INFLUENCE OF COMMUNITY DEVELOPMENT FACTORS ON PERFORMANCE OF WATER PROJECTS IN MAARA SUBCOUNTY, THARAKA-NITHI COUNTY, KENYA

NJERU JOHN MUCIRA

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DECLARATION

This research project report is my original work and has never been presented for a degree award in any other university.

Sign ……. DATE ……..

Njeru John Mucira

L50/78208/2009

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

Sign ……. DATE ……..

Prof. Nathan Gichuki

Lecturer

School of Biological Sciences

University of Nairobi

DEDICATION

This project is dedicated to my late mum Alice Kina, who gave me inspiration to study. I also dedicate it to my lovely wife Grace Mucira, daughter Patience Gatugi and son Caleb Mucoki.

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I wish to express my heartfelt gratitude to my supervisor Prof. Nathan Gichuki and Resident Lecturer Dr. Chandi J. Rugendo, for their guidance and critique of the work. I also wish to acknowledge the assistance given by the staff at Meru Extra-Mural Centre especially Mr Amos Gitonga. I also thank the administration of University of Nairobi School of Post Graduate studies for according me the chance to undertake the degree course.

I wish to also thank all the individuals and project members who helped me complete the task of filling the questionnaires. This research project work could not have been possible without their input.

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ABBREVIATIONS AND ACRONYMS

CBOS: Community Based organizations

CDF: Constituency Development Fund

DCLG: Department of Communities and Local Government

DDO: District Development Officer

DFOA: District Field Operations Assistants

DDP: District Development Plan

DFRD: District Focus for Rural Development

MDGs: Millennium Development Goals

MPND: Ministry of Planning and National Development

NDP: National Development Plan

UN: United Nations

ABSTRACT

The success of community development projects is profoundly influenced by both external factors, such as political and administrative interference; and internal factors, such as poor planning, poor governance and mismanagement of project resources, especially funds. This study investigated the community development factors that influence the performance of water projects in Maara Sub County, Tharaka-Nithi County. For the purpose of the study, two public water development projects, Kamwene and Gatua-Karimba, were selected because they offered an opportunity to compare projects with contrasting levels of success. The research sought to answer the question of why Kamwene water project was succeeding while Gatua-Karimba had lagged behind in terms of their development targets. The specific objectives were to determine the influence of community participation on the performance of water projects, to examine the influence of use of participative leadership on the performance of water projects and to assess the influence of community empowerment on the performance of water projects in Maara Sub County. The research was conducted through a survey and administration of pre-prepared questionnaires and interview schedules to target the community group members, leaders, local administrators and extension officers working in water sector. Target population was 1120 members, including members of the management teams of the two water projects. A random sample of 112 members, including interviewing all 30 committee members of the management teams of the two projects was taken. All the responses received were analyzed for patterns and trends and the results indicated that participation of members of the project influenced performance in water project as indicated by results of awareness of the rules governing the project, attendance of meetings and active participation in the those meetings. This Influence of community participation was reported in 88.4% of the total respondents in both water projects. On participative leadership of the project officials, 70.5% showed there is influence of use of participative leadership on performance. This is indicated by how leaders were elected and open forums where members can freely express their ideas. Concerning community empowerment, 92% of members from both projects agreed there was influence of community empowerment on performance as indicated by understanding their needs as community, members mobilizing other members in project initiatives and the responses to such mobilization. In conclusion the study looked at how community members are involvement, consultation and empowerment in project management influenced the performance of those projects. The information gathered will enable communities understand their own weaknesses in management of water projects to achieve targets. It will also help the government and the donors to know how they approach different projects.

CHAPTER ONE
INTRODUCTION

1.1. Background to the study

As far as transboundary conflicts are concerned, regional economic development and cultural preservation can all be strengthened by states cooperating management of water. Instead of a trend towards war, water management can be viewed as a trend towards cooperation and peace. Many initiatives are launched to avoid crises. Institutional commitments like in the Senegal River are created. In 2001, UNESCO and Grenn Cross International have joined forces in response to the growing threat of conflicts linked to water. They launched the joint *From Potential Conflicts to Co-Operation Potential* programme to promote peace in the use of transboundary watercourses by addressing conflicts and fostering co-operation among states and stakeholders. Water is a critical resource for sustaining all forms of life as well as economic and social activities in the world and in any country. The target for Millennium Development Goal seven (MDG 7) on environmental sustainability is to have by 2015 the proportion of people without sustainable access to safe drinking water sanitation services reduced by half.

United Nations, (2010) analysis of data from 35 countries in Sub-Saharan Africa shows significant differences between the poorest and richest population in both rural and urban areas. Over 90% of the richest group's in urban areas use improved water sources and over 60% have piped water on premises. In rural areas, piped-in water is non-existent in the poorest 40% of households and less than half of the population use some form of improved source of water.

Kenya Vision 2030's aim on water and sanitation sector in Kenya is to ensure water and improved sanitation availability and accessibility to all by the year 2030. Individuals need water for their domestic and leisure activities whereas economies rely on water to generate electricity, support irrigation agriculture and livestock development. Water is also needed for industrial production and other commercial purposes particularly in tourism and catering industry. Water is also increasingly becoming a commodity whose

sale provides income and employment opportunities. Access to clean water and its use is also indispensable not only for sanitation purposes but also for helping to reduce incidences of water borne diseases and improves public health, which account for a large proportion of health cases in hospitals. Water forms part of infrastructure in marine transport and support irrigated agriculture. In this regard, proper management of this resource will play a vital role in the realization of the Kenya Vision 2030.

Kenya is a water scarce country with renewable fresh water per capita at 647 cubic meters against the United Nations recommended minimum of 1000 per capita cubic meters. This fresh water per capita has been declining and is projected to reach 235 cubic meters by 2025 unless effective conservation measures to address the challenges are implemented. Additional supply and more efficient management of Kenya's scarce water resources for household and commercial enterprises will therefore be necessary to achieve the economic, social and political stability. Moreover, the pressure to manage the country's water resources more efficiently and ensure that water services are availed equitably among the diverse uses is bound to increase as the country gears itself towards meeting the Kenya Vision 2030.

Access to safe water is currently estimated at national average of about 50%. The World Bank's 2004 water and sanitation country assessment has put the coverage at 49% for water supply with access to safe water in rural areas averaging 31 % (GOK, 2005)

In order to increase water development and access many community water projects have been initiated throughout the country. According to Maara District Annual Monitoring and Evaluation Report 2012, there are 96 community water projects in Maara Sub County. Among them are Kamwene and Gatua-Karimba water projects, which are registered and operate in Mitheru location. The two water projects cover the same geographical area and therefore the same population target. The difference between them lies in their leadership and management styles.

Since implementation of the District Focus for Rural Development strategy in the early 1990s, the Government has continued to emphasize the use of participatory approaches in development programmes and project implementation (Kenya National Development

Plan 2002-2008). That approach recognizes that all stakeholders have a role to play in the entire development process. Furthermore, participatory approaches are not a substitute for government or donor funds but are intended to ensure that projects which are supported by the people and serve the interests of the majority are selected on a priority basis. Participative management of projects ensures that funds are used where they are most needed and where they will have highest impact.

The theory behind participative project management originated in the 1930s as a result of a business study conducted by Elton Mayo, who explored Frederick Taylor's scientific management principles. His findings challenged Taylor's views, which emphasized the importance of social norms, such as communication, participation, and leadership. Decades later, renewed interest in participative management hinged upon the desire for seeking better management practices, namely top-notch quality management systems, better employee relations, and integrated design and production teams. Elton emphasized the need for employees to be treated and made to feel as members of the same group. He observed that monetary rewards and good working conditions are less important than ownership of project by members. Community participation builds capacity of the communities in order to strengthen their ability to determine their own values as well as to organize themselves to action on their priority projects in their lives. It empowers the community members to play an active role by taking charge of their development projects according to their needs. However, participative management principles should be domesticated to serve the needs of local communities taking into account the prevailing social and economic environment.

1.2 Statement of the problem

The District Focus for Rural Development Strategy of the Government of Kenya started to institutionalize participatory approaches in rural development programmes in the 1980s. However, the old order of top-bottom approach continues to be applied especially in government funded projects. Where bottom- up approach is used it is still on experimental basis. According to the Maara District Annual Monitoring and Evaluation report (2012), there have been issues with management of water projects in Maara Sub-

County, Tharaka Nithi County. Despite the increase in funding, there has been an increased conflict between members and management of various water projects. Of the 96 community water projects in Maara Sub County, the report indicated that 42 had registered conflicts with the water office at Kieganguru. This represents 43.75% of the total projects in the sub county. According to Annual report (2012) at the sub county water office, two projects in one location had shown different levels of performance despite operating in nearly the same conditions including enjoying common members and management.

According to the Annual report (2012), Kamwene water project used participative project management since its inception. On the other hand, Gatua-Karimba water project was implemented by the district water office without involving the community during resource mobilization. The two projects have significant differences in terms of achievement of their set objectives. Kamwene water project has achieved more in terms of the distance they had laid the pipes. Their target was to construct 8 km water pipe line but they had done 14 km already serving members, exceeding their target. The members of the project are very cooperative and have owned the project.

Gatua-Karimba water project on the other hand had aimed to construct 8 km of water pipeline and only 2km which was done by the government through the Ministry of Water and Irrigation was able supply water to members. The community demanded to be paid for digging the trench and there was no such allocation in the budget. What resulted is a stalled project and some pipes had even been stolen. Notably, the two projects cover the same project area, the same community, the same or most leadership and the same water officers. The question was why should two water projects with the same stakeholders in the same area differ significantly in terms of success? This study therefore sought to establish the community development factors influencing performance of water projects in Maara Sub-county, Tharaka Nithi County.

1.3 Purpose of the Study

The purpose of this study was to examine how community development factors influenced performance of development project.

1.4. Objectives of the study

The study was guided by the following objectives;

1. To determine the influence of community participation in project activities on performance of water projects in Maara Sub County.
2. To examine the influence of use of participative leadership on performance of water projects in Maara Sub County
3. To assess the influence of community empowerment on performance of water projects in Maara Sub County

1.5 Research Questions

The study was guided by the following research questions;

1. Does the level of community participation in project activities influence the performance of water projects in Maara Sub County?
2. Does use of participative leadership influence performance of water projects in Maara Sub County?
3. Does the level of community empowerment influence performance of water projects?

1.6 Significance of the Study

The study was significant at two decision making levels: project level and at policy making level. Over the recent years, there has been a lot of emphasis on involving the people in identification and management of their own development projects. However, not much had been done in terms of research on evaluation of the factors influencing success of development projects especially in rural areas. Once unearthed, it would be used to improve decision making at project and policy levels in the study area. The lessons learned and best practices identified would be disseminated to other areas and hence used to improve the success of community based projects.

1.7 Delimitation of the Study

The study targeted the members and management committees of Kamwene and Gatua-Karimba water projects. It was favored by the fact that the two water projects are in the same area of operation and cover the entire Mitheru location. The population of the membership provided a good sample. Most of the founder members of these water projects were alive and useful in giving reliable historical information. This enabled easier comparison of the two water projects.

1.8 Limitations of the study

The time available posed a major challenge to the study. This is because at no time were all members of the projects at the same point to be interviewed or to fill the questionnaire. This challenge was overcome by use of research assistants as well as diversifying mode of interviewing including use of email and mobile phone calls. Some members of the project and their committee members were shy from giving exact information in fear of exposure of their weaknesses. This challenge was overcome by making clear the intention of the study before data collection. Use of discussion groups to debate about the projects were also used to reduce tension in the respondents.

1.9 Assumption of the Study

The research had various assumptions including; that the samples represented the entire population of the membership of the water projects, that the selected respondents were willing and faithful in answering the questions, that the data collection methods used were accurate and valid to achieve the right data, that the membership and the committees of the two water projects were representative of other water development projects in Kenya.

1.10 Definition of Significant Terms

Community: A group of interacting people, living in some proximity and sharing common norms, values and challenges

Community empowerment: the process by which people gain control over the factors and decisions that shape their lives

Community participation: involvement of the local people in the process of project planning and implementation

Management: act of regulating project operations using available resources efficiently and effectively.

Participative Leadership refers to the general governance and management of the project actively involving the subject.

Success: the achievement of objectives and targets of the project

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter reviewed the literature on water management as well as influence of community participation, participative leadership and community empowerment factors on performance of project water projects. It also discussed the conceptual framework and theoretical framework.

2.2 Overview of water management.

Golam and Chowdhury, (2010), say that access to water resources is unequal between the poor and the rich. In an attempt to promote equity, sustainable water management and environmental preservation, integration of multi objective planning and decision making, maintenance of ecosystems and protection of livelihoods, public participation and ecosystem–based local management constructs have been adopted by water management in Bangladesh.

International Institute for Environment and Development (IIED) report by Skinner (2009), up to US dollars 360 million spent on building boreholes and wells was wasted as a result of poor maintenance of water supply points. An estimated number of 50,000 water supply points are nonfunctional across Africa. The report further indicates that only one third of water points constructed by NGO's in Senegal are working while 58% in Ghana are beyond repair. This is attributed to the fact that the Government and other development agencies do not consult local people on long term sustainability constructs such as operations and maintenance and financial management after termination of external financial support. The culture of constructing water points and then walking away without proper assessment on post implementation maintenance procedures is highly criticized.

The constitution of Kenya states that every person has the right to clean and safe water in adequate quantities. Oden, (2002) noted that statistics show that 1.3 billion people worldwide do not have access to safe water, 800 million are malnourished and hunger is their constant companion. Therefore a framework of sustainable development must

include a strategic plan for insuring access to secure sources of water and evaluate water and impact of its different uses on all aspects of development. Two potential outcomes that should concern all of us about water issues are the consequences for production which in turn compromises the safety of the food supply and conflicts over control of the water that can occur.

Medium Term Plan (2008-2012) states that water is a resource necessary not only to support life but also to sustain economic activities in different sectors of the economy. The centrality of water in economic and social development of the country is acknowledged in the Kenya Vision 2030. Water is critical to successful performance of key sectors of the economy such as agriculture, livestock, energy, manufacturing and tourism. The role of water in promoting growth and development within these sectors and the national economy depends on its availability and reliability. It further notes that the distances to the nearest water point pose a challenge particularly to women and girls who bear responsibility of fetching water. Most time is spent on the activity hence compromising the girls' education and time for other productive activities. The available water is often inadequate for industrial, commercial, domestic as well as livestock and wildlife use. This scarcity has intensified competition among various users and often results to conflict. Involvement of local communities in the management of water resources through formation of water resources users association has resulted in reduction of illegal abstractions reduced catchments encroachment, rehabilitation of catchment areas and river bank protection. Water constitutes a significant part of living matter and it's recognized that living organisms consist of 60-70% of water. We know that water is important to life since it serves as the medium of moving nutrients into plants. It regulates heat transfer in the biosphere and supports aquatic system.

Francis, (2008) observes that some of the factors that could lead to collapse of grassroots organizations are the hijacking of the project from the above, heterogeneous membership that threatens harmony, limited social awareness that leads to increased vulnerability, crushed and crippled spirit as a result of poverty, non-democratic political environment contradicting the process of empowerment and compromises on unity of purpose as a result of large projects that are difficult to manage. This, according to Mulwa, (2008) is

because strong donor support tends to shift loyalty of the leadership to the donor as opposed to the membership hence diverting from the goals and wishes of the membership.

Cursworth and Franks, (1993) say that a project can succeed or fail because of lack of strong management and leadership, the cultural misfit of project objectives and activities within the environment and lack of local knowledge and understanding leading to rejection of the project by the intended beneficiaries. Such a project will succeed if it builds on existing strengths and reduced duplication of effort.

The other factor that influences the success of the water project is, according to Mansuri and Rao, the involvement of members in the project decision process. This is important because it helps in building social capital which is extremely important for project success (Mansuri and Rao, 2004).

Therefore there is clear relationship between members' participation in the process of project conceptualization and design, the leadership of the project and resource mobilization strategies. The research will investigate these factors which form participative management with a view of unearthing how they have influenced success and failure of Gatua-Karimba and Kamwene water projects. This will contribute to the opinion of other scholars in as far as management of water projects, especially in Kenya, is concerned.

2.3 Community participation and performance of water projects.

The principles of participation can be traced in Paulo Freire's psychosocial method in which people discussed their own life situation, identified their problems and planned for transformation (Francis, 2008). The principles require that developers focus on creating critical awareness through experience-based learning and reflection on the peoples own life situations and finding out what to do with its inadequacies, planning for collective action to transform whatever is undesirable, acting to change situation and finally identifying failures and successes from action taken so that it informs the next plan of action (Ibid, 2008)

Kasiaka, (2004), defines participation as an approach through which beneficiaries and other stakeholders are able to influence project planning, decision-making, implementation and monitoring phases. On the other hand, participation is considered to be a prerequisite for project ownership, successful implementation and sustainability of the projects in question. Participation does not mean acceptance of all ideas from diverse groups. In participation, there is a need to combine indigenous and intellectual knowledge. However, care must be taken so that intellectual knowledge does not influence that of the indigenous. All people covered by a project, irrespective of gender, caste or classes have access to clean water. However, they may not all have equal access to all the benefits which are part of the work. Many important decisions made during project implementation are made by well-off and influential men in the village. Women and poor men are not equally involved, both at times are poorly represented in project management committee. Those who probably have the most to gain from these water supply and sanitation systems, mainly poor women and men should be involved in the management of the water system.

McCommon *et al*, (1990), says that community participation is taken to mean that community plays an active role in its own affairs by sharing and exercising political and economic power. The term community participation is sometimes used interchangeably with community management to refer to community involvement in development projects.

Figuere, (1991), argues that those projects which involve the widest possible participation of people whose needs are addressed are mostly likely to be effective. In explaining participation, we should understand that there are four levels of participation in order of ascending from least influence to most influence (ILEC, 2005).These are information sharing which is one way communication, consultation which is two way communications, collaboration which is shared control over decisions and resources and empowerment which is transfer of control over decisions and resources.

ILEC, (2005), further notes that participatory development seeks to engage local populations in development projects. Participatory development has taken a variety of forms since it emerged in the 1970s, when it was introduced as an important part of the

basic needs approach to development. Participatory development seek to give the poor a part in initiatives designed for their benefit in the hopes that development projects will be more sustainable and successful if local populations are engaged in the development process. Participatory development has become an increasingly accepted method of development practice and is employed by a variety of organizations. It is often presented as an alternative to mainstream top-down development. There is some question about the proper definition of participatory development as it varies depending on the perspective applied. Two perspectives that can define participatory development are the Social Movement Perspective and the Institutional Perspective.

According to ILEC, (2005), the social movement perspective defines participation as the mobilization of people to eliminate unjust hierarchies of knowledge, power, and economic distribution. This perspective identifies the goal of participation as an empowering process for people to handle challenges and influence the direction of their own lives. Empowerment participation is when primary stakeholders are capable and willing to initiate the process and take part in the analysis. This leads to joint decision making about what should be achieved and how. While outsiders are equal partners in the development effort, the primary stakeholders are primus inter pares, i.e., they are equal partners with a significant say in decisions concerning their lives. Dialogue identifies and analyzes critical issues and an exchange of knowledge and experiences leads to solutions. Ownership and control of the process rest in the hands of the primary stakeholders. The institutional perspective defines participation as the reach and inclusion of inputs by relevant groups in the design and implementation of a development project. The institutional perspective uses the inputs and opinions of relevant groups, or stakeholders in a community, as a tool to achieve a pre-established goal defined by someone external to the community involved. The development project, initiated by an activist external to the community involved, is a process by which problem issues in a community can be divided into stages, and this division facilitates assessment of when and to what degree a participatory approach is relevant.

There are four key stages of a development project from an institutional perspective: Research Stage, Design Stage, Implementation Stage and Evaluation Stage (ILEC, 2005).

Advocates of participatory development emphasize a difference between participation as an end in itself, and participatory development as a process of empowerment for marginalized populations. This has also been described as the contrast between valuing participation for intrinsic rather than purely instrumental reasons. In the former manifestation, participants may be asked to give opinions without any assurance that these opinions will have an effect or may be informed of decisions after they have been made. In the latter form, proponents assert that participatory development tries to foster and enhance people's capability to have a role in their society's development.

Kioko (2010) gave advantages of stakeholder participation as; bringing common undertaking of the project, enhancing accountability, improving project design, better decisions are made when more people participate, improve project performance once implemented, more management information generated, brings common understanding of problems their causes, magnitude, effects and implications and hence identification of solutions and posters feeling of ownership of project and its management.

2.4 Participative Leadership and performance of water projects

One of the most significant functions performed by leaders is making and executing decisions. Participative leadership involves efforts by a leader to encourage and facilitate participation by others in making important decisions (Yukl, 2010,). In organizations, it is often necessary to involve others in the process of decision making in order to get decisions approved and implemented. Participative leaders not only guide group members but also participate actively in the group and acknowledge inputs from group members when making decisions and solving problems.

Likert, (1967) defines Participative leadership as a style of leadership that involves all members of a team in identifying essential goals and developing procedures or strategies to reach those goals. From this perspective, this leadership style can be seen as a leadership style that relies heavily on the leader functioning as a facilitator rather than simply issuing orders or making assignments. This type of involved leadership style can be utilized in business settings, volunteer organizations and even in the function of the

home. One of the main benefits of participative leadership is that the process allows for the development of additional leaders who can serve the organization at a later date. Because leaders who favor this style encourage active involvement on the part of everyone on the team, people often are able to express their creativity and demonstrate abilities and talents that would not be made apparent otherwise. The discovery of these hidden assets help to benefit the work of the current team, but also alerts the organization to people within the team who should be provided with opportunities to further develop some skill or ability for future use.

Franks and Cursworth, (1993), asserts that in the effort to understand the concept of leadership, Mintzberg, a classical scientific management theorist, saw a project manager as the chief executive, the leader and diplomat while Fayol saw it in terms of planning, controlling, organizing and directing Analoui Farhad observes that people are not only subordinates, but also the essential resource for transforming ideas, inspirations, materials, capital and technical competence and account for why some projects are more successful than others.

Likert (1967) says that a participative leader, rather than taking autocratic decisions, seeks to involve other people in the process, possibly including subordinates, peers, superiors and other stakeholders. Often, however, as it is within the managers' whim to give or deny control to his or her subordinates, most participative activity is within the immediate team. The question of how much influence others are given thus may vary on the manager's preferences and beliefs, and a whole spectrum of participation is possible. A participative leadership involves engaging people lower down the organization in decision-making. People across the organization are psychologically closer together and work well together at all levels. The concern here is the caliber of the management players of the water project and the qualities of the management team and how they are identified in relation to the successful implementation of the water projects. This includes level of education, economic status, social status in terms of connection to the local politics and the experience. It also shows how people are managed. This will be the focus of the research so as to unearth the relationship between leadership and successful implementation of the water project.

Muhamad *et al* (2008) says that evidence indicates that the participative style is more effective leadership behavior. According to University of Iowa studies, leadership behavior range from autocratic to democratic to laissez faire behaviors. Autocratic leaders are those emphasizing on centralized power, democratic are more participative in nature while laissez faire are considered non-leadership because there is little guidance provided. On the other hand, the Michigan and Ohio studies identified two major behaviors related to task-oriented and people-oriented style. The people oriented style is focused on getting participation from others in decision making process. People oriented style of team leadership is more participative and the ideal approach to leadership. In the Malaysian scenario, Mohamad *et al* (2008) found that the democratic style that involves two-way is the most effective for a multiracial community. The study also identified various roles of community leaders. The public sector leadership should change their traditional roles of command and control to more collaborative roles.

2.5 Community Empowerment and performance of water projects

The New Start national magazine defined empowerment from a community development perspective as having a number of dimensions and they are as follows; personal empowerment is having the opportunity to gain the skills and knowledge you need to take action on things that matter to you; tackling exclusion and promoting social justice; group activity in communities – whether for self – help, mutual support, campaigning or just for fun; cooperation and networking between community groups or communities having influence over decision- making and decision- makers being open to community influence. (New Start, 22nd February 2008 Edition, page 21).

Wallerstein & Bernstein, (1988) says that one methodology that has proven itself efficacious as a theoretical groundwork for intervention in community development is Paulo Freire's empowerment education model. Based on strong philosophical ideas regarding oppression and struggle, Freire's pedagogy is also relevant to community development. Freire's ideas in community development are to start from the problems of the community, to use active learning methods, and to engage participants in determining

their own needs and priorities Freire's educational philosophy aspires to liberate and empower its students by promoting critical consciousness of the world around them.

Delp *et al*., 2005), Freire's model of empowerment education, therefore, incorporates three major themes that citizens voice their knowledge and experiences to shape their own education; that dialogue between citizens leads to critical consciousness of root causes to social problems; and that programs grounded in the empowerment education model "build skills, confidence, and opportunities for individual and collective action" Freire's empowerment education model invites citizens to become subjects rather than objects in their complex social lives, ideally fostering desire to take social action against problems in their communities.

Community empowerment is the process of enabling people to shape and choose the services they use on a personal basis; so that they can influence the way those services are delivered. It is often used in the same context as community engagement, which refers to the practical techniques of involving local people in local decisions and especially reaching out to those who feel distanced from public decisions (DCLG website, 2008).

Mauch and Paper, (1997), empowerment means that people become aware of their problems, gain knowledge, competencies, take action and gain control and power over their resources. It has explicit purpose namely to bring about social and political changes embodied in its sense of liberation and struggle. This implies that communities are empowered if their social conditions change for better and in political context where they organize work together to achieve shared goals.

Mauch and Paper, (1997) further defines Empowerment as the process by which people gain control over the factors and decisions that shape their lives. It is the process by which they increase their assets and attributes and build capacities to gain access, partners, networks and/or a voice, in order to gain control. Enabling implies that people cannot be empowered by others; they can only empower themselves by acquiring more of power's different forms. It assumes that people are their own assets, and the role of the external agent is to catalyze, facilitate or accompany the community in acquiring power.

Community empowerment, therefore, is more than the involvement, participation or engagement of communities. It implies community ownership and action that explicitly aims at social and political change. Community empowerment is a process of re-negotiating power in order to gain more control. It recognizes that if some people are going to be empowered, then others will be sharing their existing power and giving some of it up. Power is a central concept in community empowerment and health promotion invariably operates within the arena of a power struggle. Communication plays a vital role in ensuring community empowerment. Participatory approaches in communication that encourage discussion and debate result in increased knowledge and awareness, and a higher level of critical thinking. Critical thinking enables communities to understand the interplay of forces operating on their lives, and helps them take their own decisions. Although there are a number of constraints that affect success of development projects the research sought to investigate and concentrate on management constraints in water development projects.

2.6 Theoretical Framework

The study was guided by the structural functionalism theory; Talcott, (1991). It's a sociological theory that attempts to explain why society functions the way it does by focusing on relationship between various social setups that makes up society. According to this theory, organizations consist of many groupings of different individuals, all working together harmoniously to a common goal. It argues that most organizations are large and complex social units consisting of many interacting sub-units which are sometimes in harmony but more often than not they are in diametric opposition to each other. Functionalism is concerned with the concept of order, formal work in organizations and in how order seems to prevail in both systems and society irrespective of the changes in personnel which constantly takes place. The theory seeks to understand the relationship between the parts and the whole system in an organization in particular and identify how stability is for the most part achieved. Structural functionalism further advocates for an analysis of the perceived conflicts of interests evident amongst groups of workers. In this case the water project members, management committees, donors, the

government through the Ministry of Water and the chiefs were the parts of the system while the system is the community.

Carr and Capey, (1982), however, say it is crucial to take into account the involvement for participation by each stakeholder and the different interest towards achievement of certain goals. The theory thus appropriately explains that an organization's management must consider it important in bringing the other parties together into building a cohesive and a goal oriented system that pull together towards achieving goals and how to manage both conflicts and excitements

2.7 Conceptual Framework

Figure 2.1 shows the conceptual framework of the study. It shows the relationship between the independent and dependent variables as well as moderating and extraneous variable. The extraneous variable includes the culture of the organization. These in include beliefs, methods of recruitment, gender involvement and also subscription rates.

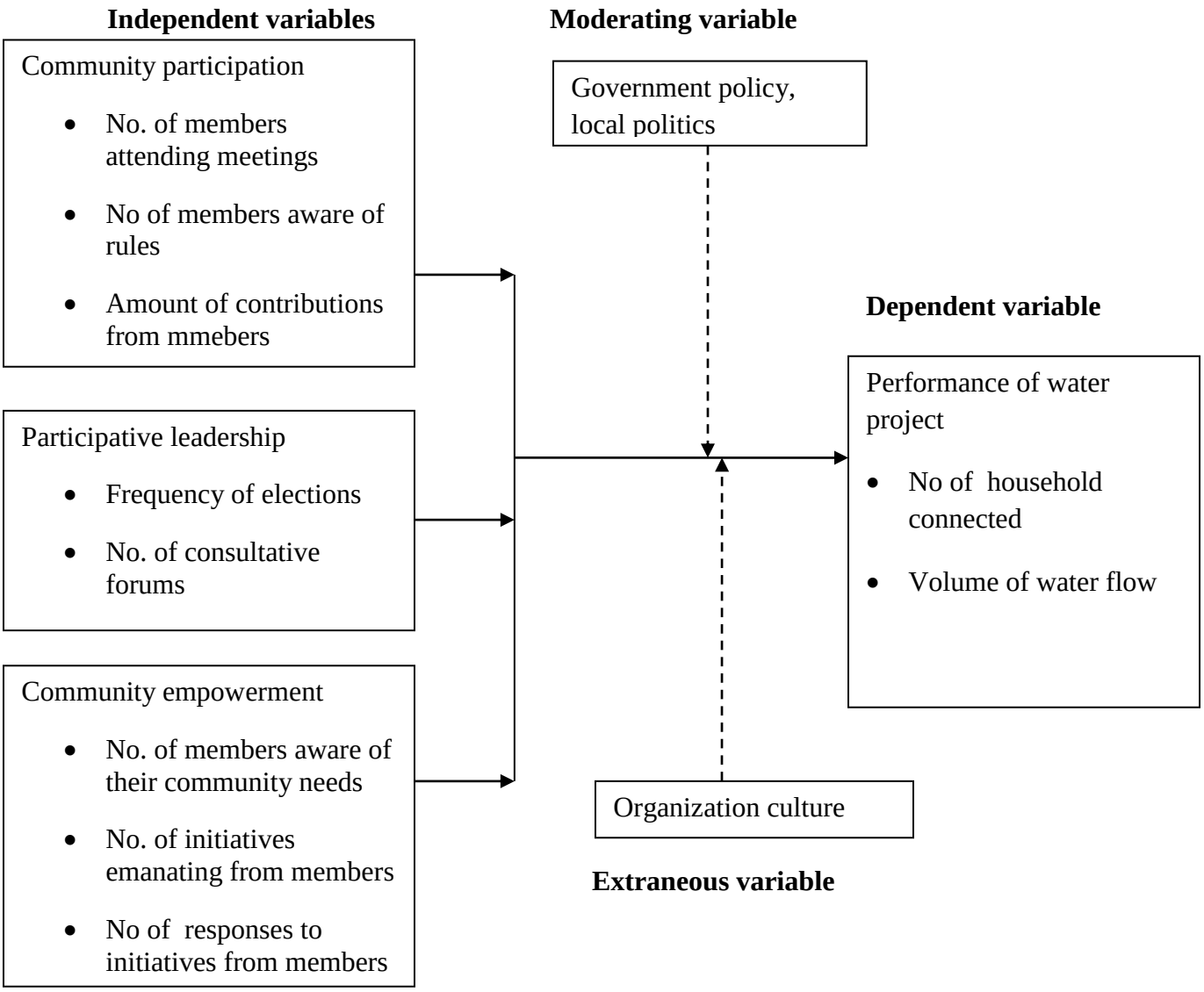

Figure 2.1 Conceptual framework

The participation of members of water project, participative leadership of the management and the level of community empowerment will affect the effective implementation of the water project. However, external factors which cannot be controlled by management of the project such as government policy and local politics could have an effect on the success of the project.

2.8 Summary of Literature Review

This chapter has reviewed the literature on influence of community participation, participative leadership and community empowerment factors on the performance of water projects in Maara Sub County. The literature has revealed that every person has the right to clean and safe water in adequate quantities. Oden, (2002) noted that statistics show that 1.3 billion people worldwide do not have access to safe water. Therefore as a resource that supports other economic activities, it requires prudent management. For the water projects to succeed the management need to involve all the stakeholders of the project. On participation, the literature has revealed that Participatory development seek to give the poor a part in initiatives designed for their benefit in the hopes that development projects will be more sustainable and successful if local populations are engaged in the development process. Participative leadership on the other hand involves efforts by a leader to encourage and facilitate participation by others in making important decisions in order to get decisions approved and implemented. Empowerment makes that people become aware of their problems, gain knowledge, competencies, take action and gain control and power over their resources to achieve shared goals. The chapter has also discussed the Conceptual framework and theoretical framework upon which design of the project was based.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter deals with the specific methodology of research as well as the procedure in data analysis. It includes the research design, population target, and the process of sampling, data collection methods, the validity and reliability of data collection methods, methods of data analysis and operation definition of variables.

3.2 Research Design

The research was carried out in Mitheru location of Maara subcounty in Tharaka Nithi County. That is where the two water projects, Kamwene and Gatua Karimba water projects operated. The research used both qualitative and quantitative approach of analysis. It was cross-sectional and adopted a descriptive survey design. Descriptive survey design is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals. It's used when collecting information about people's attitudes, opinions, habits or any of the variety of social issues in their natural setting. Variables are measured once, needs a sample of about a hundred to a thousand for accurate estimate of variables relationship and no attempt is made to change the situations. Kate *et al*, (2003), says that it may lack details or depth of the topic being investigated and one may not secure control of a high response rate. This weakness was managed by the sampling procedure.

3.3 Target Population

The research targeted the membership of Kamwene and Gatua-Karimba water projects, the project management committees and the district water office in Maara Sub County. However, the district water office was treated as part of the management. Both projects have total population of 1120 members according to District Water Annual Report 2012.

To capture all the views, the research also targeted the women members as a population category. This avoided a situation whereby women membership is overlooked due to dominance of male opinion.

3.4 Sampling Procedure

The research adopted stratified and systematic random sampling. The general population was stratified into two projects and then male and female. Systematic random sampling method was then used on each stratum. The advantage of random sampling is that it allowed a known probability that each elementary unit of the population will be chosen hence increasing the possibility of collective representation and accuracy. Stratum sampling on the other hand ensured proper presentation and greater objectivity and variety of opinions based on each project and gender.

3.5 Sample Size

Mugenda and Mugenda, (2003), assert that 10% of the accessible population is a adequate sample where one is using a descriptive studies design. Since the research assumes a descriptive survey design, a sample of 10% per strata in each cluster of sample was taken. This gave 62 members in Kamwene water project and 50 members for Gatua-Karimba water project because they had 620 and 500 members respectively. Thus, 112 respondents filled the questionnaires.

Table 3.1 shows the membership and the sample size of the members of the two water projects studied.

Table 3.1 Sampling frame

Project Name	**Total membership**	**Sample**
Kamwene Water Project	620	62
Gatua-Karimba Water Project	500	50
Total	**1120**	**112**

Source: Maara District Water Office

3.6 Methods of data collection

The data collection was conducted using questionnaire and interview schedules. This is a research instrument that gathers data over a large sample. According to Kothari (1990), a questionnaire consist of a set of structured questions that respondent are expected to respond to appropriately. It is used to collect information from substantial number of people. Some questionnaires were administered on phone while others were sent to specific target population representatives for filling. Structured and unstructured interviews were also used. These were questions asked orally to get information.

3.7 Validity and Reliability of the instruments

Mugenda and Mugenda (2003), validity refer to how far a research instrument measures what it is intended to measure or the degree to which the test items measures the traits for which the test is designed to. Kasomo (2007), points out that it is the accuracy of research tool. It refers to the utility of a tool, data or information. In this study two experts in the area of research were given research instruments to assess the relevance of each item in the instrument based on the objectives of the research. The questionnaires were also given to the supervisor to ascertain their appropriateness. To ensure the accuracy the language used to structure the questionnaires were easy, simple and clear for the respondents to understand. A piloting was also done by randomly picking 30 respondents to fill the questionnaires before the actual study.

Kombo (2007) says that reliability refers to how consistent a research procedure or instrument is or the degree of consistency in a study. According to Mugenda and Mugenda (2003), reliability is a measure of the degree to which a research instrument yields constant results or data after repeated trials to establish the reliability of data collection instrument. The reliability of the instrument was tested through a test-re-test method. The same instruments were administered to the sample at different times in two weeks interval. The results of the two responses were correlated to determine the extent of the consistency.

3.8 Methods of data analysis

Data analysis is examining what has been collected in a survey and making deductions and inferences from the information. The most commonly used method of reporting descriptive survey research is by developing frequency distribution, calculating percentages and tabulating them appropriately. The research adopted both quantitative and qualitative method of analysis of data. The data so collected was compiled, edited and entered into excel spread sheets and the statistical package of social sciences (SPSS) used. The analysis produced percentages and frequency distribution tables.

3.9 Operational definition of variables

Table 3.2: Operationalization table

OBJECTIVE	TYPE OF VARIABLE	INDICATOR	MEASURE	SCALE	APPROACH OF ANALYSIS	TYPE OF ANALYSIS	LEVEL OF ANALYSIS
To determine the level of community participation	Independent variable: members participation	No. of members attending meetings No of members aware of rules Amount of contributions from members	Number	Ordinal Nominal	Quantitative Qualitative	Non parametric Non parametric Thematic analysis	Descriptive Content analysis
To examine the use of participative leadership in the management	Independent variable: participative leadership	Frequency of elections No. of consultative forums	Number	Nominal Ordinal	Quantitative Qualitative	Non parametric Non parametric	Descriptive
To assess the level of community empowerment	Independent variable: community empowerment.	No. of members aware of their community needs No. of initiatives emanating from members No of responses to initiatives from members	Number	Ordinal Ratio	Quantitative Qualitative	Non-parametric Non parametric	Descriptive
	Dependent variable: Performance of water project	• No of household connected • Volume of water flow	Number Volume	Ordinal	Quantitative Qualitative	Non parametric	Descriptive

3.10 Ethical issues

The researcher assured the respondents of their confidentiality in the course of their participation during data collection. Also the researcher sought permission from the relevant authority to validate the whole activity.

CHAPTER FOUR
DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter deals with data analysis, presentation and interpretation of findings. It provides the overall findings based on primary and secondary data. Primary data was collected from the field using questionnaires, interviews and focused group discussions. The data analysis was mainly descriptive using percentages, tables and frequency distribution and cross tabulation to determine the relationship between independent and dependent variables. The analysis was done and the questionnaire responses of 100 members of the two projects and then the interview responses of the 30 committee members separately.

4.2 Response rate

A total of 112 questionnaires, 50 of which were administered to Gatua-Karimba members and 62 to Kamwene members and were all completed .The researcher and research assistants administered the questionnaires themselves by visiting the household and thus achieved 100% response rate.

4.3 Background information

In the background information, the respondents were requested to indicate the name of the project they were member, their gender, level of education and the duration they have been member of particular project.

4.3.1 Gender Analysis

Respondents were asked to state their gender. Analysis was done for the total respondents. Table 4.4 shows the gender of the members in the two projects. Overall there are more male members at 56.2% than female members at 43.8% in the two projects as shown in table 4.4. Sampling was, however, not biased towards male in either project

Table 4. 3: Distribution of respondents by gender.

Gender	Frequency	Percent
Female	49	43.8
Male	63	56.2
Total	**112**	**100.0**

Gender analysis was further done for every water project. Table 4.5 shows the analysis of gender per each water project. Female skew was apparent at Kamwene as shown by 54.8% of respondents from Kamwene as compared to male members at 45.2%. At Gatua-Karimba there were more males at 70% compared to females at 30%.

Table 4. 4: Gender analysis as per water projects

(a) Kamwene water project

	Frequency	Percent
Female	34	54.8
Male	28	45.2
Total	**62**	**100.0**

(b) Gatua-Karimba water project

Gender	Frequency	Percent
Female	15	30.0
Male	35	70.0
Total	**50**	**100.0**

4.3.2 Level of education

The respondents were asked to state their level of education. Table 4.6 below shows the level of education of the respondents. According to the table, a significant percentage of

all the respondents had secondary and post-secondary education. 58.1% of respondents from Kamwene water project and 62% from Gatua-Karimba had secondary and post-secondary education as shown by table 4.6 (a) and (b).

Table 4.5: Respondents level of education

(a) Kamwene water project

	Frequency	**Percent**
Post-Secondary	8	12.9
Secondary	28	45.2
Primary	16	25.8
Did Not Go To School	10	16.1
Total	**62**	**100.0**

(b) **Gatua-Karimba water project**

Education level	**Frequency**	**Percent**
Post-Secondary	8	16.0
Secondary	23	46.0
Primary	13	26.0
Did Not Go To School	6	12.0
Total	**50**	**100.0**

According to the table 4.6, only average of 14.05% in the two projects did not go to school while 26% had basic primary education.

4.3.3 Water projects

The respondents were asked to state the name of the water project in which they are member between Kamwene water project and Gatua-Karimba water project. Table 4.3 shows the project in which respondent is a member. 44.6% of the members sampled were from Gatua-Karimba and 55.4 % from Kamwene respectively. This is because the total

membership of the two projects is 1120 members 500 of which are from Gatua-Karimba and 620 are from Kamwene.

Table 4. 3: Distribution of respondents to various water projects

Name of the project	Frequency	Percent
Gatua-Karimba	50	44.6
Kamwene	62	55.4
Total	**112**	**100.0**

4.3.4 Duration of membership in water projects

The respondents were asked to state the length of time they had been members of the water project. Table 4.7 shows the duration of membership by respondents in the water projects. In table 4.7 (a) and (b), a significant 88.7% of respondents from Kamwene and 78% from Gatua-Karimba had been members of their project for 10 years or less while 11.3% from Kamwene and 22 % from Gatua-Karimba were members for longer period.

Table 4.4: Duration of membership in water projects

(a) Kamwene water project

Duration in the project	Frequency	Percent
<1 year	15	24.2
1-5 years	26	41.9
6-10 years	14	22.6
> 10 years	7	11.3
Total	**62**	**100.0**

Sixty six percent of respondents from Kamwene project and 36% from Gatua-Karimba had been members for 5 years and below while 33.9% of respondents from Kamwene compared to 66 % of Gatua-Karimba had been members for over 5 years.

(b) Gatua-Karimba water project

	Frequency	Percent
<1 year	3	6.0
1-5 years	15	30.0
6-10 years	21	42.0
> 10 years	11	22.0
Total	**50**	**100.0**

There was significant difference between the members in the two projects who had been members of their project for less than 5 years in favour of Kamwene at 66.1% and those that had stayed for more than 5 years in favour of Gatua-Karimba at 64%.

4.4 Level of Community participation and performance of water projects

The first objective of the study was to determine the influence of community participation on perfomance of water projects in Maara Sub County to achieve this objective the respondents were requested to give information on their awareness of rules and regulations governing their water project, the frequency of attendance of meetings by members, members' participation and its influence on performance of water projects.

4.4.1 Members awareness of with rules and regulations governing water project

The respondents were asked to state whether they were aware of any rules and regulations governing their water project. Table 4.8 shows members awareness of with rules and regulations governing water project. There was significant difference between those who were aware of the rules at 45 members and those not aware at 67 out of 112 respondents in the two projects as shown in tables 4.8(a) and (b).

Table 4.5: Members awareness of with rules and regulations governing water project

(a) Kamwene water project

Responses	Frequency	Percent
No	10	16.1
Yes	52	83.9
Total	**62**	**100.0**

However, there was a clear disparity between the two projects. More members were at Kamwene at 83.9 % than Gatua-Karimba at 30%. Those that were not aware of rules governing the project were more at Gatua-Karimba at 70% in table 4.8 (b) compared to those at Kamwene 16.1% in table 4.8 (a).

(b) **Gatua-Karimba water project**

Responses	Frequency	Percent
No	35	70.0
Yes	15	30.0
Total	**50**	**100.0**

4.4.2 Attendance of meetings by members

Respondents were asked to describe the member's attendance of meeting in water projects. Table 4.9 shows the frequency of attendance of meetings by members of the two projects. Tables 4.9 (a) and (b) shows that 67.6% of all respondents of the two water projects liked the attendance of the meetings by members. 9.8% of the sampled members felt the attendance was very bad. 95.2% of Kamwene members described attendance of the meetings as good and very good.

Table 4. 6: Frequency of attendance of meetings by members

(a) Kamwene water project

Attendance	Frequency	Percent
Very Good	24	38.7
Good	35	56.5
Poor	2	3.2
Very Poor	1	1.6
Total	**62**	**100.0**

In contrast 60% in Gatua-Karimba felt the attendance was poor and very poor while 40% from Gatua-Karimba felt the attendance of meetings as good or very good as shown by table 4.9(b).

(b) Gatua-Karimba water project

Attendance	Frequency	Percent
Very Good	5	10.0
Good	15	30.0
Poor	21	42.0
Very Poor	9	18.0
Total	**50**	**100.0**

4.4.3 Participation in management of water pprojects

The respondents were asked to describe members' participation in meetings of the water project. Table 4.9 shows members participation in water projects activities. In tables 4.10 (a) and (b), 66.6% of respondents in the two projects liked the participation of members to the meetings describing it as good or very good. 10.8% of the sampled members felt the attendance was very poor.

Table 4.7: Members' Participation in Water Projects

(a) Kamwene water project

	Frequency	**Percent**
Very Good	28	45.2
Good	31	50.0
Poor	2	3.2
Very Poor	1	1.6
Total	**62**	**100.0**

The majority (95.2%) of the sampled members at Kamwene felt that participation of members in meetings was good or very good compared to 38% at Gatua-Karimba who felt the same. Only 1.6% of members at Kamwene described the participation as very poor compared to 20% in Gatua-Karimba who felt participation as very poor.

(b) Gatua-Karimba water project

Participation	**Frequency**	**Percent**
Very Good	3	6.0
Good	16	32.0
Poor	21	42.0
Very Poor	10	20.0
Total	**50**	**100.0**

4.4.4 **Influence of Members' Participation on Performance of Water Projects**

The respondents were asked to state the way they thought the members' participation influenced the performance of water project. Table 4.11 shows the influence of members' participation on performance of water projects. A majority at 88.4% of the members sampled in the two projects concurred with the assertion that the way members participate in the project activities influence the success of the project as shown in Tables

4.11(a) and (b). Only 11.6% of total sample in two projects did not accept this. At Kamwene 64.5% said the influence was positive as compared to 10% from Gatua-Karimba who said the same. Those who said it was negative were majority from Gatua-Karimba at 74% as compared to 27.4% from Kamwene.

Table 4.8: Influence of Members' Participation on Performance of Water Projects

(a) Kamwene water project

Influence	Frequency	Percent
Positively	40	64.5
Negatively	17	27.4
No Influence	5	8.1
Total	**62**	**100.0**

(b) Gatua-Karimba water project

Influence	Frequency	Percent
Positively	5	10.0
Negatively	37	74.0
No Influence	8	16.0
Total	**50**	**100.0**

A cross tabulation was done on the members' participation against the status of the project. Table 4.12 shows cross tabulation of members' participation in water projects against project performance.

Table 4.9: Influence of members' participation in project activities on status of project

(a) Kamwene water project

			how level of members participation in project activities influence status of project			
			Positively	negatively	no influence	**Total**
members participation in meetings	very good	count	28	0	0	**28**
		% of Total	45.2%	.0%	.0%	**45.2%**
	Good	Count	12	17	2	**31**
		% of Total	19.4%	27.4%	3.2%	**50.0%**
	Poor	Count	0	0	2	**2**
		% of Total	.0%	.0%	3.2%	**3.2%**
	very poor	Count	0	0	1	**1**
		% of Total	.0%	.0%	1.6%	**1.6%**
Total		**Count**	**40**	**17**	**5**	**62**
		% of Total	**64.5%**	**27.4%**	**8.1%**	**100.0%**

In table 4.12(a), a majority at 64.5% of total respondents believe that the level of members' participation in project activities has positive influence on the status of the project. 27.4% believe the influence is negative while only 8.1% say there is no influence. Of the 95.2% who said that participation was good and very good 64.6% said that participation influenced the project positively while 30.6% there was negative and no influence. Only 4.8% who said there was poor or very poor participation also said there was no influence of this participation on the project.

In table 4.12(b), majority at 62% said participation was either poor or very poor, 46% of who said that the level of participation had negative influence to status of project and the

remaining 16% said there was no influence. 10% of those who said the participation was good or very good also said there was positive influence while the remaining 28% of them said the influence was negative.

(b) Gatua-Karimba water project

			how level of members participation in project activities influence status of project			
			Positively	negatively	no influence	**Total**
members participation in meetings	very good	Count	3	0	0	**3**
		% of Total	6.0%	.0%	.0%	**6.0%**
	good	Count	2	14	0	**16**
		% of Total	4.0%	28.0%	.0%	**32.0%**
	poor	Count	0	21	0	**21**
		% of Total	.0%	42.0%	.0%	**42.0%**
	very poor	Count	0	2	8	**10**
		% of Total	.0%	4.0%	16.0%	**20.0%**
Total		**Count**	**5**	**37**	**8**	**50**
		% of Total	**10.0%**	**74.0%**	**16.0%**	**100.0%**

Comparing Kamwene and Gatua-Karimba in table 4.12(a) and (b) above, majority 78 of total respondents which is 69.6% said there was good or very good participation. Out of these 57.7% said there was positive influence while a significant 39.4% said it had negative influence. Majority of those who said there was positive influence came from Kamwene. It's notable that of 34 respondents who said the participation was either poor or very poor, 31 of them came from Gatua-Karimba representing 91.2%.

Further, interview was conducted among the management committee members, water officers and administrators involved in these projects. They were asked to describe

participation of members in project activities. Majority indicated that at Kamwene Water project, participation of members in project activities was very good but had reservations with participation of members in project activities in Gatua-Karimba. They all said that members' participation or lack of it had influenced the status of the project.

4.5 Use of Participative leadership and performance of water projects

The second objective of the study was to examine the influence of use of participative leadership on the performance of water projects. To achieve this objective the respondents were required to give information on the preferred method of electing project leaders, the frequency of electing leaders, extent to which members were involved in management and key decision making in water project, and the influence of participation in decision making on water project performance.

4.5.1 Method of electing project leaders

The respondents were asked to state the preferred method of electing leaders in their water project. Table 4.13 shows the preferred method of electing project leaders by the members. In tables 4.13 (a) and (b), 54 respondents, comprising 48.2% of total respondents in the two projects said that leaders are elected through secret ballot. 36.6% said election is by show of hands and 15.2% appointed by the chief or politician. There is therefore no significance difference between those that said leaders are elected by secret ballot and those that said it is by show of hands.

Table 4.10: Preferred method of electing project leaders

(a) Kamwene water project

How leaders are elected	Frequency	Percent
Secret ballot	48	77.4
Show of hands	10	16.1
Appointed by chief or politician	4	6.5
Total	**62**	**100.0**

A significant 77.4% at Kamwene said elections are done through secret ballot and only 6.5% said leaders were appointed by the chief or politician. 12% at Gatua-Karimba said election is done by secret ballot. 62% at Gatua-Karimba said elections are done by show of hands while 26% said leaders are appointed by chief or politician. The difference in mode of electing leaders in the two projects is significant.

(b) Gatua-Karimba water project

How leaders are elected	Frequency	Percent
Secret ballot	6	12.0
Show of hands	31	62.0
Appointed by chief or politician	13	26.0
Total	**50**	**100.0**

4.5.2 Frequency of elections

The respondents were asked to say how often they elected their project leaders. Table 4.14 shows the frequency of electing leaders in the water projects. Tables 4.14(a) and (b) show 57 respondents making 50.9% of all respondents in the two projects said leaders are chosen after one year. Out of 57 respondents, 50 came from members at Kamwene, which was 80.6% of respondents from Kamwene. 37.5% in the two projects said they elect leaders after 3 years while 11.6% said they elect leaders when there is crisis.

Table 4.11: Frequency of electing leaders

(a) Kamwene water project

Response	Frequency	Percent
After one year	50	80.6
After three years	9	14.5
During crisis	3	4.8
Total	**62**	**100.0**

According to table 4.14 (a) and (b), Leaders of Kamwene water project are chosen after every year as shown by 80.6% of members in of the project while those of Gatua-Karimba are chosen either when there is a crisis or after 3 years as shown by 86%.

(b) Gatua-Karimba water project

Response	Frequency	Percent
After one year	7	14.0
After three years	33	66.0
During crisis	10	20.0
Total	**50**	**100.0**

4.5.3 Use of open forum

The respondents were asked to state whether their leaders encouraged open forum for the members to freely express their ideas. Table 4.15 shows the extents to which open forums were held. In the table 4.15, 77.68% of the total respondents said they were aware of that there open forums were encouraged by the management while 22.32% of the total respondents said they were not held. Most respondents from Kamwene water project 79% said they were aware their leaders encouraged open forum for members to express their ideas as compared with 24% from Gatua-Karimba who are aware of such efforts by their leaders

Table 4.12: Extent to which open forums were held in water project management

(a) Kamwene water project

Responses	Frequency	Percent
No	13	21.0
Yes	49	79.0
Total	**62**	**100.0**

(b) **Gatua-Karimba water project**

Responses	Frequency	Percent
No	12	24.0
Yes	38	76.0
Total	**50**	**100.0**

4.5.4 Consultation of members in decision making

The respondents were asked to rate how their leaders consulted the embers in decision making. Table 4.16 shows the extent to which project members are consulted in decision making in water projects. According to the table 4.16, 95.2 % from Kamwene said their leaders' consultation level was good or very good. Only 4.8% said the consultation was either poor or very poor. 40% from Gatua-Karimba said consultation was good or very good while majority at 60% said consultation was poor or very poor. 70.5% of total respondents said the level of consultation of members was either good or very good. Of these 74.4% came from Kamwene and 25.6% came from Gatua-Karimba. Majority at 30 respondents or 90.9% of those who said consultation was poor or very poor came from Gatua-Karimba. Only 3 respondents representing 9.1% who said it was poor or very poor came from Kamwene.

Table 4.13: Extent to which project members are consulted in decision making in water project.

(a) Kamwene water project

Rate	Frequency	Percent
Very good	28	45.2
Good	31	50.0
Poor	2	3.2
Very poor	1	1.6
Total	**62**	**100.0**

(b) **Gatua-Karimba water project**

Rate	Frequency	Percent
Very good	4	8.0
Good	16	32.0
Poor	22	44.0
Very poor	8	16.0
Total	**50**	**100.0**

4.5.5 Influence of consultation of members on water project performance

Respondents were asked to give their opinion on how consultation influenced the performance of water project. Table 4.17 shows the opinion of how the level of leader's consulting project members in decision making influenced the status of the project. Overall, 59.8% of the total respondents said the consultations influenced the status of the project positively while 36.6% said it had negative influence on the status of the project. 70.1% of those who said there was positive influence came from Kamwene compared to 29.9% from Gatua-Karimba. On the contrary, of the 36.7% who said it had negative influence, 68.3% came from Gatua-Karimba as compared to 31.7% from Kamwene.

Table 4.14: Influence of consultation on water project performance

(a) Kamwene water project

Influence	Frequency	Percent
Positively	47	75.8
Negatively	13	20.9
No influence	2	3.3
Total	**62**	**100.0**

(b) Gatua-Karimba water project

Influence	Frequency	Percent
Positively	20	40
Negatively	28	56
No influence	2	4
Total	**62**	**100.0**

Majority at 75.8% from Kamwene said the level of consultation positively influenced the status of the project while a significant 24.2% said the influence was either negative or there was no influence as shown in table 4.17(a).

Table 4.17 (b) shows that at Gatua-Karimba 40% said there was positive influence and only 4% said there was no influence caused by the level of consultation. On the other hand majority here at 56% said there was negative influence.

4.5.6: Cross tabulation of consultation of members by leaders in making decisions

Table 4.18 gives the cross tabulation of the relationship between consultation of leaders while making decisions and the performance of the project. In table 4.18(a), 75.8% said that consultation of members by leaders has positive influence on the status of the project. All are those who said consultation was good or very good. Out of those who said the consultations were good, a significant 19% said this influenced negatively the project status. Only 4.8% said the level of consultation by leaders was poor or very poor and all believed this consultation had negative or no influence on the project status.

Table 4.15: Cross tabulation of consultation of members by leaders in making decisions against the performance of the project

(a) Kamwene water project

			how does the level of consultation of leaders influence decision making			
			Positively	negatively	no influence	**Total**
Rating project leaders in terms of decision making	Very good	Count	28	0	0	**28**
		% of Total	45.2%	.0%	.0%	**45.2%**
	Good	Count	19	12	0	**31**
		% of Total	30.6%	19.4%	0%	**50%**
	Poor	Count	0	1	1	**2**
		% of Total	.0%	1.6%	1.6%	**3.2%**
	very poor	Count	0	0	1	**1**
		% of Total	0%	0%	1.6%	**1.6%**
Total		**Count**	**47**	**13**	**2**	**62**
		% of Total	**75.9%**	**20.9%**	**3.2%**	**100.0%**

In table 4.18(b), majority of Gatua-Karimba members at 42% saw no influence caused by consultation of members by leaders, 40% of which had said the level of consultation was in itself poor. Out of the 40% who said consultation was good or very good, 38% said that consultation had negative influence to project status. Only 20% all who had said the consultation is poor or very poor believed there was positive influence on project status.

(b) Gatua-Karimba water project

			how does the level of consultation of leaders influence decision making			
			positively	negatively	No influence	**Total**
rating project leaders in terms of decision making	very good	Count	0	4	0	**4**
		% of Total	0%	8.0%	0%	**8.0%**
	good	Count	0	15	1	**16**
		% of Total	0%	30.0%	2.0%	**32.0%**
	poor	Count	2	0	20	**22**
		% of Total	4.0%	0%	40.0%	**44.0%**
	very poor	Count	8	0	0	**8**
		% of Total	16.0%	0%	0%	**16.0%**
Total		**Count**	**10**	**19**	**21**	**50**
		% of Total	**20.0%**	**38.0%**	**42.0%**	**100.0%**

Further, interview was conducted among the management committee members, water officers and administrators involved in these projects. They were asked to rate the effectiveness of project leadership in consulting members in management of water projects. Majority indicated that at Kamwene Water project, project leadership was very effective in consulting members in management of water projects. They said though there was attempt to consult members in Gatua-Karimba, it was not very effective. They all said that consultation of members by leaders while making decisions influenced the performance of the project.

4.6 Level of Community empowerment and performance of water projects

The third objective of the study was to assess the level of community empowerment in the membership of water projects in Maara Sub County. To achieve this objective the respondents were required to give information on their understanding of community needs, the extent to which members mobilize others to participate in ownership of water project, extent to which members responded to mobilization to participate in project activities and the influence of community empowerment on performance of water projects

4.6.1 Members' understanding of their needs as a community

The respondents were asked to give their opinion on whether the members understood their community needs. Table 4.19 shows the members understanding of their needs as a community. Overall 31.3% did not understand their needs as a community while 68.7% understand their needs. Majority at 43.8% of the total respondents who understood their needs came from Kamwene as compared to 25% of the total respondents who came from Gatua-Karimba. Many of those who did not understand their needs came from Gatua-Karimba at 19.6% of the total as compared to 11.6% from Kamwene.

Table 4.16: Member understanding of community needs

(a) Kamwene water project

Responses	**Frequency**	**Percent**
No	13	21.0
Yes	49	79.0
Total	**62**	**100.0**

(b) **Gatua-Karimba water project**

Responses	**Frequency**	**Percent**
No	22	44.0
Yes	28	56.0
Total	**50**	**100.0**

In table 4.19(a), 79% of Kamwene members said they understood their community needs while those who did not understand their community needs were significant 21%. At Gatua-Karimba in table 4.19(b), 56% are those that understand their needs while those did not are 44%.

4.6.2 Mobilization of members

The respondents were asked to state their knowledge on efforts by members to mobilize fellow members to contribute and own the project. Table 4.20 shows the extent to which members mobilize other members to participate in ownership of water project. In the table 4.20, the results of the question on knowledge of any efforts of project members to mobilize other members to contribute and own the project are shown. It shows that majority at 66.1% of the total respondents said they knew of efforts of project members to mobilize other members to contribute and own the project as compared to 33.9% who said they were not aware of such efforts.

Table 4.17: Extent to which members mobilize others to participate in ownership of water project

(a) Kamwene water project

Responses	Frequency	Percent
No	10	16.1
Yes	52	83.9
Total	**62**	**100.0**

In table 4.20(a), majority at 83.9% of Kamwene members said there were a lot of efforts to mobilize other members to contribute and own the project. Only 16.1% said they were not aware of such efforts. On contrary, 56% of Gatua-Karimba members said they were not aware of efforts to mobilize other members to contribute and own the project while 44% of members here said they were not aware of such efforts.

(b) Gatua-Karimba water project

Responses	Frequency	Percent
No	28	56.0
Yes	22	44.0
Total	**50**	**100.0**

4.6.3 Response to mobilization of members

The respondents were asked to give their opinion on how members responded to mobilization call to participation. Table 4.21 shows the extent to which members responded to mobilization to participate in project activities. Overall, 43.8% of total respondents said there was high response to such calls while 42.9% said members responded reluctantly to such mobilization. This shows there is no significant difference between the highly respond and reluctantly respond responses. Those who ignored the call to participate were 13.3%.

Table 4.18: Extent to which members responded to mobilization to participate in project activities

(a)Kamwene water project

Response of members	Frequency	Percent
Highly respond	40	64.5
Reluctantly respond	15	24.2
They ignore	7	11.3
Total	**62**	**100.0**

(b) Gatua-Karimba water project

Response of members	Frequency	Percent
Highly respond	9	18.0
Reluctantly respond	33	66.0
They ignore	8	16.0
Total	**50**	**100.0**

In table 4.21(a) which shows responses from Kamwene, majority at 64.5% in the project highly responded to mobilization while 24.2% reluctantly responded. Only 11.3% ignored the call to participate in project activities. At Gatua-Karimba water project only 18% highly responded to mobilization to participate in project activities. Majority in this water project at 66% reluctantly responded to such calls while 16% ignored.

4.6.4 Influence of community empowerment on performance of water projects

The respondents were asked their opinion on how community empowerment influenced performance of the project. Community empowerment entails understanding of their needs, mobilization to participate coming from members and responses to such mobilization. Table 4.22 shows how community empowerment has influenced the status of the project. Majority at 55.4% of the total respondents said there was positive influence on the project status caused by empowerment of the community while 36.6% said the influence was negative. Only 8% of total respondents said there was no influence.

Table 4.19: Influence of community empowerment on performance of water projects

(a) Kamwene water project

	Frequency	**Percent**
Positively	50	80.6
Negatively	11	17.7
No influence	1	1.7
Total	**62**	**100.0**

At Kamwene in table 4.22(a), majority of members at 80.6% said there is positive influence while 17.7% said there was negative influence. Only 1.7% of Kamwene members said there was no influence on project status. This is compared to table 4.22(b) about Gatua-Karimba members. Majority of respondents here at 60% said there was negative influence while 24% said there was positive influence.

(b) Gatua-Karimba water project

Influence	Frequency	Percent
Positively	12	24
Negatively	30	60
No influence	8	16
Total	**50**	**100.0**

A significant 16% of Gatua-Karimba members said there was no influence caused by community empowerment to project status. At Kamwene in table 4.22(a), majority of members at 80.6% said there is positive influence while 17.7% said there was negative influence.

Table 4.23 shows cross tabulation of any efforts made by members to mobilize other members to contribute and own the project against the level of community empowerment influence on the status of the project.

In table 4.23(a), out of 16.1% who said there were no any efforts to mobilize other members, 1.6% said this had positive influence, 12.9% negative influence and another 1.6% said there was no influence. Out of 83.9% who said there were efforts to mobilize other members, majority at 79.1% said this had positive influence to project status and 4.8% said it caused negative influence to project status

At Gatua-Karimba water project in table 4.23(b), out of 56% who said there were no such efforts, 40% said there was negative influence and 16% said there was no influence caused by community empowerment. Out of the 44% who said they knew of such efforts, 24% said the influence was positive and 20% said it was negative.

Table 4.20: Influence of community empowerment on the project performance

(a) Kamwene water project

			how does the level of empowerment influence the status of the project			
			positively	negatively	no influence	**Total**
if there are any efforts made by members to mobilize other members to contribute and own the project	no	Count	1	8	1	**10**
		% of Total	1.6%	12.9%	1.6%	**16.1%**
	yes	Count	49	3	0	**52**
		% of Total	79.1%	4.8%	0.0%	**83.9%**
Total		**Count**	**50**	**11**	**1**	**62**
		% of Total	**80.7%**	**17.7%**	**1.6%**	**100.0%**

Gatua-Karimba water project

			how does the level of empowerment influence the status			
			positively	negatively	no	**Total**
if there are any efforts made by members to mobilize other members to contribute and own the project	no	Count	0	20	8	**28**
		% of Total	0%	40.0%	16.0%	**56.0%**
	yes	Count	12	10	0	**22**
		% of Total	24.0%	20.0%	0%	**44.0%**
Total		**Count**	**12**	**30**	**8**	**50**
		% of Total	**24.0%**	**60.0%**	**16.0%**	**100.0%**

Further, interview was conducted among the management committee members, water officers and administrators involved in these projects. They were asked to give their opinion on how much the members understood their community needs and mobilized other members to own and participate in project activities. Majority indicated in both projects members understood their community needs but when it came to mobilization by members it was more at Kamwene than Gatua-Karimba. This was explained as due to lack of involvement by the leaders of the project in various stages of the project. However they all indicated that the level of awareness on community empowerment had direct influence on the performance of the project.

4.7 Discussions of Findings

A discussion of the findings of the study is presented based on the three objectives of the study.

4.7.1 Influence of community participation on performance of water projects

Samwel, (1987), asserts that in several World Bank projects the neglect of local indigenous organizations created problems in project implementation in an irrigation project absence of consensus among the users lead to bottlenecks in the allocation and actual flow of water to the farms.

Dube, (2009), in an evaluation of community participation in development found that cooperation amongst members and management of a project tends to yield positive results and the reverse yields negative results. This is supported by finding of this research where a majority at 64.5% of total respondents believes that the level of members' participation in project activities has positive influence on the status of the project while 27.4% believe the influence is negative while only 8.1% say there is no influence. Of the 95.2% who said that participation was good and very good 64.6% said that participation influenced the project positively while 30.6% there was negative and no influence. Only 4.8% who said there was poor or very poor participation also said there was no influence of this participation on the project.

Mohamad, (2010), in his research on people's participation in development projects at grass root level, observes that greater community participation ensures transparency in

decision-making process enhance accountability of key actors to their clients. Where there is participation focused policy guidelines in community participation in planning process, implementation and monitoring level of development projects has been quite successful. Community express satisfaction about such projects and ownership has been established more than those projects with low or no community involvement. This observation is clearly shown by the finding in this research where the participation of members at Kamwene was better than at Gatua-Karimba. 95.2% at Kamwene felt that members' participation as being good or very good as compared to 38% at Gatua-Karimba. In contrast, 62% of respondents at Gatua-Karimba felt that participation was bad or very bad as compared to 4.8% from Kamwene. This explains why there is significance difference in the status of the two projects.

4.7.2 Influence of use of participative leadership on performance of water projects.

Mohamad *et al* (2009) indicated that more participative approach results in more effective leadership. In performing their roles as leaders there is a strong need to involve others in the process. Involvement of people such as the committee members of the Association, members of the community and other relevant parties will ensure better results. In a study focusing on participative leadership among community leaders in Malaysia, one of the findings was that in conducting various leadership roles in the community, the leaders have to use the participative leadership approach in order to be more effective. This is supported by this research finding in that majority at 75.8% said that consultation of members by leaders has positive influence on the status of the project. All are those who said consultation was good or very good. Only 4.8% said the level of consultation by leaders was poor or very poor and all believed this consultation had negative or no influence on the project status.

Silong, (2007), in evaluating community project in Malaysia mentioned the lack of participation of community members in planning, conducting and evaluating community programs. There is a high tendency to approach community development in Malaysia by using the "top-down" approach rather than "bottom-up" approach. As a result community efforts, especially implemented by government agencies are more likely to fail rather than succeed. This is shown in this research in that a significant proportion of Gatua-

Karimba members at 42% saw no influence caused by consultation of members by leaders, 40% of which had said the level of consultation was in itself poor. Out of these had said consultation was 38% said that consultation had negative influence to project status.

4.7.3 Influence of community empowerment on performance of water projects

Mauch and Paper, (1997), said empowerment makes people to become aware of their problems, gain knowledge, competencies, take action and gain control and power over their resources. It has explicit purpose namely to bring about social and political changes embodied in its sense of liberation and struggle. This implies that communities are empowered if their social conditions change for better and in political context where they organize work together to achieve shared goals. This is shown by the findings of the research in that out of 83.9% at Kamwene, who said there were efforts to mobilize other members, majority at 79.1% said this had positive influence to project status. On contrary, at Gatua-Karimba water project out of 56% who said there were no such efforts, 40% said there was negative influence and 16% said there was no influence caused by community empowerment.

CHAPTER FIVE
CONCLUSIONS AND RECOMENDATIONS

5.1 Introduction

This chapter presented the conclusion and recommendations of the study findings. The aim of the study was to evaluate the community development factors affecting the success of water projects in Maara Sub County with specific comparison of the Kamwene and Gatua-Karimba water projects.

5.2 Conclusion

This section presents the conclusion of the study. It concludes on the findings on influence of level of community participation, use of participative leadership and level of community empowerment factors on perfomance of water project in Maara Sub County. First, in determining the influence of community participation in project activities on performance of water projects, most members (88.4%) of both water projects were in agreement that there is some influence of community participation on the performance of water projects.

Secondly, in examining the influence of use of participative leadership on performance of water projects in Maara Sub County, 70.5 % of members in both water projects agreed that there was influence of use of partivipative leadership on the performance of water projects

Thirdly, in assessing the influence of community empowerment on performance of water projects in Maara Sub County, 92% of members from both water projects agreed there was influence of community empowerment on performance of water projects.

In conclusion community empowerment influenced performance of water projects more followed by community participation and then use of participative leadership. However the three factors greatly influence the performance either positive or negatively as indicated by more than 70.5% responses from members of both water projects.

5.3 Recommendations

This study has led to a number of recommendations on what the government, donors and the management of water projects should do to improve performance of water projects.

1. Involve and consult project members in all stages of project cycle to ensure ownership and hence success of project and especially in monitoring and evaluation of project.
2. Project leadership should empower the project members by training them in partnership with the project donors.

5.6 Suggestion for further research

For further research, the study recommends that the following studies be carried out.

1. A research to be carried out to establish the actual status of the two projects given some time.
2. A study to be carried out to explain why Gatua-Karimba water project did not achieve its pre-planned target.
3. Research to be carried out to understand the various situations that may enhance participative leadership style.

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APPENDICES

Appendix 1: Letter of Transmittal

John Mucira Njeru,

P.O Box 137-60100,

Embu.

31st July 2012.

Dear Respondent,

I am a Post graduate student at the University of Nairobi (Meru Extra Mural Centre) pursuing a Master of Arts Degree in Project Planning and Management. As part of my final year requirements I am required to carry out academic work in the form of a research study. My aim is to conduct a study on factors influencing performance of water project in Maara Sub – County, Tharaka Nithi County, Kenya.

The study will be guided by 4 sections which include; background information, community participation, participative leadership and community empowerment in water project. I hereby request you to assist me in completing this questionnaire. Your information will only be used for the purpose of this study and it will also be kept confidential, thus to uphold privacy, please do not write your name anywhere on the questionnaire.

I am very grateful for your participation and co-operation.

Thank you,

Yours faithfully,

John Mucira Njeru.

L50/78208/2009

Appendix 2: Questionnaire for Members of the Water Projects

The aim of this study is to investigate the factors influencing performance of water projects in Maara Sub – County. Your water project has been sampled for this study. I do therefore request you to complete this questionnaire. The information that you will give is confidential and will only be used for the purpose of this study. I request you to feel free and cooperate in this exercise.

Instructions to the Respondent

1. Please answer all questions in this questionnaire.

2. Do not write your name anywhere on this questionnaire.

3. Make the answers as confidential as possible after the exercise.

Section A: Background information

1. Project in which you are member

(a) Kamwene [ ] (b) Gatua-Karimba

2. State your gender

(a) Male [ ] (b) female

3. Your level of education

(a) Post secondary [ ] (b) Secondary [ ]

(c) Primary [ ] (d) Did not go to school [ ]

4. How long have you been a member of the project?

(a) Less than 1 yr [ ] (b) 1-5 yrs [ ]

(c) 6-10 yrs [ ] (d) over 10 yrs [ ]

Section B: Community Participation

5. Do you know of any rules available for your project members?

(a) Yes [ ] (b) No [ ]

6. How do you describe the members' attendance of the meetings?

(a) Very good [ ] (b) good [ ]

(c) Poor [ ] (d) very poor [ ]

7. How do you describe the members' participation in meeting?

(a) Very good [ ] (b) good [ ]

(c) Poor [ ] (d) very poor [ ]

8. How has the way the members participate in the project activities influenced the status of the project so far?

(a) Positively [ ] (b) Negatively [ ] (c) No influence [ ]

Section C: Participative Leadership

10. Project leadership is supposed to evolve from the people. How do you get your project leaders? (Tick appropriately)

Secret ballot	Yes [ ]	No [ ]
Show of hands	Yes [ ]	No [ ]
Appointed by chief or politician	Yes [ ]	No [ ]

11. How often do you choose your project leaders?

(a) After 1 year [ ] (b) After 3 years [ ] (c) During crisis [ ]

12. Do your leaders encourage open forum for members to express their ideas

(a) Yes [ ] (b) No [ ]

13. How do you rate how project leaders consult the members when making decisions?

(a) Very good [ ] (b) Good [ ] (c) Poor [ ] (d) very poor [ ]

14. In your opinion, how do the consultations influence the performance of the project?

(a) Positively [ ] (b) Negatively [ ] (c) No influence [ ]

Section D: Community Empowerment

15. In your opinion, do the members of the project understand their needs as a community?

(a) Yes [ ] (b) No [ ]

16. Do you know of any efforts made by members to mobilize the other members to contribute and own the project?

(a) Yes [ ] (b) No [ ]

17. How do members respond to such mobilization to participate in project activities?

(a) Highly respond [ ] (b) Reluctantly respond [ ] (c) They ignore [ ]

18. In your opinion, how does community empowerment influence the performance of the project?

(a) Positively [ ] (b) Negatively [ ] (c) No influence [ ]

Appendix 3: Interview schedule for Management of Water Projects

The aim of this study is to investigate the factors influencing performance of water projects in Maara Sub County. Your water project has been sampled for this study. I do therefore request you to answer the questions posed to you. The information that you will give is confidential and will only be used for the purpose of this study. I request you to feel free and cooperate in this exercise.

1. Please tell us your name and the designation in the management of water project. Name the project you are a management committee member.

2. How long have you been in management of the project? How were you elected?

3 how do you describe members' participation in project activities?

4. Has the members' participation or lack of it influenced the current status of the project?

5. Rate the effectiveness of leadership in consulting members in management of the project.

6. How much do the members of the project understand their community needs and mobilize others to participate in project activities?

7. How do members react to the call for their involvement in the project activities?