives suggestion of what should be done or advances a particular course of action.

#### 5.2 Summary

##### 5.2.1 Background information

The general objective of the research was to identify factors influencing the implementation of natural resource management projects in Kenya and to examine how the factors influence the project implementation with a focus on Mount Kenya East pilot Project in Eastern Province. The research Project was undertaken in Districts implementing MKEPP; they were topographically falling to the East of Mt Kenya. Six districts were randomly selected for sampling purpose. The research was conducted through collection of Primary data through administration of questionnaires to the project implementers-the Coordinators, the District facilitating team, the Chairmen of Focal Development Area Committees and the stakeholders. Two questionnaires were used to collect primary Data. The first questionnaires targeted the project coordinators, the District facilitating team members and the Chairmen of Focal development area committees; the second questionnaire targeted the beneficiary stakeholders. Secondary data was collected from the Project Management Unit (PMU) and government offices implementing the project. The data was processed through the stages of data cleaning, data coding, data entry in a computer and data analyzed using the software of Statistical package for Social Sciences (SPSS).

The processed data was further subjected to cross tabulation and statistical inferences aimed at establishing valuable information and relationships. The findings of the study were derived from the analyzed data. Recommendations were formulated based on the research findings. This report was thereafter prepared to record the research process, outcome, recommendations and suggestion for further research.

### **5.2.2 Implementation**

Implementation is one of the phases in project life cycle that involve putting in to action the project plan. It is a process by which a set of predetermined activities are carried out in a planned manner with a view to achieving certain established objectives (Pander, 2008).

From the findings of the study, MKEPP implementation was done through an established organizational structure. There was the Project Management Unit (PMU), the component coordinators, the District facilitating team (DFT), the Divisional Implementation Committee (DIT) and the Focal Development Area Committee (FDAC). Secondary data indicated that MKEPP project was working with the relevant Government departments to undertake activities falling in the mandate of the respective department; that the project implementation approach was multidisciplinary; however the led agency was Ministry of water.

### **5.2.3 Project management skills**

Project management skills involve the ability to undertake project planning, resource management, financial management, quality management and change management. The project managers are responsible for project initiation, project planning, project execution and project closure. It is therefore important that project implementers should have the skills to assist them in performing the task of project implementation. From the findings of data analysis, 96.1% of the respondents indicated MKEPP implementers are regularly trained and 94.8% that the project supported capacity building. 92.1% of respondents indicated that all coordinators and District Facilitators were trained in their areas of operation. There was also training and capacity building of the beneficiaries.

### **5.2.4 Project planning organization and communication.**

Planning involves deciding what is to be done before it is done. The results of a planning process are a plan. The plan articulates the actions that are necessary to achieve the goal.

The research established that 94.7% Of respondents indicated that MKEPP had a work plan for project implementation, 89.4 % indicated that there was a logical frame work for the operation and 93.4% indicated that in every year of implementation an annual work plan and budget was prepared. It was also established that the project was strictly implemented according to the work plan and budget.

Project organization is the management function that is concerned with providing group action .It involves the design and maintenance of a structure of roles for the people to work together in carrying out the organization plans. Activities in organization include; departmentation in formation of organization units, the work is divided into homogenous groups. Span of management is about the various levels of sub- departments while authority delegation involves the chain of command and the flow of communication throughout the hierarchy. The research findings indicated that 90.8% of respondents were in agreement that in MKEPP there was a clear project organization pattern displayed in a flow chart. 97.8% of respondents indicated that there was an established chain of command; 100% of respondent indicated that the project had Departments and that implementers were positioned according to their skills.

Communication involves passing of messages from the sender to the receiver. A communication plan identifies the types of information to be distributed to stakeholders, the method of distribution, the information, the frequency of distribution and the responsibility of each person in the project team for distributing the information ( Westland,2006).The research findings indicated that 90.8% of respondents indicated that project communication was effective, 63.1% indicated that there was an computer information system that require to be expanded to reach the FDACs, 92.1% at least agreed that record of activity undertaken about the project were well kept, that implementers were informed and familiar with contents of the work plan and that emerging issues were communicated and addressed without delay.

### **5.2.5 Financial management and Budgeting**

Financial management involves keeping watch and control over the project cost, project operational costs, cash flow, the investment and profitability (benefits) of the project. The findings of the research indicated that 75% of respondents indicated that Funds were available for the activities to be undertaken, 81.6% of respondents indicated that project books of account were well kept and 79% that project financial records were regularly audited. The beneficiary contributed to the overall project funding was mainly through providing unskilled labour, in kind and to a very small extent through monetary contribution. 89.3% of respondents indicated that procurement of resources was in an open transparent and honest manner but only 69.7% of respondents indicated that flow of funds for project activities was smooth and streamlined.

Budgeting is a key management tool of planning and controlling financial resources. It involves preparing, compiling and monitoring mainly monetary resources. The research findings indicated that 93.4% of respondents at least agreed that budgets were prepared annually and 89.5% that the project was being implemented according to the work plan and budget.

### **5.2.6 Stakeholder involvement**

Stakeholders are persons or company that is involved in a particular organization (oxford dictionary).The stakeholders considered in the research project were the beneficiaries of the project. The research findings indicated that 96.1% of the respondents at least agreed that Stakeholder support was necessary for project implementation and 93.5% that there was high stakeholder involvement in the implementation of MKEPP.

### **5.3 Conclusion**

From the research findings the researcher concluded that in the course of implementation of MKEPP project, project management techniques such as; participatory project identification, planning and budgeting, project organization ,financial management , monitoring and evaluation, project close out plan and stakeholder involvement had been satisfactorily incorporated and applied. Stakeholder involvement and support was rated to have a high influence in implementation. Beneficiary contribution to the overall financing of the project was indicated to have been through providing unskilled labour and in kind. Beneficiary ownership of the project was rated high. However issues of enhancing flow of funds, increasing motivation of implementers and more beneficiary involvement in the control of funds were stated in the recommendation.

On the first objective of project management skills, the study established that the project provided training and capacity building for the project implementers. Apart from offering training to the community the project was supporting the community with project material requirement, facilitating exchange visits for beneficiaries and encouraging farmer to farmer education through establishment of farmer's field schools ; however stakeholders recommended that these activities should be enhanced. Managerial skills were indicated as important factor with great influence in project implementation.

On the second objective on project planning, organization and communication the research findings indicated that Project planning, project organization and communication were well applied in MKEPP implementation. They emerged as important factors in project implementation. Project planning and budgeting were rated to have a great influence in project implementation. Communication and information flow had a low rating on project implementation (see table 4.17), however the research findings indicated that communication and information flow was an important factor in project implementation.

The third objective was on financial management and budgeting, the research findings indicated that financial management was satisfactorily applied in the implementation of MKEPP; furthermore , Financial management emerged as an important factor in project implementation .The findings indicated that a lower proportion of respondents (69.7%) indicated that Flow of funds was smooth hence a significant number of respondents were not in agreement that flow of funds was as expected and this presented a challenge in the implementation of MKEPP. Financial management was rated to have influence in project implementation.

On the fourth objective of stakeholder involvement, the findings indicated that majority (96.1%) of respondents indicated that Stakeholder support was necessary for project implementation. The findings also indicated that 93.4% of respondents agreed that there was stakeholder involvement in MKEPP. Stakeholder involvement was indicated as an important factor in project implementation, Stakeholder involvement was also ranked to have a great influence in project implementation (Table 4.17).

The general conclusion based on the findings of the study was that the factors affecting project implementation were well captured and applied in MKEPP implementation. The high scores on the application of project management factors in project implementation projected MKEPP as a successful project. Although all the identified independent variables of -Project management skills, project planning, organization, communication, financial management, and budgeting and stakeholder involvement were important for project implementation, **project planning and budgeting** and **stakeholder involvement** were rated to have the highest influence in project implementation.

## 5.4 Recommendation

From the findings of the study the researcher made the following recommendations aimed at improving the implementation of MKEPP and other similar future projects

- It was recommended that an extension of the project life should be considered in order to allow for completion of the ongoing activities and to accomplish what was yet to be done on the Work plan.
- Documentation of the Project implementation process was commendable, however extra efforts should be applied to Capture and documentation of all the achievements of the project for future reference by project implementers, donors, development agents, Governments and academia. The computer Information system in use should be expanded to reach the Focal Development areas (FDA).
- There was need to encourage and enhance farmer to farmer education and training as in tours and farmer field schools.
- Managerial skills were found to be an important factor in project implementation and all implementers should be regularly trained in order to build their capacities; they should also be supported to perform their work through backstopping.
- Project planning, organization and communication were found to be important factors in project implementation and should be applied in project implementation process.
- Financial management and budgeting were found to be important factors in project implementation, the project management should address the challenge of Flow of funds to the project implementing team and to enhance the involvement of the community in the control of resources and especially funds .This would improve on community ownership of the project.
- Stakeholder involvement was also found to be a very important factor in project implementation; it was also rated to have a high influence in project implementation. Project implementers should involve stakeholders right from project identification to project close out. The issue of sustainability should be addressed early in project implementation.
- Government, donors and development partners should ensure project implementers are trained on managerial skills, they should provide adequate funding for the project, ensure financial management, streamline flow of funds to the project implementers and involve the stakeholders in the entire project life cycle.

- Baseline survey for future projects should be undertaken before the commencement of actual project implementation in order to capture all the achievement of the project (Baseline survey for MKEPP Project was done in 2005 while the project implementation started in 2004).
- In view of the findings of this research and the stated project achievement (from the secondary data, see appendix 1) the project is suitable for benchmarking by other project implementers and any other party undertaking similar projects.

### **5.5 Recommendation for further research**

Further research should be conducted on a similar project in a different location and environment to compare the findings with this research. End term impact assessment is recommended in order to capture the contribution of the project towards natural resource management and poverty alleviation. The research finding of this study indicated that MKEPP project was a government led initiative; further research should be conducted to compare it with a project where the community is more involved in decision making and control of project funds.

### **5.6 Limitations of the study**

Limitation to the study included challenges in time and cost of delivery and collection of questionnaires, tracing the busy project implementers at their work place (some cases required several visits), failure of some respondents to answer to all the questions on the questionnaire and delays in the return of the questionnaires.

## REFERENCES

- Asule P A (1999), *Land use management for household food security in sabatia Division of Vihiga District, Kenya*
- Brewerton Paul and Lynne Millard Lynne (2006), *Organization Research methods, SAGE Publications inc, Great Britain.*
- Brookson Stephen (2000), *Managing budgets, Dorling Kindersley, London*
- Chandra Prabanna (2008), *Project Planning analysis, financing, implementation and review, New Delhi.*
- Chikati John (2008), *the Project Proposal Writing Handbook, Rev Ed, Regional Partnership for Resource Development, Nairobi.*
- Cooke Helen and Tate Karen (2008), *Project Management, Tata McGraw-Hill, New Delhi.*
- Connell Fergus (2007), *Fast Projects, Ashford colour press, Great Britain*
- Devendra Prasad Pandey(2008), *Rural Project management, New Age International, New Delhi*
- Government of Kenya (2010), *Agricultural Sector Development Strategy (ASDS)), 2010 Government printers, Kenya.*
- Government of Kenya (2003), *Economic recovery strategy for wealth and employment creation (ERS), Government printers, Kenya*
- Government of Kenya (2009), *End term Review (ERS-Kenya), Government printers, Kenya*
- Government of Kenya (1985), *Project implementation review Kenya, Project status Report No 2 Government printers, Kenya*
- Government of Kenya (2004), *Strategy for revitalization of agriculture (SRA), 2004-2014, Government printers, Kenya.*
- Government of Kenya (2008), *Vision 2030, Government printers, Kenya*
- Kohli Uddesh / Chitkara KK (2008), *Project Management Handbook, Tata McGraw-Hill, New Delhi*
- Kothari CR, *Research methodology (2008), 2<sup>nd</sup> Edition, New Age International, New Delhi*
- Ministry of Livestock Development (2008), *National Livestock Policy, Sessional paper No 2 of 2008, Government printers, Kenya.*
- Mount Kenya East Pilot Project for Natural Resource Management (2003) *Appraisal Report, (2003), IFAD, Kenya*

- Mount Kenya East Pilot Project for Natural Resource Management (2005), *Project Implementation Manual*, IFAD, Kenya.
- Mugenda O M, Mugenda A G (2003), *Research Methods Quantitative & Qualitative Approaches*
- Mugambi Kimenchi,(2008);Challenges of project implementation of community based Goat breeding project in Meru,Kenya.
- Muchai P Wachira (2003), *Investigation of causes of failure and ways of improving performance of small enterprises in Limuru*,Kenya
- Nagarajan K (2010), *Project Management, 5<sup>th</sup> Edition, New Age International, New Delhi.*
- Newton Richard (2006), *Project Management, step by step, Ashford color press Ltd, Great Britain.*
- Saundas Mark, Leisus Phillip and Thornhill Adrian (2009), *Research methods for business Students, prentice Hall, New York..*
- Westland Jason(2007), *The project Management, life cycle, Bell & Glasgow, Great Britain*
- [Http://us.mg3.mail.yahoo.com/blank.html?bn=us](http://us.mg3.mail.yahoo.com/blank.html?bn=us) & lang. *How to Fail your Project*, method 123, 14/09/
- Zikmund G. William (1987), *Business Research Methods*, Dryden Press series in Management, U.S.A.

**QUESTIONNAIRE ON PROJECT MANAGEMENT**

**Mt KENYA EAST PILOT PROJECT FOR NATURAL RESOUCE MANAGEMENT**

**(To be filled by project coordinators, District facilitating team and Chairmen of focal development area committees)**

Questionnaire No----- Date -----20-----

Enumerator's Name -----

**1. GENERAL BACK GROUND INFORMATION**

1. Name of Respondent -----( optional)
2. Designation (DVO, DLPO, DAO, DPC, DSDO, DDO, DFO, DEO, DWO). \_\_\_\_\_
3. Position in MKEPP Organization chart -  
Project Coordination   
District facilitation team   
Focal Development Area Chairman

4 District

Meru South  Maara  Mbeere North

Imenti South  Meru Central  Imenti North

5 Focal Development area ----- (optional)

6. How long have you been involved in MKEPP activities?

One year  Three years  Four years   
Two years  Five years  over 5 years

7 What is your highest Level of Education? Primary  secondary  Tertiary   
University

8. How did you get to know about MKEPP?

- GOK Ministry communication
- Extension workers
- Through a friend
- Through Baraza
- Through reading

Other way (specify) -----

9. How was the project identified?

Through consultation with community

Through Experts

Brought by GOK

Brought by political leaders

Other way (Specify) -----

## 2. PROJECT IMPLEMENTATION

Please mark with a tick (✓) against your appropriate answer to the enquiry.

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Comment Where necessary
<b>MANAGEMENT SKILL</b>						
10. MKEEP implementers are regularly trained to improve on their performance.						
11. The project supports capacity building of project implementers.						
12. There is provision for Backstopping.(technical support to project implementers)						
13. All coordinators and District facilitators are trained in their areas of operation.						
14. There is regular monitoring and Evaluation of the project.						
<b>PROJECT PLANING AND BUDGETING</b>						
15. A work plan for project implementation is available						
16. There is a Logical Framework indicating what is to be done by who, when, where, at what duration and the expected outcome.						
17. In every year of implementation an annual work plan and budget is prepared.						If yes, were you involved in the activity -----
18. The project is strictly implemented according to the work plan and budget						

19. There is in place a work schedule indicating what to be done, when, where and by who.						
20. There is in place a project close out plan						

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Comment Where necessary
<b>PROJECT ORGANIZATION</b>						
21. There is a clear project organization pattern which is displayed in a flow chart.						
22. There is an established chain of command in project administration.						
23. The project has departments based on type of operations and/or roles played.						
24. Implementers are positioned according to their skills.						
<b>FINANCIAL MANAGEMENT</b>						
25. Funds are readily available for the activities to be implemented on the AWPB						
26. Books of Accounts are well kept.						
27. Flow of funds for project activities is smooth and streamlined.						
28. Project Financial records are regularly Audited.						If yes who are the auditors -----
29. There is an established internal control of resource utilization						
30. Beneficiaries contribute to the overall project funding						If yes, how -----
31. There is project ownership by the beneficiaries.						
32. Procurement of resources is done in an open, transparent and Honest manner						

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Comment Where necessary
<b>COMMUNICATION AND INFORMATION FLOW</b>						
33. Records of every activity undertaken about the project are well kept.						
34. Project communications is effective.						
35. All implementers are informed and are familiar with the contents of the work plan.						
36. There is an operational computer information system.						
37. Emerging issues are communicated and address without delay.						
<b>STAKEHOLDERS INVOLVEMENT</b>						
38. Stakeholders support is necessary for project implementation.						
39. There is stakeholder involvement in the implementation of MKEPP project.						
<b>OVERALL PROJECT IMPLEMENTATION</b>						
40. MKEEP activities are on schedule according to plan.						
41. MKEEP project is likely to be completed in time as per the work plan						
42. MKEEP activities are implemented strictly according to the work plan and budget.						
43. Funds utilization are monitored and controlled to ensure compliance with the budget.						
44. Quality of inputs and products is maintained at the required standards						
45. Project implementation controls are in place to ensure that quality of the products and service is maintained.						If Yes how is it done?

### 3. RANKING

#### FOR COORDINATORS AND DISTRICT FACILITATION TEAMS

RANK in order of importance the factors that, in your opinion, greatly influence the performance of project implementation (6- Being the highest influence and 1 the lowest)

STATEMENT	RANKING
Managerial skills	
Project planning and budgeting	
Project organization	
Financial Management	
Communication and information flow	
Stakeholders involvement	

Please give any other comment you would wish to express on project Implementation.

-----  
-----

Give recommendations on how the projects can be improved

-----  
-----

END  
THANK YOU

**QUESTIONNAIRE ON PROJECT MANAGEMENT**

**(Mt KENYA EAST PILOT PROJECT FOR NATURAL RESOURCE MANAGEMENT)**

**(To be filled by stakeholders other than the Project Coordinators, members of DFT and Chairmen of FDACs)**

Questionnaire No----- Date -----20----

Enumerator's Name -----

**1. GENERAL BACK GROUND INFORMATION**

- 1. Name of Respondent -----( optional)
- 2. Name of Your Organization -----

3. District (optional)

Meru South       Maara       Mbeere North

Imenti South       Meru Central       Imenti North

4. How long have you been involved in MKEPP activities?

- One year       Five years
- Two years       over 5 years
- Three years
- Four years

5. How did you get to know about MKEPP?

- GOK Ministry communication
- Extension workers
- Through a friend
- Through Baraza
- Through reading

Other way (specify) -----

6 How was the project identified?

- Through consultation with community
- Through Experts

Brought by GOK   
Brought by political leaders   
Other way (Specify) -----

**2. PROJECT IMPLEMENTATION**

7 What activity are you involved with in MKEPP Project?

---

8. How is the performance of that activity? (Referred to in 7)

Excellent  Good  Satisfactory  Fair  Poor

9 How is the General performance of MKEEP?

Excellent  Good  Satisfactory  Fair  Poor

10 How is MKEEP Different from other Development projects you have participated in

-----  
-----  
-----

11. Give recommendations on how the projects can be improved

-----  
-----  
-----

**END**

**THANK YOU.**

### BUDGET

Item	Description	Estimated cost
<b>PROJECT PROPOSAL</b>		
Transport expenses	Trips to -PMU -KU Library -To meet supervisors	4,000
Subsistence expenses	Lunches	6,000
Stationeries	Pens, notebooks, photocopying papers etc	5,000
Communication	Telephone expenses	5,000
<b>TOTAL</b>		<b>20,000</b>
<b>PROJECT UNDERTAKING</b>		
Transport expenses (fuel)	Trips to PMU, District offices and field in 12 days - 30lt per day @ Shs100	36000
Subsistence	2 officers- lunch @ 1000 for 8 days 1 driver's lunch @ 750 for 12 days	25000
Purchase of stationery	Pens, notebooks, photocopying papers etc	5000
Library expenses	Seek material and <b>literature review</b>	25000
Communication	Telephone expenses	8000
<b>TOTAL</b>		<b>99,000</b>
10% contingency		11,900
	<b>Grand Total</b>	<b>130,900</b>

**PROPOSED TIME SCHEDULE**

No.	Activity	Time in weeks												
		1	2	3	4	5	6	7	8	9	10	11	12	
1	Pilot testing	■												
2	Data collection		■	■	■	■								
3	Data editing and coding					■	■	■						
4	Data analysis								■	■				
5	Report writing										■	■	■	
6	Submission of report													■

## APPENDICES

- Appendix 1: Physical MKEPP progress summary
- Appendix 2: MKEEP Organization Structure
- Appendix 3: Composition of MKEPP sample groups
- Appendix 4: Stakeholders Organization
- Appendix 5: Calculation of actual sample size.
- Appendix 6: Letter of introduction
- Appendix 7: MKEPP Hierarchy of objectives –from activities to impact output (based on activity planning in the AWPB).
- Appendix 8: Map of project area

## APPENDIX I

### SUMMARY ON PHYSICAL PROGRESS IN THE VARIOUS MKEPP COMPONENTS.

It covers the period from the start of the project to the end of 2009/2010 period.

Physical progress summary in:-

#### (i) Water Resources Management

Progress/Results	Unit	Total Project target	Cumulative Achievement	%
New River gauging stations established and operating	Number	47	24	46.8
River gauging stations rehabilitated and operational	Number	19	38	157.9
River Basin Management Plans Dissemination to WRUA's	Number	5	5	100
Umbrella Water Users Associations (WRUA) registered	Number	NA	5	NA
Development of River Basin Management Plans	Number	7	7	100
TOT courses on River Basin Management and WRUA development cycle conducted	Number	2	4	200
WRUA Training on WRUA Development Cycle (WDC)	Number	NA	12	NA
Establishment of Sub-WRUA's along the five river basin	Number	NA	15	NA
Pollution Monitoring and Control	Number	NA	5	NA
Water and Sanitation Campaign	Number	NA	5	NA
Construction of new roof water harvesting tanks	Number	286	14	4.8
Provision of Plastic Tanks for rain water harvesting	Number	Na	2	Na
No of community springs developed	Number	45	80	178
Ha of irrigation schemes completed and in use	Ha	1,000	800	80
Ha of Irrigation schemes under construction			200	20
Ha of irrigation schemes surveyed and designed	Ha	1000	1090	109
Earth Dams developed	Number	12	8	66.7
Shallow wells developed and rehabilitated	Number	70	45	64.3

Progress/Results	Unit	Total Project target	Cumulative Achievement	%
boreholes developed and rehabilitated	Number	Na	124	Na
Sub-surface dams developed	Number	16	5	31.25
Repair and completion of DWO office Mbeere and Tharaka.	Number	2	2	100



Rehabilitation of RGS along ENA River in Mbeere)



Mutua Kathanwa shallow well



Mbeere North water tank



Dam under construction

**(ii) Environmental Conservation**

source: MKEPP

Progress Results	Unit	Total Project target	Cumulative Achievement	%
Planting in degraded areas	Ha	NA	230	NA
River bank planting	Km	150	189.25	126.2
Protection of springs and catchment areas	No	150	182	121.3
Roadside conservation	Km	40	21.2	53
Preparation of SoE for FDAs	No	47	44	93.6
Environmental action plans for River Basins	No	-	8	N/A
Survey on wetlands and their status	No	-	43	N/A
Planting in hotspots	Ha	-	34,700 seedlings	-
Training on Environmental Governance (men)	No	-	447	-
Training on Environmental Governance (women)	No	-	358	-
Farm Biodiversity-threatened/scarce tree species at farm level	Seedlings	-	9,800	-
Rehabilitation of hill tops	Ha	200	225.1	112.6
Demonstration on Energy saving technology	No	15 kilns +10 associations	70 (35 institutional +35 Domestic)	
Training community in Participatory Forest Management	No	NA	1804	NA
Establishment of commercial woodlots	No	2500	4024	161
Promotion of schools greening program	No	700	890	127.1
Germplasm acquisition	Kg /Seedlings	400	-508.4Kg +40Kg nuts +100 mango scions + 50,000 improved Eucalyptus	127.1
Support to community and Private tree nurseries	No	250 (each producing 10,000 per year)	510	204
Training on nursery and tree management, (men)	No	NA	893	NA
Training on Nursery Management and tree management, (women)	No	NA	894	NA
Inventories of tree nurseries and stocking	No	NA	18	NA
Planting in Mt. Kenya forest plantation areas	Ha	200	155	77.5
Maintenance of planted sites-pruning	Ha	-	195	-
Maintenance of earlier planting-weeding	Ha	-	640.4	-
Procurement of tractor and trailer	No	3	3	100
Training on GIS/GPS	Officers	31	31	100
Training in EIA/EA	officers	-	12	N/A

Progress Results	Unit	Total Project target	Cumulative Achievement	%
Training in Integrated Natural Resources Management	officers	-	17	-
Procurement of Vehicles	No	5	5	100
Procurement of motorbikes	No	10	10	100
Training in Participatory Forest management	No	-	40	
Induction and Inception Workshops for GEF activities held	No	2	2	100
Procurement of Vehicles	No	5	5	100
Rehabilitation of degraded forest areas-indigenous	Ha	1950	1368	70.2
Rehabilitation of degraded forest areas-plantations	Ha	850	392	46.1
Rehabilitation of research Centre	NO	1	1	100
Construction of Ranger Houses	Blocks	3	3	100%
Baseline Biodiversity Survey	No	1	100	100
Staff training in PFM	No	8	9	112.5
Staff training in Biodiversity assessment	No	50	47	94
Ranger (ranger training in ecology)	No	48	36	75
Community training in PFM-men	No	-	473	
Community training in PFM-women	No	-	307	



Munyuri Tree Nursery-Nthawa FDA, Mbeere



Rural Afforestation - Meru



School greening programme



Afforestation — Imenti North

Source :MKEPP

**(iii) Rural Livelihoods**

<b>Progress Results</b>	<b>Unit</b>	<b>Total Project target</b>	<b>Cumulative Achievem</b>
Farmer Field Schools (FFS)	Number	168	116
Demonstration on multi-storey kitchen garden	Number	240	199
Demonstration on tree crop demonstration	Number	168	113
Demonstration on soil fertility	Number	504	184
Fodder establishment and Management	Number	168	147
Seed bulking	Ha	N/A	41.6
Ha of land improved through soil and water conservation measures	Ha	N/A	6774
Livestock health training	Men	N/A	1944
	Women	N/A	1587
Artificial Insemination (AI) service kit	Kits	72	40
Livestock breeding training (AI)	Number	72	36
Bee keeping training and demonstration	Number	72	65
Goats vaccinated	Number	N/A	5724
Poultry vaccination	Number	N/A	46,613
Number of cattle dips constructed /rehabilitated	Number	N/A	13
Procurement of dairy bucks (goats)	Bucks	N/A	201
Procurement of meaty goats (Galla)	Bucks	N/A	36
Group marketing training	Courses	50	45
Km of roads rehabilitated/constructed	Km	53	157.7
marketing bulletins produced	Number	N/A	202



A dairy buck supplied by MKEPP to upgrade local goat breeds.

Source: Researcher



Above: Community members follow instructions on drip irrigation at Kirui FDA in Imenti South district

Source: MKEPP



Imenti North cal

Source: Res

iv)Community Empowerment

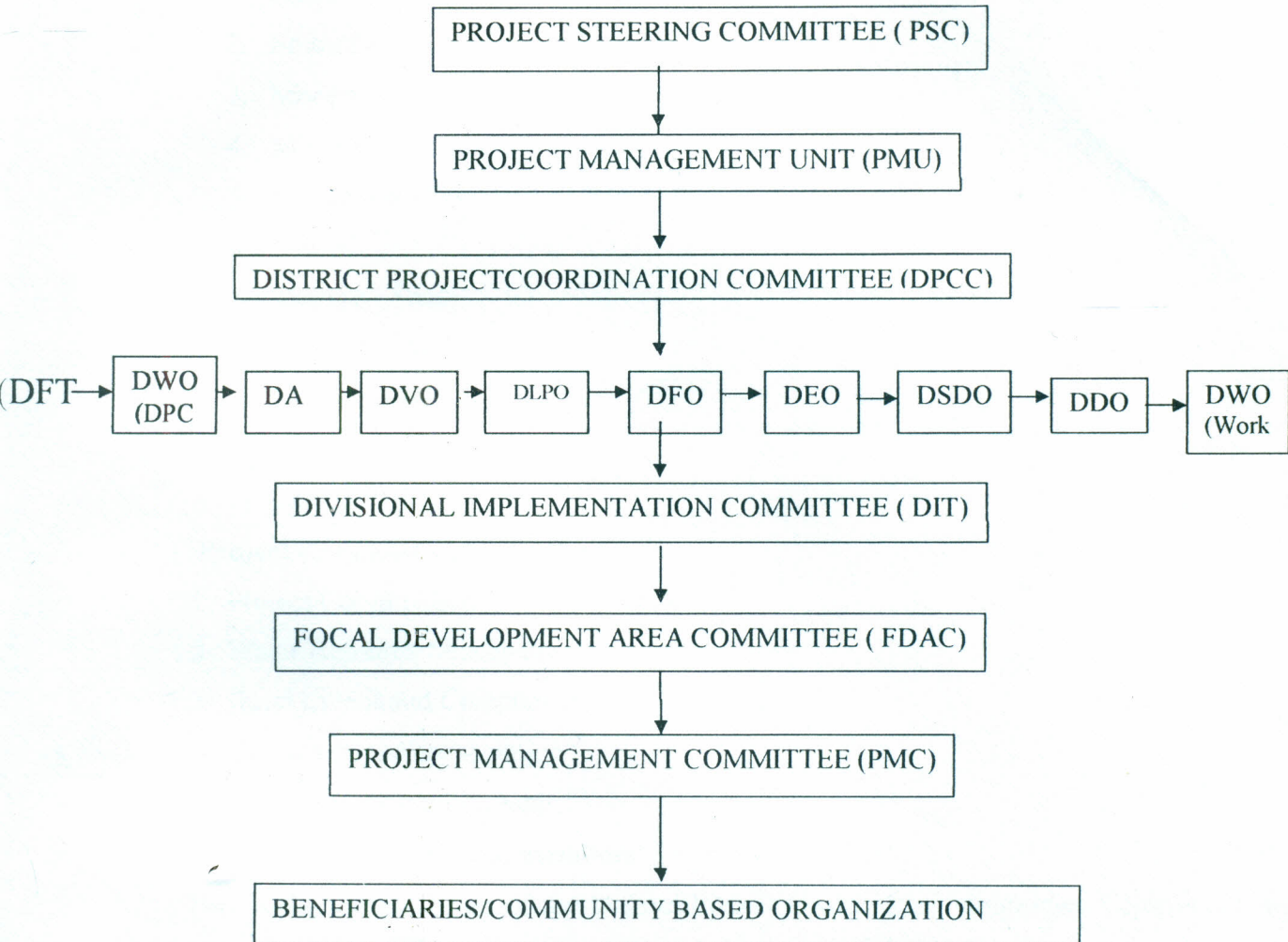
Project Progress	Unit	Total Project Target	Cumulative achievements	%
Women/men trained on group management skills	women	N/A	3944	N/A
	men	N/A	4415	N/A
Women trained on Roles of FDAC	women	N/A	586	N/A
Men trained on Roles of FDAC	men	N/A	788	N/A
groups with women in leadership positions	women	N/A	9	N/A
PRA's conducted	number	72	47	65%
Community action plans reviewed	number	N/A	55	N/A
Community action plans prepared	number	72	47	65%
Women attending CAPS dissemination meetings	women	N/A	1250	N/A
Men attending CAPS dissemination meetings	men	N/A	1,462	N/A
Women trained on Bi-Laws and constitution making	women	N/A	1542	N/A
Men trained on Bi-Laws and constitution making	men	N/A	1369	N/A
Women trained on computation of community contribution.	women	N/A	1106	N/A
Men trained on computation of community contribution.	men	N/A	1415	N/A
Women trained on gender mainstreaming.	women	N/A	1965	N/A
Men trained on gender mainstreaming	Men	N/A	2145	N/A
Baseline survey workshops conducted	number	2	2	100
Training needs survey workshops conducted	number	N/A	1	N/A
No of women officers trained on gender	women	N/A	79	N/A
No of men officers trained on gender	men	N/A	167	N/A
No of women officers trained on group dynamics	women	N/A	44	N/A
No of men officers trained on group dynamics	men	N/A	118	N/A
No of women officers trained on Project management	women	N/A	14	N/A
No of men officers trained on project management	men	N/A	36	N/A

**(v) Coordination and Management**

<b>Project Progress</b>	<b>Unit</b>	<b>Total Project Target</b>	<b>Cumulative Achievements</b>	<b>%</b>
Holding PMU meetings for review and planning the Unit project activities	number	NA	48	NA
Facilitate conducting of Supervision and Implementation Support Missions	No.	6	4	67
Compilation of progress reports	No.	21	9	31
Preparation of SoEs and Withdrawal Application	No.	NA	109	NA
PSC meetings	number	28	28	100
Backstopping on the utilization and application of M&E tools in the districts	number	NA	32	NA
AWP&B consolidation workshop	number	7	6	85
Annual Review workshop	number	7	5	71
Compilation of reports	number	21	18	85
Regional workshop participation	number	7	6	85
Training for PMU Staff	number	NA	NA	NA
Training of district staff	Number	NA	NA	NA
Facilitate conducting of Internal and External Audits	No.	7	6	71

Source: MKEPP annual report 2009/2010

**APPENDIX 2**  
**MKEPP ORGANIZATION STRUCTURE**



Source; MKEPP annual report, 2006

## APPENDIX 3

### COMPOSITION OF MKEPP SAMPLING GROUPS

#### **The Districts implementing MKEPP**

1. Embu West
2. Embu East
3. Mbeere South
4. Mbeere North
5. Meru South
6. Maara
7. Tharaka South
8. Tharaka North
9. Imenti South
10. Meru Central
11. Imenti North

#### **Project component coordinators**

- 1 Project Coordination and management
- 2 Water Resource Management
- 3 Rural Livelihood Component
- 4 Environmental conservation
- 5 Community Empowerment

#### **District Facilitation Team members**

This is the technical arm of the District Project Coordination committee. Composition was as follows:-

1. District Project coordinator (Water Officer)
2. Districts Agricultural Officer (DAO)
3. District veterinary officer (DVO)
4. District Social Development Officers (DSDO)
5. District Livestock Development Officer (DLPO)
6. District Development Officers (DDO)
7. District Forest Officers (DFO)
8. District Environment Officer (DEO)
9. District Works Officer (DWO)

Each project implementing district had a DFT. However some newly formed district still operate closely and jointly with their mother Districts and under one District project coordinator. The Districts were – Embu East with Embu West, Mbeere South with Mbeere North and Tharaka North with Tharaka South.

Hence DFT potential respondents were:  $- 9 \times 8 + 3 \times 8 = 96$

**Chairmen of Focal Development Area Committee.**

There was one Chairman for each Focal Development Area Committee (FDAC).

Number of FDAS in each district:-

1. Embu West	6
2. Embu East	3
3. Mbeere South	4
4. Mbeere North	4
5. Meru South	4
6. Maara	4
7. Tharaka South	6
8. Tharaka North	0
9. Imenti South	6
10. Meru Central	3
11. Imenti North	<u>5</u>
<b>TOTAL</b>	<b>45</b>

**Note-** There was only one FDA in Tharaka North which was shared with Tharaka South under one FDAC.

## APPENDIX 4

### Stakeholders' organizations

Name of your organization	Frequency	Percent
Kathiga gaceru water project	1	3.3
A.I Project	2	6.7
Nthawa	1	3.3
Mukami irrigation water project	1	3.3
Ndurumori FDA	1	3.3
Kamarandi water project	1	3.3
Fish pond, Iriri spring	1	3.3
Joy tree nursery	1	3.3
Gacimbi spring protection	1	3.3
Kanyuru spring protection	1	3.3
mutungi farmers field school	1	3.3
Ndagani kk water project	1	3.3
Gaciankumbo FDA	1	3.3
kogoti youth group	1	3.3
Mwega FDACS	1	3.3
Kuiri community policing	1	3.3
Farmer	2	6.7
Kathigu LFFS	1	3.3
Gitwiki FDA	3	10
Mweru bee keepers	2	6.7
Kathaku SHG	1	3.3
WRUA	1	3.3

Source: Researcher 2011

## APPENDIX 5

### CALCULATION OF ACTUAL SAMPLE SIZE

According to Brewerton and millward, 2003 in their book, *Organization Research Methods*. The sample size is governed by:-Confidence level required.

- The margin of Error
- Type of analysis
- Size of the total population

To calculate the Actual sample size we consider the response rate  
They state that- the response rate for mailed Questionnaires' is 30%

The response rate of interviews is given as 75-90% (sometimes may get to 100)

$$\text{Total Response rate} = \frac{\text{Total number of responses}}{\text{Total number in sample- Ineligible responses}}$$

Hence to calculate the actual sample size  $n^a = n \times 100$

$$\frac{\text{-----}}{\text{Re \%}}$$

Where  $n^a$  is the actual sample size required.

$n$  is the minimum sample size( from the table)

Re% is the estimated response rate expected as a percentage.

#### **An extract of the table from Research Methods(Brewerton and Millward,2003**

Population	sample size@95% confidence
50	44
100	79
150	108
200	132



**KENYATTA UNIVERSITY  
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**28<sup>th</sup> February, 2011**

**TO WHOM IT MAY CONCERN:**

**RE: JOSEPH NDUATI GITHINJI - D53/OL/16330/06**

This is to confirm that the above named is a master of Business Administration **MBA (Project Management)** Student in the **School of Business, Kenyatta University**.

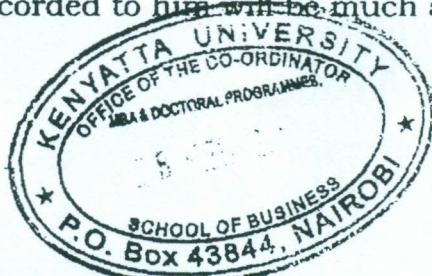
He is through with course work and has successfully defended his Masters Degree proposal (**Factors Influencing Implementation of Natural Resource Management Projects in Kenya. A Case of Mount Kenya East Pilot Project in Eastern Province**) and has done all the corrections that were pointed out by the examiners during the defense. He is now embarking on data collection.

Any assistance accorded to him ~~will be~~ much appreciated by this office.

Thank you.

A handwritten signature in black ink, appearing to read 'Muathe SMA', written over a horizontal line.

**MUATHE SMA  
DOCTORAL AND MBA PROGRAMME COORDINATOR**





MAP 1: THE PROJECT AREA

