INFLUENCE OF COMMUNITY PARTICIPATION ON SUSTAINABILITY OF COUNTY GOVERNMENT FUNDED WATER PROJECTS IN ELGEYO MARAKWET COUNTY KENYA

TITUS KOSGEI BIWOTT

A research project submitted in partial fulfillment of the requirements for the award of the degree of Master of Arts in project planning and management of the University of Nairobi.

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DECLARATION

This research project is my original work and has not been submitted for any academic award in any other learning institution.

Signature …… **Date ……**

TITUS KOSGEI BIWOTT

L50/83552/2015

DECLARATION BY THE SUPERVISOR

This research project has been submitted for defense with our approval as the University supervisors.

Signature …… **Date ……**

DR. JOASH MIGOSI

Lecturer
Department of Open Learning
School of Continuing and Distance Education
University of Nairobi

Signature …… **Date ……**

MR. YONA SAKAJA

Lecturer
Department of Open Learning
School of Continuing and Distance Education
University of Nairobi

DEDICATION

This work is dedicated to my dear family members for their undivided support and understanding during the period of my study.

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ABBREVIATIONS AND ACRONYMS

ADP: Annual Development Plan

CAP: Community Action Planning

CBP: Community based projects

CDD: Community Driven Development

CECM: County Executive Committee Member

COB: Controller of budget

DFRD: District Focus for Rural Development

CIP: Community Participation Plan

EDA: Elgeyo Marakwet County Equitable Development Act

IDP: Integrated Development Planning

IEBC: Independent Electoral and Boundaries Commission

IFMIS: Integrated Financial Management System

IMF: International Monetary Fund

M&E: Monitoring & Evaluation

MCA: Member of County Assembly

MIS: Management Information System

NACOSTI: National Commission for Science, Technology and Innovation

TANGO: Technical Assistance to Non-Governmental Organizations

PMCs: Projects Management Committees

PM & E: Participatory Monitoring & Evaluation

PFMA: Public Finance Management Act

PLWDs: People Living with Disabilities

OAG: Office of the Auditor General

ABSTRACT

The concept of community participation for any meaningful development in a society cannot be over emphasized. Experts in development opine that in order for projects to succeed, communities need to actively take part in planning, designing, resource mobilizing and shaping the projects that affect them. The biggest problems with most of community project is non-involvement in project management cycle. This study sort to investigate the influence of community participation on sustainability of county government funded water projects in Elgeyo Marakwet County. The study objectives were as follows; to assess the influence of project identification on sustainability of county government funded water projects in Elgeyo Marakwet County; To establish the influence of project planning on sustainability of county government funded water projects in Elgeyo Marakwet County; To determine the influence of project resource mobilization on sustainability of county government funded water projects in Elgeyo Marakwet, County and To establish the influence of oversight on sustainability of county government funded water projects in Elgeyo Marakwet County. The study used descriptive survey research design as it provided the study with the needed qualitative data that was instrumental in achieving the findings of the study. The target population was 479 respondents who comprised of County staff (47), community leadership members (379) and Chairpersons of community water project committees (53). Simple random sampling procedure was adopted to determine sample size for the unit of study (community leadership members) who are beneficiaries of the county government funded water projects with purposive sampling procedure being utilized for the key informants (county staff and chairpersons of water project committees) were used for the study. The sample size for the unit of study (community leadership members) was determined using Yamane's formula of which the sample size was found to be 195 respondents. Data was collected using questionnaires for community leadership members and interview schedules for both the water project committee members chairpersons and the County staff. Validity and reliability tests were conducted of which the reliability of the research instrument was found to be 0.856. Quantitative data collected was analyzed using Statistical Package for Social Sciences (IBM SPSS Version 20) while qualitative data was analyzed using content analysis. Results of the study were interpreted using descriptive statistics: frequency distribution, mean, standard deviation and percentages as well as inferential statistics, Chi-square test for independence was used to determine the significance influence between variables.The study found out that majority (63.5%) of the community leaders members participated in county government water projects identification, it was further established that there is a significance influence of community participation in identification on sustainability of water projects (x^2 =31.657). The study found that 59% of community leadership members participated in project planning of water projects. There is a significant influence of community participation in project planning on sustainability of water projects (x^2 =24.224). It was found that 49.3% of community leaders participated in resource mobilization of water projects. There is significant influence of community participation in resource mobilization on sustainability of water projects (x^2 =24.224). Finally, it was observed that 42.7% of community leaders participated in oversight of water projects. There is statistical influence of community participation in oversight on sustainability of water projects (x^2 =34.214). Therefore, the study recommends that policies should be formulated to ensure that communities are capacitated to participate in identification, planning, resource mobilization and oversight of County funded projects. These will increase community ownership and thus sustainability of the initiated projects.

CHAPTER ONE

INTRODUCTION

1.1.Background to the Study

According to Benjamin, Goldfrank (2012), the origin of community participation can be traced to South America, where social movements in various Brazilian cities being credited with inventing participatory budgeting in the late 1980s. This was the main advocate of contributing directly to decision-making on municipal budgets on an annual basis. In the early 1990s, roughly a dozen cities in South America practiced what is called participatory community engagements in development through the budgeting process. The well-known Brazilian cases are Porto Alegre under the Workers' Party (PT and Uruguayan capital of Montevideo and Ciudad Guyana in Venezuela under similar political parties. Currently, there is no secret that the practice of participatory development has been globalized expanding well beyond its South American origins.

In countries such as the UK, Germany, and USA there are countless examples of consultation and other ways of public involvement in decisions which involve aspects like transport, urban planning or the environment, such as there is a range of consultation/participation methods and the applicability of each method depends, among other factors, on the policy discussed and the target population (Feltey, King and Susel, 1998; Gyford, 1991; Lowndes et.al. 2001a and 2001), Dienel et al, 1993), Burns et al. 1998). The public involvement in these European countries has become a fundamental right and democracy in encouraging development initiatives.

Several African countries have created strategies for community participation in development issues affecting them. In South Africa, John, (2006) argues that the understanding of community participation is informed by the memory of community struggle against the radical form of participation of racist apartheid State where communities have a richly textured history of strategic mobilization against exclusionary and discriminatory government practices at the local level to one where they are in charge of their development needs and priorities through Integrated Development Planning (IDP). Additionally, Raniga and Simpson (2002) argue that in South Africa, community participation has become a central theme in the broad field of social development as a model for addressing and balancing the injustices of the past.

In Kenya during the colonial period, community participation in public development discourse was minimal since the colonial government limited the rights and freedoms in her colony (Rodney, 1981). More often, community participation mainly manifested in the form of provision of forced manual labor and provision of other material resources - particularly land by the local communities for projects through top-down approach as this kind of local community participation was beneficial to the colonial administrators (Rodney, 1981). Up to the mid of the twentieth century, the top-down approach to community participation in projects was the preferred way of undertaking development projects (Smith, 2008). This was partly attributed to many scientists and academicians believing in the top-down based perception that professional scientists were the ones who knew how to undertake projects (Carr, 2002). However, from the mid-twentieth century, there was increased criticism of the top-down approach (Smith, 2008).

Top-down participation in projects are structured around the use of professional leadership that is provided by external resources to plan, implement and evaluate development projects or programs (Macdonald, 1995). The advantages of this approach include better professional skills, better services, and a variety of material resources that may not be available within the local communities. Nonetheless, according to Smith (2008), there has been growing criticism of the top-down approach especially when the approach tends to prioritize and solely appreciate professional and scientific 'expert' knowledge while ignoring local and cultural knowledge.

The Government of Kenya has tried to embrace communities to get involved in developing their local areas (RoK, 2006) through introduction of strategies such as District Focus for Rural Development (DFRD) before the proclamation of the Kenyan constitution in 2010, which has made community participation be an integral part of any development initiative as provided for under the National values and principles of governance in article 10(2)(a) of the constitution. Section 125 (2) of the Public Finance Management Act (PFMA,2012) obligates county governments to make sure that there is public participation in the budget process which determines development resource allocation to the water sector. Additionally, section 115(1) of the County Government Act 2012 provides a framework for public participation in county planning.

Participation brings about sustainability in a project (World Bank, 2001; Mansuri and Rao, 2004). Evidence exists which shows the benefits of participation for sustainable development if implemented well and maintained (Majale, 2008). A sustainable project permanently supplements a community's resources and reduces its vulnerability (Imparato and Ruster, 2003). Therefore, sustainability is the most adequate measure of the last success of a project. In line with the Community Action Planning Model, community participation is the sustainability of projects at all stages of a development project.

Hamdi and Goethert (1997) identified stages of participation to involve the following: planning, design, implementation, and maintenance stages. Participation may be at the; indirect, consultative, shared control, or full control level. Chikati (2009) emphasizes that in an ideal situation, the community be involved in a project through participatory planning, implementation, monitoring and evaluation, and in the commissioning and handing over of the project. This study seeks to determine the influence of community participation and sustainability of county government-funded water projects in Elgeyo Marakwet County, Kenya.

A number of studies conducted across the world have proven the relationship between community participation and sustainability of development projects. Over several decades of development funding in Africa, the World Bank has confirmed the failures of top-down approaches to development by establishing that provision of public goods remains low in developing nations as a result of lack of sustainability (Mansuri & Rao, 2003). A possible reason for these failures linked to the lack/inadequacy of community participation. Since the 1980s the new development rallying call has been "participatory or community-led development" and there has been a rush to jump on the participatory bandwagon (World Bank, 1996).

Many community developments projects have affected negatively on their intended beneficiaries and ended up being abandoned thereby making their benefits unsustainable. Abandonment of these projects is largely due to lack of ownership of the projects by the beneficiaries, which comes as a result of failing to involve them in the project cycle (Chikati, 2009; Baguley, 2008). Chikati (2009) asserts that effective community development most often happens when a challenge or opportunity presents itself, and the community responds to it because they are aware of their power to act together to help their community. Baguley (2008) concludes that most projects do fail because such projects lack user involvement in the project cycle.

In the year 2014, the county assembly of Elgeyo Marakwet enacted the Elgeyo Marakwet County Equitable Development Act (EDA,2014) whose main aim was to promote fair development across all the twenty (20) wards in the county. The Act stipulates that 60 percent of all development expenditure appropriated for each department shall be shared equally among all the 20 wards. The remaining 40 percent is then shared equitably among the wards based on a formula whose parameters are Population (38%), County flagship projects (23%), Poverty index (22%), Land area (8%), Emergencies (5%), Fiscal responsibility (2%) and Arid and semi-arid areas (2%). Also, within the same year, the county assembly of Elgeyo Marakwet enacted the Elgeyo Marakwet Public Participation Act (2014) which provided public participation guidelines for the county government to adopt when engaging the community on matters development.

The reports on project implementation status by Office of the Auditor General (OAG) and Controller of budget (COB) revealed a mismatch between the local nature of capital expenditure decisions and financing for the operations and maintenance of such projects with local benefits. This was attributed to county governments holding a monopoly in determining which projects were going to be implemented, and in bringing such projects into operation. Those that are expected to benefit from the working projects do not incur the recurrent costs of operating and maintaining capital projects (Nyaguthii and Oyugi, 2013). Given the discretionary nature of capital spending and the intrinsic value attached to political symbolism in launching county government projects, more often, new projects are undertaken while the existing ones are either left to deteriorate or are inadequately funded.

Despite the popular acceptance of a more participatory approach to development projects, most government authorities in Sub Saharan have not been able to fully embraced the approach in terms of involving the local community and their groups/representatives in planning, decision-making, and monitoring of project implementation. Even when national laws in these countries provide for such involvement/participation (Goldfrank, 2012). Seeking's (2012) in his study of participatory budgeting reveals that different political culture and power structure in different parts of the world affects the way and means where people participate.

In their findings Luvenga, Kirui, Oino, and Towett (2015) argued that for any project to sustain itself, all stakeholders involved including the end-users or beneficiaries of the projects, there is

need for continuous monitoring of the project to make sure they meet the intended objectives, and all the help given to the project documented. Furthermore, it was found that any project will be sustainable if all the stakeholders continue being part of the project and ensuring that the project objectives continue being implemented until the overall objective of the project is realized. Through these, project sustainability is realized in the end. Most agencies that fund projects i.e. World Bank and IMF argue that for projects sustainability to be guaranteed, the participation of the community is key and that the entire project implementation cycle needs to revolve around the community (Kumar, 2002).

According to Mansuri and Rao (2003) over the years the funding availed to communities and projects linked to them through the Community-Driven Development (CDD) have reached an estimated margin of two billion dollars. Through CDD communities have been able to benefit from donors thus contributing to development. One of the factors that have contributed to poor performance and sustainability of projects attributed to a lack of feasibility studies on the nature and types of projects that the community needs to be implemented. Due to these, most communities tend not to care about projects in which they lacked participation in project identification. This in the end retracts the community from ensuring the sustainability of the project since the project does not address the needs they want to be solved. Mulwa (2004) attributes that to most projects – infrastructural, social, and economic fail due to lack of participation by the community during the project identification, implementation, and execution phases. Other scholars i.e. (Fernando, 2005; Altschuld and Kumar, 2010) argues that the incorporation of the community in the management of the project since inception contributes to sustainability as they feel part of the projects through the acquisition of needed know-how and mobilizing of the other community members through various avenues. Also, they aid in passing the views of the other community members to the project team thus incorporating these views in the actual project plan.

1.2.Statement of the Problem

This study was undertaken against the backdrop of the failure of water projects initiated by county government in Elgeyo Marakwet for the year under review. According to the findings of the report of the auditor general on the financial statements of county executive of Elgeyo Marakwet for the year ended 30th June 2018, there were two fundamental findings of unexplained difference between project status report and IFMIS status reports. This report was informed by monitoring and evaluation outcomes and delayed implementation of development projects where Department of Lands, Housing and Physical Planning that implements water projects implementing only 45% of its' development allocation. This resulted to no value for the water projects despite huge resources having been allocated to water sector. The contributing factor to the low absorption rate of the development allocation was attributed to non-completion of projects, poor workmanship due to lack of community participation during implementation and oversight and thus some of the projects ended up being not sustained.

The county government of Elgeyo Marakwet had started 53 water projects in the 2018/19 financial year with only 15 having been completed and operational with indications' that they are sustainable. The report further revealed that some of the projects sampled by the auditors during project physical verification showed that the projects were not benefiting the public owing to an individual diverting the water for his use. The report also observed that at Kilos water project for example in Arror ward, though the project was completed, the public was not benefiting from the project since the water was drawn at two points; an individual homestead and school compound which is inaccessible to the public with no explanations having been provided for not having public water points. Despite having the 15 completed projects according to plan schedule, the question however still remains as to whether the completed projects have been sustainable?

Further reports by the network of civil society organizations (CSOs) in Elgeyo Marakwet revealed that though there is community participation during project identification and planning, effective representation to public participation forums during project identification and planning are not guaranteed for the varied segments of the ward residents e.g. People Living with Disabilities (PLWDs) and the elderly owing to the fact that some of the ward development committee and project management committee members were not elected or nominated by the community but handpicked by the area member of the county assembly and local ward administrators. Venues

for project identification could also, be far for members of the public who come from far flank areas of the ward. During planning period, enough time is not granted to the members of the public to question the project proposals objectives and scope by the county government. More often the government proposals are presented to the community on the very day of public participation forum and not availing the intended project information in advance for scrutiny beforehand. This reduced chances for any meaningful engagement and made the public feel that the project proposal is being forced to them hence face rejection or resistance even though it was to serve their needs.

The resource mobilization for projects in Elgeyo Marakwet is solely dependent on the county government funds. Mobilization of resources for projects, therefore, is then subjected to ward and project management committee who can influence the process and since they are few élite community members, they can end up being the beneficiaries at the cost of the larger community members as highlighted by the report of the office of the Auditor General. In certain instances, owing to the framework of project implementation where contracts are awarded without involving the community, locally available materials and labor are not used in the implementation of water projects such as locally available artisan skills for pipe-work lying among others. This made the community members feel sidelined and there was lack of ownership of the water project which made them refer the water projects as being for the county government and the project management committee.

Oversight of county government-funded water projects has been the prerogative of the county department of water with minimal or no community involvement. This led to the community not seeing any importance of such a project to them as they felt being treated as aliens in the project cycle. In such instances, project sustainability would be seriously affected.

In view of the above described inconsistencies between the ideal and actual practices in managing county government funded water projects in Elgeyo Marakwet, the study investigated the influence of community participation on sustainability of county government funded water projects in Elgeyo Marakwet.

1.3. Purpose of the Study

The purpose of this study was to determine the influence of community participation on the sustainability of county government-funded water projects in Elgeyo Marakwet County, Kenya.

1.4. Research objectives

The study sought to to address the following objectives:

i. To assess how project identification influences sustainability of county government funded water projects in Elgeyo Marakwet, County.
ii. To establish how project planning influence sustainability of county government funded water projects of in Elgeyo Marakwet, County.
iii. To determine how project resource mobilization influences sustainability of county government funded water projects in Elgeyo Marakwet, County.
iv. To establish how oversight influence sustainability of county government funded water projects in Elgeyo Marakwet County.

1.5. Research Questions

The following research questions were answered by the study:

i. How does project identification influence sustainability of water projects in Elgeyo Marakwet County?
ii. How does project planning influence sustainability of water projects in Elgeyo Marakwet County?
iii. How does resource mobilization influence sustainability of water projects in Elgeyo Marakwet County?
iv. How does Project oversight influence sustainability of water projects in Elgeyo Marakwet County?

1.6. Research hypothesis

The study sought to to address the following hypothesis:

Ho:$_{1:}$ There is no significant influence of community participation in project identification on sustainability of county government funded water projects in Elgeyo Marakwet, County.

Ho:$_{2:}$ There is no significant influence of community participation in project planning on sustainability of county government funded water projects of in Elgeyo Marakwet, County.

Ho:$_{3}$: There is no significant influence of community participation in project resource mobilization on sustainability of county government funded water projects in Elgeyo Marakwet, County.

Ho:$_{4}$: There is no significant influence of community participation in oversight on sustainability of county government funded water projects in Elgeyo Marakwet County.

1.7. Significance of the Study

The researcher believes that the findings of the study is expected to be beneficial to community members in Elgeyo Marakwet, County Project Management team, ward project management committee, and future researchers. Findings from this study are hoped to be used by Community Based Organizations, implementing partners, donors, international NGOs, and the government (both county and national) to address sustainability challenges and in planning better ways of implementing sustainable community projects. The findings from this study can be used to inform policy deliberations between participation and sustainability relationship as well as influence policies on community participation in development projects. These policies may range from community, organizational, county to national level. This study, therefore, contributes to the literature on the issue of community participation and project sustainability in Kenya. Academic researchers, scholars, and research organizations may find this study valuable as it may provide them with information as well as contribute in identifying gaps for further studies.

1.8. Limitations of the Study

The study was faced with a number of limitations. To start with is the current Covid-19 pandemic which has made social interaction to be limited. This was mitigated on by adhering to the social distancing guidelines issued by the Ministry of Health during field visit and administering of questionnaires and during interview. Time allocated for the study was limited as the area of coverage was vast, the researcher sought the help of research assistants to improve the collection

of data and coverage of the area. Another challenge was accessibility to the various groups within the area of the study that was handled by the help of the sub-county engineers and water officers. Financial challenges did posse to be another limitation as the funds allocated for the projects may not have been enough; this was paused an area to be explored by the county government through resource mobilizing by writing of proposals to development partners and national government.

1.9. Delimitation of the Study

The scope coverage of the study was on community participation in the sustainability of water projects in Elgeyo – Marakwet County, Kenya this is because many water projects have been implemented in this area. Based on statistics the area has over 53 water projects implemented within the county. The study looked at water projects funded in the financial year 2018/2019 and therefore projects that were initiated before 2018/2019 were not covered by the study. The study focused on only four aspects of community participation in the project cycle; identification, planning, resource mobilization during implementation, and oversight activities, and there was no involvement in other aspects of participatory approaches. The study focused on the aspects that affect the sustainability of water projects which could easily be visualized and analyzed empirically for policy purposes.

1.10. Basic Assumptions of the Study

The study assumed that the respondents used would give honest responses. The study further assumed that the research instruments were correct and provided the correct results of the problem. Another assumption under this study was that the information retrieved from respondents through questionnaires and interview schedules would meet the purpose of the study and that it would provide the necessary feedback to make conclusive findings on the study being conducted. Finally, the researcher assumed that the four predictors of community participation are the ones influencing the sustainability of county government-funded water projects in Elgeyo Marakwet.

1.11. Definitions of Significant Term

Project: A project is a unique endeavor which is usually within the constraints of resources and undertaken as a unique function.

Community: In the context of this study community refers to residents of a given ward in Elgeyo Marakwet County who share common culture and historical heritage and reside within the boundaries of the said ward as demarcated by Independent Electoral and Boundaries Commission (IEBC)

Community participation: Refers to the involvement of community member in water project identification, preparation, design, implementation, resource mobilization and oversight processes. In the context of this study, community participation refers to involvement of community members through their community leaderships in all aspects of project cycle.

Development partners: Refers to institutions, organizations, agencies and individuals who engage in project development activities.

Project Identification: Refers to the process of documenting, validating, ranking and approving of projects from a given list of propositions either by government or by the community.

Project Oversight: Is the process of assuring the quality of project management and delivery. It is a governance role that is designed to reduce project risk and improve outcomes. Project oversight also plays an improvement role in implementing lessons learned.

Projects Management Committees (PMCs): Is a set of community representative who oversee the implementation of community project activities.

Project planning: this involves the arrangement of the various projects components and activities aimed at achieving the project objectives and goals.

Project Sustainability: In this study it refers to maintenance and usability of water projects initiated by county government of Elgeyo Marakwet for a longer or specified period of time with minimal costs incurred and with significant benefit to the community.

Resource mobilization: Resource mobilization is the process of getting resources from resource provider, using different mechanisms, to implement an organization's pre-determined goals. In the context of this study, resource mobilization will entail mobilization of human resource (Labour both skilled and unskilled) for the delivery of water projects e.g. masons, provisions of materials such as land, ballast and hardcore by community members for execution of water project. It also entails provision of finances for project implementation e.g. joint community contribution for implementation of water project.

1.12. Organization of the study

The study is divided into five chapters. Chapter one deals with the background of the study covering areas such as the problem statement, research questions and objectives, the significance of the study, delimitation of the study, limitations to the study and definition of significant terms. Chapter two looks at the key concepts and issues on the building of this work on the influence of community participation in the sustainability of projects. This is where relevant literature of the study was reviewed. Chapter three gives the methodology that was adopted for the study which included research design used, the target population, sampling procedure, research instruments, data collection procedures and methods of data analysis and ethical issues considered in the study. Chapter four covers data analysis, presentation and interpretation and chapter five gives the Summary of the findings, conclusions and recommendations of the study with suggestions for further research and contribution to the body of knowledge.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a literature review of the theories that explain the variables in this study. It further presents earlier studies on community participation and sustainability of projects. The themes of the literature review were: community water project identification, planning, resource mobilization, and project oversight. A conceptual framework is also presented as a basis for linking the variable under the study. A summary of the literature and existing literature gap is presented in this section.

2.2 Concept of sustainability of projects

According to Alonzi (2018), sustainability is the ability of a project to continue serving its purpose for a more period from its point of completion. Projects tend to consume resources and have an end time. But for the project to have been successful, it needs to have solved the intended issues. The continuity of the project is based on the success it has and how it has affected the target audience thus achieving sustainability status through its continuity. Sustainability is to be achieved through various levels that include; economical level, institutional and communal (community sustainability). Sustainability's distinctive nature is based on the premise that projects can be preserved at various levels of open-ended (Alonzi, 2018).

With reference to Morfaw (2011), sustainability is based on the relevance of the project, acceptance from the stakeholders, project practicability and adaptableness of the project. Sustainability can also be determined through conducting risk analysis, economic analysis, development of the human resource, plans of operations among other factors – community analysis and environmental analysis. Requirements for funding need close scrutiny to establish the scenario and those funding the project i.e. county governments, NGOs etc. (Morfaw, 2011).

In his study, Stone (2003) states that when projects are developed, they should be developed with the aim of future use. Through the development of project with the aim of assisting future users, the project's plan of sustainability is also designed. Through this, sustainable project reduces the impact of the communities experiencing the same problems at a later time thus resulting in both social and economic sustainability and enhance productivity in other projects (Stone, 2003).

According to Klopffer (2003), sustainability can be stated as the mindful gesture of waste reduction in any project that has been finalized and achieved its objective. In projects, sustainability is achieved through environmental effects, economic effects and societal effects.

2.3. Concept of community participation

Community participation is a critical aspect that is useful in project delivery and executions. Kinyanjui and Misaro (2013), define community participation as the process in which the community's members are involved with the activities that help solve their immediate problems or needs. Community participation is a social development approach that seeks to allow the community to find solutions that affect their daily life. Some of the activities that the community are expected to participate are the identification of needs, monitoring and evaluation, and resource mobilization.

Ogolo (1995), points out that there are several benefits that can accrue if the community is allowed to participate in project delivery. Some of the benefits include sustainability, reduction of conflicts, and ownership among the community members. It also forms the best tenet of encouraging democracy and maintenance of fundamental rights among the community members. Community participation enables the process of planning, needs identification, resource mobilization, and oversight to effectively be delivered or executed. Chikati (2009) states that projects are highly dependent on the process in which stakeholders are engaged to participate in projects. Every phase of the project needs to allow the stakeholders to participate in its planning, execution, and control.

2.4 Empirical review of related literature

This section reviews scientific data from credible secondary sources that answer the various themes of the study. Empirical data that outlines the association between community participation in identification, planning, resource mobilization, oversight) and sustainability of projects.

2.4.1 Community Participation in Project Identification and Sustainability of Projects

Mwangi (2005) and Ravallion (2005) note that for any development project in a community to begin, there is a need for the identification process of the project to show the community need and the strategies for the realization of the identified need. This resonates with the legal framework guiding project identification, as section 126 (1) of the PFM Act, 2012 provide guidance on how every county government shall prepare a development plan. Article 220(2) of the Constitution of

Kenya provides basis on the identification of a project. The county government Act, Elgeyo Marakwet Equitable Development Act and the Elgeyo Marakwet Public Participation Act further gives rules for community participation during development planning. The Acts obligates that there is need for the ward level meetings to be used to select and prioritize projects to be submitted to the county executive for consideration in Annual Development Plan (ADP) before submission to the county assembly for approval and subsequently funded during the budget estimates approval. This process allows for engagements in trying to come up with ward vision through community needs assessment and group discussion analysis. According to Kerote (2007), such interventions and strategies indicate the need for change and gives the magnitude of the problem experienced in any community with a corresponding available resource that solves the problem.

Kinyanjui and Misaro (2013) argue that the leadership structure available in a community (whether accommodating or rigid) together with the awareness capacity of the community on county government operations affects active participation. In normal situations, leaders give a sense of direction in any given group. Leadership direction in the county government water project identification process attracts participation while the opposite is also true. The form of leadership that champion awareness capacities for the community who are direct recipients (respondents) of development intervention does influence achievement of the intended development goals. The resources allocated by the county government to each ward should translate to type and number of county government anti-poverty interventions or projects. This translates to a strong background for community participation and project viability especially projects for alleviating poverty. Reduction of poverty interventions translates to bridging the development gap in any community and thus projects with clear objectives succeed translating to improved community livelihoods.

A study by Kinyanjui and Misaro (2013) in Nyandarua revealed that community participation in project identification was encouraging. However, they cautioned that there is a need to encourage more households to actively participate in project identification to meet its sustainability. They further established that participation in capacity enhancement activities was extremely low. This is mainly attributed to the project management committee citing that there were minimal allocations to capacity building exercise. It was established that attendances to capacity building

sessions were majorly by males than females. They also observed that the locals' noted that development can only be attained through a bottom-up approach.

2.4.2 Influence of Community Participation in planning and its impact on Sustainability of water Projects

Public engagement in the implementation of community development projects is an important element that can fast track the development of rural areas in countries across the world. This is supported by research on literature fronted by (Udensi, 2012; Udoh, 2012). Participation entails getting members of local communities to participate actively and responsibly in analysing their problems, identifying solutions based on their knowledge and available natural resources, and taking decisions on how to achieve development.

According to a study done by Akpomuvie (2010), projects identified, planned, executed and managed by the community themselves outlive those imposed by a benefactor with little or no community participation. Community participation is a concept which describes the people involved at the local level in making choices for the community's development. This is on self-confidence and possessing the capacities to plan and take actions to solve their own problems with little or no help from the outside (Federal Republic of Nigeria, 1997).

A pointer for realizing development projects is a high level of citizen engagement guaranteed when the initiative of the people is adequately inspired to elicit their enthusiasm and wholehearted involvement (Anyanwu, 1992). The foregoing view is supported by position taken by (Ogolo, 1995) that people's participation is an act through which the beneficiaries of a development effort share in the identification of the development priorities, planning, implementation consumption and evolution of the development programs. The preceding forms the significance of memorandum of understanding of achieving sustainable community development projects in Kenya.

Arora, (1997) opines that "the doctrine of people's participation reflects institutionalization of consent as the quintessence of a democratic system" in the context of the implementation of projects in the community, this reflection would entail the involvement of the intended participants–cum–beneficiaries of rural development projects. Of importance is that involvement has to be voluntary and spontaneous or even induced and therefore people's participation is also

regarded as a 'right'. People have the right to participate in decision-making which directly affects their living conditions as a form of grassroots democracy.

Bamberger (1991) explained that community participation refers to a process whereby beneficiaries influenced all aspects of development projects and not passively receiving benefits. Sharma (1997) argued that "participation is not regarded as having been committed to any social goals regarded as a technique for setting goals choosing priorities and deciding what resources to commit to goal attainment". The rationale for that was that when those directly concerned are effectively involved in planning and implementation the possibility of remarkable success is assured. This position was also affirmed by Piccioto (1992) and Madlavu & Davis (1993) who noted that to participate was to partake to share, to own and that people must be allowed to be responsible for their own development, they should decide their needs and frame their own development strategies and that they should own the process. This therefore called for the creation of an institutional framework where all social groups engaged each other as equal partners with each being an equal partner and can set the framework within which planning happened. This, therefore, called that the people can only safeguard against manipulation if they are organized by redefining the concept of people's participation.

Andrew, (2010) emphasized a need for a participatory model of development in which local people are not just involved in the identification formulation, implementation, and evaluation of projects, but where their knowledge and skills are the building blocks for development initiatives. Thus, participation is viewed as an active process in which the participants take initiative and actions stimulated by their own thinking and deliberation and over which they can exert effective control.

With reference to Chikati (2009) preparation of projects tied to the sharing of information among different stakeholders within the project setting. The sharing process includes; ideas, concerns, opinions, and the method of achieving the project deliverables. Therefore, planning infers to the management of the project activities and how that was achieved. It is noted that for effective project sustainability, the participation of the community is relevant as community participation was realized through project committees of which major project decisions are arrived at – resource allocation, resource documentation, procurement plan, and allocation.

For any project implemented in a community, a need has to be identified. The need that needs addressing might directly or indirectly affect the community in many ways. Majority of community projects initiated on the premise that the entire community was to benefit from the last project thus gave a positive outcome at the end of it. It was noted that participation of the community in the project cycle contributes to better results at the end of which the project acceptability and sustainability was achieved. Through the participation of the community in the project identification and planning, and sharing of the project objectives provided a clear outline in which the community was either accepting or rejecting the project (Barasa and Jelagat, 2013).

With reference to Mulwa (2008), the participation of the community during the preparation stage is critical as they availed their opinion and shared their concerns about the project. During the planning of the project execution, the community gave a blueprint that was used to execute the project without affecting the project scope in the end. The success of a project especially community projects, the input from all the stakeholders was important. The consideration of the stakeholder's ideas and concerns during the planning phase determined whether the project was accepted or rejected. The community needs to be allowed to use their options and how they will contribute to the project in the long run – provision of expertise, resources. Participatory planning becomes a point of contention because when the community is involved in the planning execution becomes a walk in the park (Ochieng et al, 2012)

According to Kamuiru and Mbwisa, (2014) consulting community from the first stages of the project is important. Through the participation of the community in the project, confidence and trust is built. However, if participation is not done the community are misinformed thus causing a rift between the project funders, project team, and the community. The most involving method to use for one to gain the trust of the community is through public forums in which the project idea is sold to the community and the community provides feedback which incorporates the project plans thus the entire project receives the required support from the community (Miano, 2016).

2.4.3 Community Participation in Resource Mobilization and its Influence on Sustainability of Water Projects

For any project to be undertaken, resources are required. The required resources range from human resources – those who give the skills and manage the projects, financial resources, and availability of the materials needed by the project to be the final product. Many projects lack the ability to

sustain themselves due to inadequacy of resources. Each project has its own set of requirements that at the end will cause the various types of resources that will be utilized to ensure its sustainability. With reference to Muniu, Gakuu, and Rambo (2018), most communities allocated resources based on needs but not wants. According to Isham and Kahkonen (2009), the participation of the community in mobilizing resources is proportional to making the project sustainable and the community owns it. The majority of projects meant for the community need resources that make sure their continuity thus sustainability.

The community provides various types of resources that range from the land where the project was to be implemented, labor to be used during the implementation of the project, expert knowledge among other services that the project needed. According to White (2011), mobilization of resources can be of a different kind depending on the ability of the stakeholders of the project being undertaken. Further, White (2011) ascertains that mobilization of resources is not only financial but any form of help advanced to the project to meet its objectives. For water projects, many communities give financial resources, workers, equipment or they take part in making decisions affecting the project by attending consultative meetings or forums (Tigabu et al, 2013).

Ostron, (2000) and Mader, (2015) in their studies found out that for any completed project to be successful and sustain itself, the community or the residents in the area in which the project is undertaken need to aid in the provision of resources i.e. financial, time, and labor. Water projects being communal projects calls for cooperation between the various members of the community with other stakeholders to make sure that the project continuity is achieved. It follows therefore that for any water project to be sustainable in the long run; it needs mechanisms to recover the resources used to keep it afloat. The recovered resources are mainly used to cater to maintenance costs, staff motivation among other items that ensure the water project does not run down (Carter, Tyrrel and Howsam, 2009).

The support from the community in the first stages of the project determines how the project will be affected. If the project resolved the issues of water among the community members, they will aid in ensuring that the water projects are well taken care of since it serves their interests. Studies by Evans and Colin (2005) found out that when the projects are initiated and the community in which they are being implemented in find their usefulness, they tend to support the project to make sure that it continues serving them. However, the willingness to support the project

relies on various factors that include levels of income, the supply of the water and the way of life of the community. Resource mobilization also relies on the fulfillment of the community based on the project's ability to solve their needs. Most societies are enthusiastic to support a project that they see the effect it has on them thus if the project addressed their shortcomings, they make sure that the project is maintained at all cost through contribution for payment for the service i.e. if the water is provided on a continuous scale and is available all the time they will give a certain amount to make sure that the water keeps flowing thus achieving sustainability (Bleyleben, 2012).

2.4.4 Community Participation in Oversight on Sustainability of Water Projects

Oversight of projects helps organizations with relevant information from past and on-going activities that can be used as the basis for program redesigning, orientation, and future planning. Without effective preparation, monitoring and evaluation which is an outcome of oversight cannot be able to assess if work is guided in the right direction, whether progress and success claimed and how future efforts could be improved (UNDP, 2009). Project oversight produces critical information about impact, cost-effectiveness, and future potential and use of information gathered to assess the status of programs at any given time serve as a basis for reviewing and revising the project plans, making sound decisions, and meeting government/donor funding requirements.

Community oversight culminated to participatory monitoring and evaluation which provides an opportunity for development projects to focus on the goal of improving community livelihoods by broadening involvement in identifying and analyzing change by having a clearer picture of what the community wants to meet against what is actually happening on the ground. It allows people to celebrate successes, and learn from failures and for those involved, it is an empowerment process by putting them in charge and thus aid in skills development and showing them that their views count.

Beneficiary involvement is essential and the development project proponents need to formulate a framework of information collection incorporating community participation. This study is interested in understanding the official departmental point of view and the unofficial community view through their elected representatives serving as a project management committee. There will be a need to create an environment where shy people are frank, and women can speak without being wished off among others. The resulting analysis generated lessons that fed back to improve

project performance and efficiency. This process will help in strengthening the participatory engagement capacity of the respondents sampled for the study.

Community oversight entails utilizing the Participatory Monitoring & Evaluation (PM & E). It encourages stakeholders at ward level to embrace use of Management Information System (MIS). For PM& E to be effective, there is need for an in - built mechanism of giving feedback to all stakeholders involved at all levels (community, ward, sub county and county). In effect, participatory monitoring and evaluation system is a Management Information System that provides information for making decision by management.

Nyaguthii and Oyugi (2013) argue that the Ministry of Planning and National Development commissioned work on the design of an appropriate framework for Monitoring and Evaluation (M and E) in the National Development Program in 2005. This proposed Monitoring and Evaluation framework has not been fully operationalized and with the inception of devolution in 2013 hence there is a need for Elgeyo Marakwet County to institutionalize participatory monitoring and Evaluation components in her project management. This view is supported by social audit reports by the network of civil society organizations in Elgeyo Marakwet (2019) that citizen participation in M&E needs to be enhanced and deepened for county government-funded projects to deliver its objectives within the stipulated timeframe. Despite section 11 of Elgeyo Marakwet Equitable Development Act 2015 providing the framework for oversight, little done to actualized this provision. This makes oversight somehow difficult and when done by county departments it's not aimed since the department decides which projects are oversighted and monitored, which ones evaluated, and who is or not to participate in the oversight exercise. The department arrogates power to itself of managing oversight of water projects and the same time being implementor which brings about conflict of interests or creates biasness.

According to Ogolla and Moronge (2016), oversight has been found to give to the sustainability of various projects due to the fact that it enables the project to be on the track during its implementation stages thus improving sustainability chances by factoring in the recommendations by the community who are the major stakeholders of the project – consumers of the project. Change in the project scope is determined by monitoring of the activities being undertaken by the project team. These activities are further evaluated to make sure that they conform to the first plan

presented to the community. If the change in scope is not communicated to the community, the project becomes irrelevant thus becoming a ghost project (Tengan et al, 2018).

The project consists of various stakeholders that include the community. The community's role is seen through the entire process of the project from identifying the project, to its planning and finally its implementation. Based on this scenario, the community becomes one of the oversight staff through participatory monitoring and evaluation. The community gets involved in various stages of either monitoring or evaluating the project and give feedback on the way the project carried out. Through this exercise, the project gets its corrections and the challenges are known to all the stakeholders (Wanyera, 2016).

Mulwa (2007) stated clearly that, any judgment that emanates from evaluation would largely depend on the value system from which evaluating party originates. Conventionally, evaluating party is usually part of evaluation missions contracted and dispatched from the donor world. In Elgeyo Marakwet, the department identifies projects, implement, then monitors and evaluates with minimal or no external expertise. This is a weakness that needs to be addressed. Odhiambo (2007) while referring to Feverstein, (1986) explained that locally managed and controlled funds have great potential to bring about positive development outcome at the local level especially if community participation is sufficiently enhanced and political interference reduced.

2.4 Theoretical Framework

This study was anchored on the Community Action Planning (CAP) model, propounded by Hamdi and Goethert (1997). It focuses on who participates and at what level in development planning. For any effective development planning, there need to be clarity on who was to participate at various stages by ensuring that every person was invited and that management of the participation process is streamlined to mitigate on difficulties associated to it. This was achieved by designing a strategy that ensured a fair representation of everyone (Arcila, 2008). The cardinal principle of the model is that communities and their groups should be responsible for the initiation, planning, design, implementation and maintenance of development projects in their environments.

Community participation therefore provides a basis for explaining that inhabitants of a community must be made aware of any development project in their environment and they ought to participate through its cycle since they know their problems more than any outsider, consultant or

government. It follows therefore that, getting community inputs and having them participate in deciding identifications or designing of the project brings a sense of ownership and success of the project is guaranteed (World Bank, 1999-2001).

Hamdi and Goethert (1997) identified levels of community participation as follow: none, indirect, consultative, shared control, and full control. Community level planning should embrace newer approaches to development projects planning. According to Hamdi and Goethert (1997), the new approaches to development calls for redefinition of public responsibility and adoption of new roles by development experts. Shift from the conventional believe that planning consultants and politicians have monopoly to decide and that local people are receptive of interventions pushed to them ought to be abandoned. They need to promote community empowerment by involving the people who are directly affected by the development project by promoting adoption of the appropriate technologies in the planning process (Hamdi and Goethert, 1997).

The model propagates that there is need for direct communication with community members in identifying community needs and in planning a project for execution. They posit that a survey and direct discussion with individuals or groups is invaluable and that the planning team should undertake a direct observation by looking, listening and talking. They emphasize that caution need to be taken to ensure that various interests in the community are represented. Payne (1984) observed that there is always a challenge in finding out what people really want. Leaders or community-based associations or other representatives, may not always reflect the whole groups in a community. The project team has the responsibility in ensuring that community's interest is established by identifying opportunities, setting of project goal, identifying resources and constraints, and forming project's team that should carry or incorporate/involve community in every task.

Design and implementation particularly resource mobilization for the project after planning is another important stage where community participation is significant. In terms of designing a project that requires a high technical skill, community may participate by merely participating indirectly or by being consulted or by sharing at the control level. During resource mobilization of the project, participation may be at the shared control level. Community participation at the resource mobilization stage of a project by offering either of the following: technical support, material support, financial support, and organizational support (World Bank, 1999-2001).

Community maintenance of the completed project is mostly carried out by the community. According to Perten (2011) community members may decide to contact a technician if the problem is a technical problem which cannot be handled by the locals. Hamdi and Goethert (1997, p.77) argue that community participation at the shared control level is the key to effective community action planning.

For effective community participation to take place, skills, knowledge and technical-know how is required. Denters and Klok (2010) argue that the right institutions and framework must be designed by the constituted authority to allow effective participation. Participation is also a time-consuming exercise as indicated by Rakodi and Schlyter (1981). Investment in community participation should be considered as long-term; rather than a short-term investment. To achieve meaningful local participation projects should allow flexible time schedules, since the projects only give sufficient assistance to encourage the users to take responsibility for their environment.

When flexible time schedules are allowed the people will fully take advantage of participation. The advantage of community action plan model is that the model provides a clear-cut direction on how effective community participation can be realized. However, the model's short fall is that it fails to mention how political power structure and cultural factors poses a challenge for participation. Recent literature has revealed that political power structure and cultural factors are some of the challenges that hinder effective community participation (Mwaura, 2009; Goldfrank 2012; Seekings, 2012). The community action plan model was adopted and used in the analysis of results from county government funded water projects in Elgeyo Marakwet County. The model was found to be suitable for the study since it sets clear guidelines on how effective community participation in development projects is to be carried out. This explain Elegyo Marakwet community participation and its impact on sustainability of county government funded water projects.

2.5 Conceptual Framework

This presents the relationship between the independent variable (community participation) on dependent variable (sustainability of water projects) funded by county government of Elgeyo Marakwet. In any research a conceptual framework plays a critical role as it enables the research identify and develop the perspective of the problem being looked at/ researched on (Grant & Osanloo, 2014).

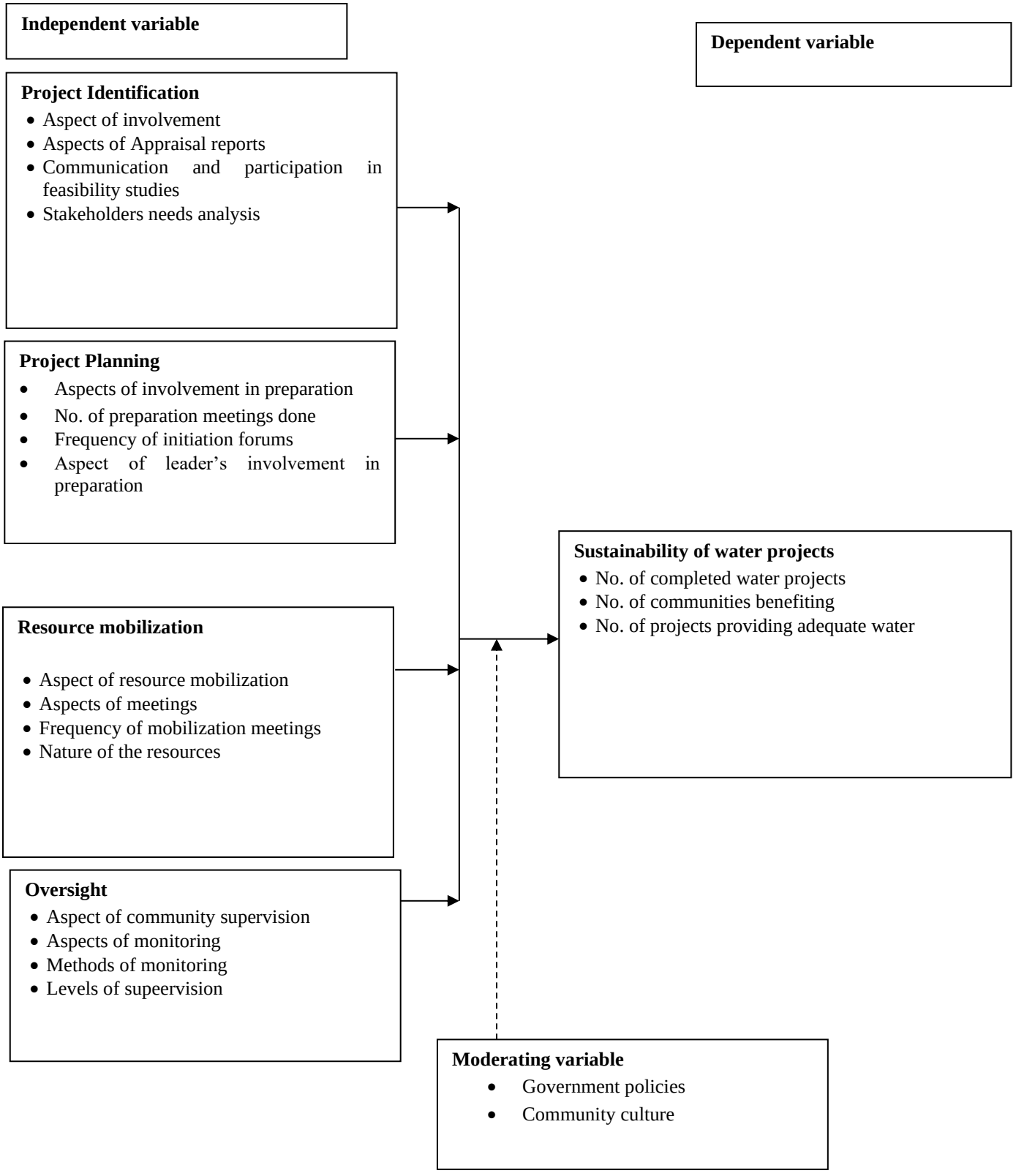

Figure 1: Conceptual Framework

2.6 Research Gap

A study conducted by Easterly (2006) acknowledges that a lot of resources in developing countries have been allocated for various development projects but there is little impact to the community mainly because of the bureaucratic approaches of governments in these developing countries and even foreign agencies which basically use top-down approach of addressing a need. However, this study focused entirely on the problem of the top-down approach and how community participation or non-involvement in any development project affect project sustainability. Study by Khwaja (2003) on sustainability of community-based projects (CBOs) discovered that those projects that are managed by the community are better managed and are more sustainable than those projects that are initiated and managed by local governments. The study did not endeavor to include the concept of community participation in other key areas of project cycle other than those that this study has selected for the study and its role to project sustainability. Another study on Community participation and sustainability of projects by Narayan (1993) recognized the importance of participation as the key factor that influences project sustainability. Unfortunately, the author concluded that the community are supposed to be involved on decision making stage only and ignores other project cycle stages which the community is supposed to be involved which equally influences project sustainability.

Analysis of the previous development plan by successive Kenyan governments shows that projects were planned from government head offices and decisions centralized. This led to implementation of projects in rural areas having no community participation resulting to resistance or rejection of the projects by community members since they felt they did not address their priority needs resulting to non-sustainability. With the inception of devolution and promulgation of the constitution of Kenya 2010, involvement of local community cannot be wished away by governments as can be evidenced by the ward level engagement between the county government and the ward residents during project identification, prioritization and planning. This has led to a number of projects being owned by the community and therefore greater sustainability of projects culminating to achievement of development objectives.

Despite these participatory interventions, there are gaps in the project cycle as far as community involvement is concerned. Majority of the community members do not have capacity to engage with the government department across all the stages of project cycle. For the community to assume responsibility, capacity building is needed right from initial stage of project cycle. This study tried to highlight the extent to which community involvement in county government funded water projects in Elgeyo Marakwet County and the gaps that existed, emerging issues and way forward. The study therefore tried to address the gaps identified by selecting variables of key stages of project cycle and analyzed how community participation at each stage affect project sustainability.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction

This chapter gives a detailed description of the methods used in carrying out the research. It consisted of the research design for the study, the target population from which possible findings were generalized, the sample size and sampling techniques that gave a representative inference of the population on all major variables. The chapter identified and described the research instruments that were used in the study stating their validity and reliability. The chapter concluded by identifying the methods used in analyzing the data.

3.1 Research Design

The research adopted descriptive survey research design. The study sought to understand the various components that had contributed to projects collapsing or sustaining themselves. Descriptive survey research design was be able to aid in collecting the required sets of information that was of importance in determining the influence of the independent variable to the dependent variable (Sanders et al, 2003). The descriptive survey research, focused on the "what" questions were useful for the study as it demonstrated the existence of social problems and challenged the accepted assumptions about the way things were and provoke action on the influence of community participation on sustainability of water projects in Elgeyo – Marakwet County, Kenya. According to Burns and Grove (2001), descriptive research is designated to give a picture of a situation as it naturally happens, justify current practice and make judgment and develop theories.

3.2 Target Population

Target population refers to individuals of groups of people who share similar characteristics and are recognized as the persons whom the phenomenon under study affects or the people who have both direct or indirect relationship to the occurrence of the phenomenon. Parahoo (1997) defines population as the total number of units from which data can be collected such as individuals, air facts, events or organizations, while target population is the total area of concern to the study from where the study result were generalized. This study therefore targeted County staff, ward community leadership composed of chiefs and their assistants, ward women and youth leadership and Chairpersons of community water Project Committees members as provided for in the Elgeyo

Marakwet Equitable Development Act and its corresponding framework for operationalization of project implementation committees

Table 1: Target population

Target group	Target population
County staff	47
Community leadership members	379
Chairpersons of community water project committees	53
Total	**479**

Source: KNBS 2009 Census Report, County Government Act 2012, Elgeyo Marakwet Equitable Development Act 2015, 2018/19 FY ADP and Framework for Operationalization of Project Implementation Committees

3.3 Sampling procedure and sample size

Sample refers to representation of a population that is procedurally selected to characterize the population upon scientifically taking the sample used to generalize the entire population. On the other hand, sampling is the process of selecting a group of people, events or behavior for research or to conduct a study (Burns and Groove, 2001).

3.3.1 Sampling procedure

With reference to Ogula (2005) sampling procedure is the method employed in selecting groups from a population to take part in a research. Through this selection the chosen population was assumed to epitomize the larger population. For this study, simple random sampling procedure was adopted as it falls under the probability sampling procedures in which it provided an equal chance for any respondents selected thus representing the population. In simple random sampling, the researcher developed a list of all the stakeholders in the area from which the sample was used in the study. From the derived list all the respondents had equal opportunity of being selected for the study. The study also adopted purposive sampling for the chairpersons of community water project committees and County staff owing to their small number thus all of them took part in the study.

3.3.2 Sample Size.

Zamboni (2018) describes sample size as the number of persons who actively participate in any form for research or survey. To find the sample size for the population, the researcher used the formula as stated below as brought forward by Yamane (1967):

$$n = \frac{N}{1 + Ne^2}$$

Where,

n = the sample size

N = the size of population

e= the error of 5 percentage points

Therefore, the sample size is $n = \frac{379}{1+(379*0.05^2)} = 195$ respondents

Table 2: Sample Size

Target group	Target population	Sample size	Sampling procedure
County staff	47	47	Purposive
Community members	379	195	Simple random
Chairpersons of community water project committees	53	53	Purposive
Total	**479**	**295**	

3.4 Research Instruments

The section outlines the instruments that the researcher did employ to gather data answering the research questions.

3.4.1 Methods of Data Collection

The primary and secondary source of data were used in this research. Secondary data was obtained from already published materials on the subject, while the primary data was obtained through administering questionnaires to community leaders (chiefs and assistant chiefs, ward youth and women leaders). Interviews were conducted for County staff comprising of elected Members of County Assembly (MCAs), ward administrators, County Executive Committee Member (CECM) for department of water, Chief Officer and director for water, sub county water officers and the chairpersons of community water project committees. The questionnaire tool was composed of two sets of questions; open ended and close-ended questions. They were structured

in line with the objectives of the study. The consideration to use the questionnaire as a tool for data collection for the study was based on its affordability, ability to be bias-free, gave respondents enough time to give out well-thought answers, and that a larger sample size was reached and consequently the results obtained was valid and reliable. The questionnaires used the likert scale to decide how the independent variable influenced the dependent variable. In reference to Kothari (2014), questionnaires are the simplest tools to collect and analyze data and they save time and resources. Furthermore, the researcher used observation method to find the current status of water projects within the county. Based on these observations, the researcher did compare the findings of both the questionnaires and the observations to figure if the phenomenon researched on actually had influenced on the corresponding phenomenon.

The researcher used well-informed aides to gather all the questionnaires distributed to the respondents. Based on the limited time, the respondents were allocated time in which they worked on the questionnaires and the hired aids collected them. For secondary data, the required information had short form historical data i.e. earlier studies, reports from the projects done and other material relevant to the study Interview schedule was used to get information from community water project committees' members. The reason for interviews was to understand exhaustively information of the study topic and allowing the respondents to have control of the answers they had given and form basis for a feedback mechanism.

3.4.2 Pilot Testing

In conducting the pilot study, the researcher was interested in establishing whether the respondent had the same understanding of the questions and thus could offer the information required. Mugenda and Mugenda (2003) argued that conducting a pilot study is of essence before the main study. The pilot study was conducted in Keiyo North Sub County. This enabled the researcher to conduct reliability tests and acquaint himself with the research environment. This was important in ascertaining the appropriateness and the clarity of questions on the instruments designed, relevance of the information sought, the language used and the content validity of the research instrument.

3.5 Validity and Reliability of Research Instruments

The questionnaires and interview schedules were tested for validity and reliability prior to administrating them in the field. The following sub-sections explained how the two processes were conducted.

3.5.1 Validity

With reference to Mugenda and Mugenda (1999), validity is the consistency of the research instruments to yield consistent data that in most cases is truthful as per the study being carried out. For an instrument to be consistent, the assistance of various individuals was required to make sure that the instrument has the ability to portray and bringing to reality the actual data for the statement being investigated or researched on. Validity of the research instruments for this study was done through revision of the questions tabulated in the questionnaire and reviewed by various persons including my research project supervisors and other tutors in the department who have expansive knowledge on matters relating to project management. Validity therefore entailed the soundness of the inferences founded on scores; whether the scores measured what they were supposed to measure and not measure what they are not supposed to measure. The research instruments were tested for validity to find out whether they measured the variables under study by checking the content of the validity of the research instruments. This was achieved by the researcher by consulting supervisors who did check and assess the frequency of errors and the accuracy of data expected. The process of validation enabled the researcher to test the suitability of the questions, the adequacy of the instructions provided, the appropriateness of the format and sequence of questions. Some corrections were made to the questionnaires and the final version was printed out.

3.5.2 Reliability

Reliability refers to the ability of a test to consistently yield the same results when repeated measurements are taken of the same individual under the same conditions (Koul (2005). In determining the reliability of the instruments, a number of tests were done to ensure consistency was achieved. The test-retest method was adopted in this study. Reliability can be argued as the ability of the research instrument to collect the correct, actual, and truthful information from the respondents without being biased on one item or group. Through reliability, the researcher determined the parameters that are not sufficient from the instruments thus correcting them to the required levels. For this to happen, persons were selected based on a

given number (20%) of the respondents of which the questionnaire was issued for specific several times until the coefficient of reliability was achieved. Based on the results obtained Pearson Moment Correlation that if it falls at a coefficient of above 0.75, the instrument had a reliability level of 0.856 which actualized the usage of the instrument to collect data for the study according to feedback obtained from the pilot study that informed change of the questionnaire before final administration in the field.

3.6 Data Collection Procedure

The researcher did seek a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI). The methods for data collection were both formal and informal with structured interviews for the collection of primary data. Data collected was mostly quantitative with some qualitative data as well. A total of 195 questionnaires were administered to community representatives of Elgeyo Marakwet in all the twenty wards. The interview sessions with community water project committee members were scheduled and reserved two weeks in advance. The reason for administering questionnaires in-person to respondents by the researcher was to establish rapport with the respondents as he introduced the research provided clarifications on the spot to questions that were sought by the respondents and offered a mechanism of collecting the questionnaire afterward on a time frame agreed by the researcher and respondents mostly three days.

3.7 Data Analysis Procedure

Data analysis refers to organizing, provision of structure, and eliciting meaning Polit and Hungler (1997). This research ensured that research questionnaires were adequately checked for credibility and verification. The primary data collected in this study were coded and tested for completeness followed by analysis using descriptive statistics and presented using tables and graphs. Both qualitative and quantitative data analysis were used in the study owing to the variables being examined and the nature of the problem under study.

Descriptive statistical techniques (frequencies, percentages, means and standard deviation) were applied to analyze data collected from the field from questionnaires to aid the interpretation of findings and analysis of data using Statistical Package for Social Sciences (IBM SPSS Version 20) was employed due to the enormous quantity of data. Qualitative data that was generated from interviews was analyzed thematically using content analysis. Inferential statistics, Chi-square test for independence was used to determine the significance relationship between variables of the

participation of community members in various project cycles and the sustainability of county government-funded water projects in Elgeyo Marakwet County.

3.8 Ethical Issues

The ethical concerns for any research study were applied. Respondents' anonymity, confidentiality, and privacy were observed during data collection. Permission was sought from the County Secretary being the head of county public service and coordinator of county government functions as provided for under schedule four of the constitution of Kenya 2010 to facilitate data collection from respondents. The questionnaire and interview guide accompanied by a cover letter described the objectives of the study assuring the respondents of confidentiality of the information to be provided and request for honesty in answering the questions. Participation in the study was voluntary. Authority to conduct the research was sort from the National Commission for Science and Innovation (NACOSTI) and the University of Nairobi.

3.9 Operationalization of variables

Operationalization of variables allows variables to be expressed in measurable terms. The indicators to be measured for each variable are identified together with the measurement scales.

Table 3: Operationalization of variables

Objectives	Variable	Measuring indicators	Data collection instruments	Scale	Method of data analysis
To establish the influence of community participation in project identification on sustainability of water projects in Elgeyo Marakwet County.	Independent	Aspect of involvement Aspects of Appraisal reports Communication and participation in feasibility studies Stakeholders needs analysis	Questionnaire Interview schedules	Nominal Ordinal	Descriptive /inferential
To assess the influence of community participation in project planning on sustainability of water projects of in Elgeyo Marakwet County.	Independent	Aspects of involvement in preparation No. of initiation meetings done Frequency of initiation forums Aspect of leader's involvement in preparation	Questionnaire Interview schedules	Nominal Ordinal	Descriptive /inferential
To determine the influence of community participation in resource mobilization on sustainability of water projects in Elgeyo Marakwet County.	Independent	Aspect of resource mobilization Aspects of meetings Frequency of mobilization meetings Nature of the resources	Questionnaire Interview schedules	Nominal Ordinal	Descriptive /inferential

To establish the influence of community participation in oversight on sustainability of water projects in Elgeyo Marakwet County.	Independent	Aspect of community supervision Aspects of monitoring Methods of monitoring Levels of supervision	Questionnaire Interview schedules	Nominal Ordinal	Descriptive /inferential

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

The chapter has the analysis and presentation of data and its interpretation. The data have been presented according to the objectives of the study and variables on the sustainability of water projects; project identification, planning, resource mobilization and oversight.

4.2 Response rate

The researcher issued a total of 195 questionnaires to community leadership representatives of which those that were filled as per the requirements and returned were 178 which represented a 91.3% response rate. Not all the questionnaires were returned or filled correctly reducing the chance for the study to obtain a 100% response rate. A total of 88 key informants composed of county staff and chairpersons of water project committees were interviewed. This represented an interview response rate of 88 %. But according to Fincham (2008) for studies conducted in any research any response rate above 60% is accepted.

4.3 Demographic data of the respondents

The researcher sought to determine the demographic data of the respondents in terms of their gender, educational levels, and ages. The findings are represented in Table 4:

Table 4: Demographic data

Aspects	Response	Frequency (n=178)	Percent (100%)
Gender of the respondents	Male	96	53.9
	Female	82	46.1
Age of the respondents	Less than 25 years	13	7.3
	26 - 35 years	31	17.4
	36 -45 years	78	43.8
	More than 46 years	56	31.5
Level of education	Primary & below	18	10.1
	Secondary level	48	27
	Diploma level	63	35.4
	Undergraduate & above	49	27.5

From Table 4 findings showed that 53.9% (96) of the respondents were male while 46.1% (82) were female. From the analysis, the male were the dominant persons who were involved in the water projects. Further, it was found that 7.3% (13) of the respondents were less than 25 years of age, 17.4% (31) of the respondents were aged between 26 – 35 years of age, and 43.8% (78) of the respondents were aged between 36 – 45 years while 31.5% (56) of the respondents were more than 46 years of age. The study furthermore found that 10.1% (18) had primary level of education and below, 27% (48) of the respondents had secondary level of education, 35.4% (63) had diploma level of education while 27.5% (49) had undergraduate level of education and below. This illustrates that more of the respondents had diploma level of education which is a good indicator of literacy.

Based on these findings, all genders were represented which reduced the levels of biasness within the study. Age distribution of the respondents was considered of which resulted in getting opinions from all the age groups within the research area. According to Wijk – Sijbesma (1998) every individual has a different level of biasness, thus have a different opinion on some issues they face which literacy is a good indicator of understanding the concepts of the study.

The findings from interview schedule of key informants were presented as follows:

> *A large number of the chairpersons of water projects and county staff have been for a period of more than 3 years while a few numbers of them stated they have been in the project for a period less than one year. Further a significant large number of the chairpersons and county staff have only managed one water projects while a few numbers of the key informants agreed to have managed more than 2 water projects in their respective wards and jurisdiction [Interview schedule: County government staff, community committee chairpersons].*

The findings from qualitative data show that majority of community chairpersons and county government staffs have managed one project and have been in the project for a period of one year. Wijk – Sijbesma (1998) supports the finding by stating that it is significant for the key respondents to have at least some knowledge in certain projects or activities to provide useful information as key informants.

4.3. Sustainability of the Water Projects

The study sought to establish from the respondents the extent to which the completed projects have been sustainable. They were provided with several statements that sought to establish the sustainability of the projects. Findings were then presented in Table 5.

Table 5 Sustainability of the water projects

	Level of agreement						
Statements	**1 F (%)**	**2 F (%)**	**3 F (%)**	**4 F (%)**	**5 F (%)**	**Mean**	**SD**
At what extent are the number of water projects been completed in the ward	78(43.8)	69(38.8)	2(1.1)	19(10.7)	10(5.6)	1.955	1.178
At what extent has the number of communities benefited from the completed water projects.	67(37.6)	48(27)	8(4.5)	27(15.2)	28(15.7)	2.444	1.431
At what extent have been the number of projects completed provides adequate water to the communities.	67(37.6)	40(22.5)	2(1.1)	49(27.5)	20(11.2)	2.511	1.391
At what extent has community participation enhanced sustainability of water projects in the ward	42(23.6)	49(27.5)	5(2.8)	44(24.7)	38(21.3)	2.927	1.526
						Composite mean =2.469	

Findings in Table 5 shows that respondents with a mean of 1.955 (SD=1.178) stated that in a little extent is the number of water projects have been completed in the ward. Furthermore, respondents with a mean of 2.444 (SD=1.431) stated that in little extent that the number of communities have benefited from the completed water projects. In addition, respondents with a mean of 2.511 stated that in a little extent as the number of projects completed has provided adequate water to the communities. Lastly, respondents with a mean of 2.927 (SD=2.927) stated in a moderate extent community participation has enhanced sustainability of the water projects. The findings show that

there is moderate sustainability among the water projects. Morfaw (2011) confirms validity of the finding by stating that projects can be sustainable if the communities participate and they enjoy benefits from them. The composite general mean of 2.469 showed that in a little extent there is sustainability of water projects in the region.

The findings from key informants from the interview schedule were reported as follows:

> *Few projects have been completed because of lack of resources from the sponsors and others suffer other problems like credibility issues and conflicts which has hindered its completion rates. The few of the projects that have been completed have provided safe and adequate water to the communities during the dry seasons. In addition, little water conflict related conflicts have occurred in the region and more arable land is put in use. The main reason that causes sustainability of the projects is that the communities are not accountable and responsible to the projects. [Interview schedule: County government staff, community chairpersons of water projects].*

The findings from the unit of study and key informant's shows that the water projects in the region suffer sustainability issues. A notable finding is brought about by dependency of the water sponsors and inadequacy of community participation in majority of the projects despite its benefit to the beneficiaries.

4.4 Community Participation in Project Identification and Sustainability of Projects

The study sort to establish if the community was involved in deciding which projects needed to be implemented in their areas. The community can participate in project identification needs assessments, project appraisal and identification meetings.

4.4.1. Community participation in identification.

The study did seek to establish if the community leadership was involved in identifying the projects and the project appraisal process of the water projects in their respective wards. The findings of these questions are presented in Table 6.

Table 6 Community participation in project identification

Aspects	Response	Frequency	Percent
Are you involved in the project identification process	Yes	113	63.5
	No	65	36.5
	Totals	**178**	**100**
If yes, how can you rate your level of involvement in project identifications	Poor	14	12.4
	Fair	18	15.9
	Good	43	38.1
	Excellent	38	33.6
	Total	**113**	**100**
Are your suggestions and ideas factored in identification of water projects	Yes	98	55.1
	No	80	44.9
	Totals	**178**	**100**

From the analysis presented in Table 6 shows that the majority of the community leaders 63.5% (113) were consulted in the identification of water projects initiated in their areas while 36.5% (65) stated that they had not participated in any project identification meeting. Among those who are involved with project identification the further rated their identification as follows; 12.4% and 15.9% of the respondents rated it poorly and fairly respectively while 38.1% and 33.6% of the respondents rated it to be good and excellent respectively. The findings show that the involvement of the community in identifying the projects, they wanted to be implemented was important has it allowed the people to provide feedback that will be used during the project cycle.

The information from key informants was reported as follows:

> *They stated that they held various forums within the county to get an opinion from the residents and other stakeholders of whom the opinion obtained was used during the project identification and design and also during the implementation stages. In such forums every stakeholder is provided with a open space for them to contribute to project identification [Interview schedule: County government staff, committee chairpersons of water projects].*

These findings were in line with Mwangi (2005) and Ravallion (2005) studies that attributed the importance of the community in project identification as they understood their needs more than any other person outside the community. From the findings it was evident that at least efforts had been made to involve the community in the designing of the projects and also the conceptualization of the various ideas brought forward by the involved members of the community.

The study further established that 55.1% of the respondents agreed that their suggestions and ideas are factored in during project identification process while 44.9% of the respondents disagreed that their suggestions or ideas are not considered during project identification. This shows a slightly higher involvement of communities in project identification. From the interviews of key informants, the findings were affirmed as follows:

> *Various meetings are conducted within various wards in the county to allow the communities to avail their proposals and also provide the concerned teams with data that they used to design the various water projects thus providing the locals with the required projects that assisted in solving their problems within the wards and give valuable inferences that would be used to formulate the respective project ideas.*

4.4.2. Community participation in identification and Sustainability of water projects

The study sort to establish to what extent the community participation in project identification contributed in assisting the communities in the various wards come up with water projects that they thought would be of impact to them thus achieving their sustainability. The findings were presented in table 7 summarizing the level of their responses these was guided by the following keys: 1=Not at all, 2=little extent, 3=Moderate extent, 4=Great extent, 5= Very great extent.

Table 7: Community participation in identification and Sustainability of water projects

Statements	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Mean	SD
To what extent has attendance of the project conceptualization meeting contributed to a number of completed water projects.	19(10.7)	36(20.2)	4(2.2)	56(31.5)	63(35.4)	3.607	1.415
To what extent has the frequency of having conceptual project meetings assisted the number of communities benefitting from water projects.	32(18)	24(13.5)	10(5.6)	58(32.6)	54(30.3)	3.438	1.488
To what extent is appraisal reports contributed in assisting the community realized the number of projects providing adequate water.	22(12.4)	21(11.8)	9(5.1)	59(33.1)	67(37.6)	3.719	1.394
To what extent has the community being involved in feasibility studies contributed to a number of completed water projects	30(16.9)	18(10.1)	4(2.2)	56(31.5)	70(39.3)	3.663	1.495
To what extent is stakeholder analysis been instrumental in determining number of communities benefiting from water projects.	17(9.6)	22(12.4)	7(3.9)	64(36)	68(38.2)	3.809	1.322
					Composite mean =3.6472		

Findings as per Table 7 showed that respondents with a mean of 3.607 (SD1.415) with a great extent agreed that has attendance of the project conceptualization meeting have contributed to a number of completed water projects. The specific responses for the statement showed that 10.7% and 20.2% of the respondents stated that not at all or in a little extent respectively does attendance

of the project conceptualization meeting have contributed to a number of completed water projects while 31.5% and 35.4% of the respondents stated that it does so in a great extent and in a very great extent respectively. About 2.2% of the respondents agreed that it does in a moderate extent. This shows that in a great extent attendance to project conceptualization meetings have contributed to a number of completed water projects. The findings are echoed by Masum (2018) who stated that the involvement of the community in the initial phases of the project – designing and conceptualization of the project ideas – was instrumental in determining the actual needs of the community and the community identifying its role in the entire project.

The findings from the key informants were reported as follows:

> *The members agreed that project conceptualization meetings are usually conducted in various localities, and are instrumental in ensuring that the community was involved in all the stages of designing and implementation and also in providing the required support to ensure that the project was on track to completion [Interview schedule: County government staff].*

Findings further showed that respondents with a mean of 3.438(SD=1.488) agreed that in a moderate extent that frequency of having conceptual project meetings assisted the number of communities benefitting from water projects. The specific responses of the statement showed that 18% and 13.5% of the respondents stated that not at all and in a little extent respectively does frequency of having conceptual project meetings assisted the number of communities benefitting from water projects while 32.6% and 30.3% of the respondents did stated that it does so in a great and very great extent respectively. Additionally, about 5.6% of the respondents were neutral to the statement. The finding shows that fairly frequency of having conceptual project meetings assisted the number of communities benefitting from water projects. Gordon (2004) supports these findings by stating that through the various meetings held by various individuals concerned with the project, the meetings were instrumental in all the parties making decisions in one accord thus allowing the project activities to be carried out on time thus the community benefiting from the final project.

From the interview schedules of key informants, it was noted that;

Majority of the key informants agreed that majority of the meetings were done after every two weeks to allow maximum participation and sharing of the various progresses reached by the project team. These frequent meetings are allowing the community to fully air their needs thus including these needs in the final implementation plan [Interview schedule: county government staff, committee chairperson of water projects].

The findings reported from the Table 7 showed that respondents with a mean of 3.719 (SD=1.394) stated in a great extent the appraisal reports have contributed in assisting the community realized the number of projects providing adequate water. The specific responses to the statement showed that about 12.4% and 11.8% of the respondents stated that not at all and in a little extent respectively does appraisal reports has contributed in assisting the community realized the number of projects providing adequate water while 33.1% and 37.6% of the respondents stated that in a great and very extent respectively it does so. A smaller significant number 5.1% of the respondents were agreed moderately with the statement. Williams (2008) supports the findings by stating that it is the community which needs to be informed of the developments that are to be implemented in their areas of occupation or residence through reports in which the positives and negatives of the projects are identified and either adopted for execution or rejected.

From the interview schedules from key informants reported that;

Majority of the community leaders are usually given the project appraisals during the meetings they had with the various project teams and also taken through the appraisals to understand the impact the project has on the community and the benefits the community will get once the project is completed. The interaction of the leaders with project appraisals is to identify gaps and opportunities to be initiated before the project commences [Interview schedule: County government staff, Community chairpersons of water projects].

Findings from Table 7 further showed that respondents with a mean of 3.663 (SD=1.495) stated in a great extent the community being involved in feasibility studies contributed to a number of completed water projects. Specific responses to the statement showed that 16.9% and 10.1% of the respondents stated that not at all and in little extent respectively does community being involved in feasibility studies contributed to a number of completed water projects while 31.5% and 39.3% of the respondents did agree in a great and very extent with the statements. Furthermore 2.2% of the respondents agreed moderately with the statements. Through these findings it shows

through feasibility studies the community and other stakeholders are able to understand the practicality of the water projects and also derive the benefits the community from the water projects. Donna and Greg, (2001) agrees with the finding by stating that the involvement of community members in the project feasibility studies assists in providing them with accurate information that allows them make informed decisions about the project and how it will impact there day to day lives.

Findings from the interview schedules of the key informants reports that:

> *A number of key informants stated that although feasibility studies were done to ensure that the project was viable to the community, most of the community leaders did not take part in most of the studies thus it was difficult in convincing some of the leaders on the importance of having certain components within the project plan. [Interview schedule: County government staff].*

The study did seek to establish the extent is stakeholder analysis been instrumental in determining number of communities benefiting from water projects respondents with a mean of 3.809 SD=1.322) stated that it does so in a great extent. Specific responses showed that 9.6% and 12.4% of the respondents stated that in a little extent respectively stakeholder analysis has been instrumental in determining number of communities benefiting from water projects while 36% and 38.2% of the respondents stated that it does in a great and a very great extent respectively. About 3.9% of the respondents stated that moderately it does so. From the analysis of the finding it was evident that feasibility study was instrumental in the projects as it allowed the community to understand the various benefits that will be derived from the project once it was completed as supported by majority of the respondent. In his study, Jeffery (2009) supported the findings by stating that stakeholder identification and determining their roles within the project, was a critical component that assisted any project to achieve its main objectives and goals through the consideration of all the stakeholder interests.

The general composite mean of 3.6472 shows that in a great deal community participation in identification influences sustainability of water projects. This shows that in a great deal community participation in identification influences sustainability of water projects.

4.4.3. Association between Community Participation in Identification and Sustainability of water Projects

The study sought to establish the association between community participation in identification and sustainability of water projects. Cross tabulation that involved use of chi-square statistical test of independence was used to test the associations which was based on 95% significance levels. Findings of the chi-square test was presented in table 8.

Table 8 Chi-square tests of Project Identification and Sustainability of Water Projects

	Chi-Square Tests		
	Value	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	31.657[a]	3	.015
Likelihood Ratio	23.819	1	.002
Linear-by-Linear Association	17.846	2	.001
No. of Valid Cases	178		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 3.38.

The chi-square test statistics (x^2) value=31.657, the p-value (2, 178) <0.05 meaning that the null hypothesis that states there is no significance influence of community participation in identification on sustainability of water projects is rejected, and then becomes significant. The alternative hypothesis which states that there is significance influence of community participation in identification on sustainability of water projects. This means there is a linear to linear association between community participation in identification and sustainability of water projects. Williams (2008) supports the finding by stating that a positive strong relationship exists between identification of projects and performance of projects.

4.5 Community Participation in Planning and its impact on Sustainability of water Projects

The second objective of the study was aimed at finding the influence that community participation in planning influences sustainability of water projects. Responses from the unit of the study and key informants were used to establish the relationship between the two study variables.

4.5.1. Community Participation in Planning

The study sought to find from the unit of study whether they are involved in project planning and if they are part of the teams that prepare planning meetings. The question was to establish the level of participation among the community members in planning for water projects. Findings to the questions were presented in Table 9.

Table 9 Community participation in planning

Aspects	Response	Frequency	Percent
Are you involved in the project planning process	Yes	105	59
	No	73	41
	Total	**178**	**100**
If yes, how can you rate your level of involved in the water project planning process	Poor	11	14.7
	Fair	30	40
	Good	26	34.7
	Excellent	8	10.7
	Total	**75**	**100**
Are you involved in initiation of planning meetings?	Yes	99	55.6
	No	79	44.4
	Total	**178**	**100**

Table 9 shows that 105 (59%) of the respondents agreed to be involved with the project planning process while 73(41%) of the respondents disagreed that they are not involved in water project planning process. The study further found that 14.7% and 40% of the respondents did rate poor and fair respectively their level of involvement in the water project planning process while 34.7% and 10.7% of the respondents rated their involvement in water project planning to be good and excellent respectively. Ogolo, (1995) affirms the finding by stating that people's participation is an act through which the beneficiaries of a development effort share in the identification of the

development priorities, planning, implementation consumption and evolution of the development programs. The study further found that 55.6% of the respondents agreed that they are involved in preparation of planning meetings while 44.4% stated that they are not involved.

4.5.2. Community Participation in Project Planning and Sustainability of Water Projects

The study sort to establish to what extent community participate in project planning influenced the sustainability of water projects in Elgeyo – Marakwet county and the findings showing the level of agreement is represented in Table 10.

Table 10 Project planning and Sustainability of water projects

Statements	**Level of agreement**					**Mean**	**SD**
	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)		
To what extent have aspects of involvement in preparation by the various stakeholders contributed to number of completed water projects.	43(24)	42(23.6)	12(6.7)	39(21.9)	42(23.6)	2.972	1.542
To what extent have initiation of meeting conducted being instrumental in assisting in the number of completed water projects in different wards.	33(18.5)	34(19.1)	10(5.6)	39(21.9)	62(34.8)	3.364	1.561
To what extent have the frequency of initiation community forums contributed to the number of projects providing adequate water.	22(12.4)	32(18)	9(5.1)	51(28.7)	64(36)	3.579	1.441
To what extent have the community leadership involvement in initiation contributed in ensuring that the number of water projects benefits the communities.	17(9.6)	18(10.1)	11(6.2)	54(30.3)	78(43.8)	3.888	1.327
				Composite mean=3.45075			

From Table 10, the study established that respondents with a mean of 2.972 (SD=1.542) did moderately agreed that aspects of involvement in initiation by the various stakeholders contributed to number of completed water projects. Specific responses showed that 24% and 23.6% of the respondents stated that not at all and in a little extent respectively does aspects of involvement in initiation by the various stakeholders contributed to number of completed water projects while 21.9% and 23.6% of the respondents stated agreed that it does in a great and in a very greater extent respectively. While 6.7% of the respondents stated that it moderately does so. From the analysis it was evident that most of the community members and leaders attended forums convened by the county government on projects to be initiated in the different wards contributes to completion of water projects moderately. The findings concur with those of Moss (2011) who stated that it is through participation of which conducting of forums was one of the key elements that the community and the project sponsors come together and make decisions regarding the projects

The findings from interview schedule from the key informants showed that:

> *Through these forums the project sustainability was the major aim as through the community benefiting from the water projects the continuity of the water projects are achieved. They stated that the sponsors need projects implemented in the vicinity of the community and also providing the community with details during forums on the benefits they will get once the implementation and usage of the project is achieved [County government staff.*

The study further established that respondents with a mean of 3.354 (SD=1.561) agreed moderately that initiation of meeting conducted has been instrumental in assisting in the number of completed water projects in different wards. Findings from specific responses showed that 18.5% and 19.1% of the respondents stated that not at all and in a little extent does initiation of meeting conducted has been instrumental in assisting in the number of completed water projects in different wards while 21.9% and 34.8% of the respondents did stated in a great and in a very great extent it does so respectively. About 5.6% of the respondents stated that it moderately does so. Kiogora (2013) in his study support these findings by appreciating the importance of having regular consultative meetings between the various persons involved in the project.

Finding from interview schedule of the key informants was reported as follows:

> *The project implementation team provided status reports to the various stakeholders every two weeks to allow the stakeholders know the level at which each project was at and what was hindering its completion. Through this, the problems that needed solving urgently were solved and those that could not be solved solutions were looked for this has enabled the projects to be completed without any difficulty. [Interview schedule: County government staff, community chairpersons of water projects].*

The study furthermore established respondents with a mean of 3.579 (SD=1.441) stated at in a great extent the frequency of initiation community forums contributed to the number of projects providing adequate water. Additionally, based on specific responses 28.7% and 36% of the respondents stated that at a great and a very great extent respectively frequency of initiation community forums contributed to the number of projects providing adequate water while 12.4% and 18% of the respondents stated that it does not at all and in a little extent respectively it does so. A significant smaller number of respondents 5.1% did state that it does in a moderate extent. The finding shows that in a great extent frequency of initiation community forums contributed to the number of projects providing adequate water. Kerote (2007), argues that through full involvement of the community in the in planning and identification process and regular involvement frequently or in a number of times through community forums helps to identify opportunities and solves project hurdles.

Lastly, the study established that respondents with a mean of 3.888 (SD=1.327) in a great extent agreed that the community leadership involvement in planning contributed in ensuring that the number of water projects benefits the communities. Specific responses showed that 9.6% and 10.1% of the respondents stated that it does not at all and in a little extent respectively does the community leadership involvement in initiation contributed in ensuring that the number of water projects benefits the communities, 6.2% of the respondents stated that it does so moderately. While 30.3% and 43.8% of the respondents stated that in a great and in a very great extent respectively does the community leadership involvement in initiation contributed in ensuring that the number of water projects benefits the communities. The results correspond with those of Martiskainen, (2017) who in her study found that community leadership played an influential role within the community as most of the community members believed what the community leaders suggested

thus through their leadership that they ensured that the projects implemented served their people and that the water being produced was adequate enough for their people.

The findings from the interview schedule of key informants showed that;

> *Community leadership played a critical part of representing the community needs thus the development of water projects was a key infrastructural achievement in most of the wards as the area experienced lack of rains thus the duty of the local leaderships to ensure that the local had adequate water as a results of the initiated water projects within these localities It is through the community leadership that the needs of the community are aired to the respective authorities and through them that solutions are found. [Interview schedule: County government staff].*

Therefore, the community leadership is instrumental in ensuring that the water projects are completed on time so as their people get adequate supply of water to assist them realize their potential and also improve their livelihoods. The findings concurred with those of Berssaneti and Carvalho (2015) who argued that when all the stakeholders are involved within the project planning process, the various decisions and agreed upon require accurate implementation and the projects be implemented within the agreed timelines thus allowing the project to meet its objectives and goals.

The general composite Mean of 3.45075 shows community participation in project planning contributes in a great deal to sustainability of water projects. This means that if communities participate in project planning it contributes to sustainability of water projects.

4.5.3. Association between Community Participation in Project Planning and Sustainability of Water Projects

The study sought to establish the association that exists between community participation in project planning and sustainability of water projects. A cross tabulation that involved the use of chi-square test statistics for independence was used to was used to establish this associations. Table 11 shows the findings of the chi-square.

Table 11 Chi square test of project planning and Sustainability of water projects

Chi-Square Tests	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.232[a]	3	.000
Likelihood Ratio	7.234	1	.000
Linear-by-Linear Association	8.452	2	.000
N of Valid Cases	178		

a. 2 cells (31.2%) have expected count less than 5. The minimum expected count is 2.04.

Table 11 shows the chi-square (x^2) =16.232, while the P-value (2, 178) <0.05 which means the null hypothesis that states that there is no significant influence of community participation in project planning on sustainability of water projects was rejected. The alternative hypothesis which states that there is a significant influence of community participation in project planning on sustainability of water projects was adopted. This finding shows existence of association between community participation in project planning and sustainability of water projects.

4.6 Community Participation in Resource Mobilization and its influence on Sustainability of Water Projects

The third objective of the study sought to establish the influence that community participation in resource mobilization is on sustainability of water projects. Key informants and unit of study were used to provide responses to the research objectives.

4.6.1. Community Participation in Resource Mobilization

The study sought to establish from the respondents on whether they are involved in resource mobilization and whether they provide any form of resources for the water projects. The finding to the question was presented in Table 12.

Table 12 Community Participation in Resource Mobilization

Aspects	Response	Frequency	Percent
Are you involved in resource mobilization for the water projects	Yes	86	48.3
	No	92	51.7
	Totals	**178**	**100**
If yes, how can you rate your level of involvement in resource mobilization?	Poor	34	39.5
	Fair	21	24.4
	Good	19	22.1
	Excellent	12	14
	Total	**86**	**100**
Do you provide any form of resources for the water projects?	Yes	54	30.3
	No	124	69.7
	Totals	**178**	**100**

The findings as per Table 12 show that 86(48.3%) of the respondents are involved in resource mobilization for the water projects while 92 (51.7%) of the respondents are not involved with resource mobilization. For those that are involved in resource mobilization they rated their level of involvement, 39.5% and 24.4% of the respondents stated that is poor and fair respectively while 22.1% and 14% of the respondents rated it as good and excellent respectively. Furthermore, the respondents were asked to state whether they provide any form of resources for the water projects, 30.3 % of the respondents agreed while 69.7% of them disagreed to offer any form of resources. Berssaneti and Carvalho (2015) agrees with the finding by stating that majority of the communities are depended on the project sponsors to provide resources for the projects.

4.6.2. Community Participation in Resource Mobilization and sustainability of Water Projects

The respondents were provided with several statements that explain the association between community participation in resource mobilization and sustainability of water projects. They were expected to provide their level of agreements with the statements based with the following scale: keys: 1=Not at all, 2=little extent, 3=Moderate extent, 4=Great extent, 5= Very great extent. Findings were presented in table 13.

Table 13: Community participation in resource mobilization and Sustainability of water projects

Statements	Level of agreement						
	1 F(%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Mean	SD
To what extent have aspects of resource mobilization been instrumental in providing the number of completed water projects.	43(24.2)	38(21.3)	6(3.4)	43(24.2)	48(27)	3.084	1.583
To what extent aspects of resource meetings benefitted from the number of projects benefitting the communities.	29(16.3)	28(15.7)	4(2.2)	62(34.8)	55(30.9)	3.483	1.474
To what extent has nature of the resources has contributed to the number of communities benefitting from water projects.	19(10.7)	34(19.1)	10(5.6)	52(29.2)	63(35.4)	3.596	1.408
To what extent is availed resources been instrumental in ensuring that the number of project was completed.	18(10.1)	24(13.5)	9(5.1)	49(27.5)	78(43.8)	3.815	1.384
			Composite mean= 3.4945				

Findings as per Table 13 showed that respondents with a mean 3.084 (SD=1.583) moderately agreed that aspects of resource mobilization have been instrumental in providing the number of completed water projects. Additionally, specific response to the statement showed 24.2% and 21.3% of the respondents stating that not at all and little extent does aspects of resource mobilization has been instrumental in providing the number of completed water projects while 24.2% and 27% of the respondents stated it does so in a great and in a very great extent. A

significant smaller number of respondents 3.4% stated that it does so moderately. These findings contradict a study done by Muniu, Gakuu and Rambo (2018) who stated that the community provided mobilized resources based on the needs they wanted achieved but not wants

The study established that respondents with a mean of 3.483(SD=1.474) did moderately agree that aspects of resource meetings benefitted from the number of projects are benefitting the communities. Specific responses to the statement showed that 16.3% and 15.7% of the respondents stated that not at all and in a little extent respectively does aspects of resource meetings benefitted from the number of projects are benefitting the communities while 34.8% and 30.9% of the respondents stated that in a great and a very great extent respectively it does so. Another 2.2% of the respondents agreed moderately with the statement. The findings were echoed by Mader (2015) who attributed to the success of projects within the community on determination of resources required for the project and its operations to be achieved.

The interview schedule findings from the key respondents showed that:

> *The water projects were majorly funded by the county government; however, the long run of the project was dependent on the locals within the wards to ensure its sustainability. The findings showed that through the resource mobilization meetings, resources were needed for the project to be identified and the community members are allowed to pull whatever they had to ensure that the project was well executed and that it did not lack the required resources to ensure its completion [County government staff, community chairperson of water projects.*

The study found that respondents with a mean of 3.596 (SD=1.408) stated that in a great deal the nature of the resources has contributed to the number of communities benefitting from water projects. Furthermore, specific responses showed that 10.7% and 19.1% of the respondents stated that not at all and in a little extent does the nature of the resources has contributed to the number of communities benefitting from water projects while 29.2% and 35.4% of the respondents stating that it does so in a great and in a very great extent respectively. About 5.6% of the respondents were neutral with the statement. The findings were supported by Carter, Tyrrel and Howsam (2009) who argued that the success of any community project required the support from the

community of which the community provides various forms of resources geared towards realization of the project deliverables.

The interview schedule findings from the key informants were reported as follows:

> *Communities play a critical role in assisting the various donors and project contributors in providing them with certain resources that they need to ensure that they achieve the objectives of the projects that they are implementing in their specific localities [Interview schedule: County government staff]*

The findings of the study further established that respondents with a mean of 3.815 (SD=1.384) stated in a great deal availed resources been instrumental in ensuring that the number of projects was completed. Specific responses showed that 27.5% and 43.8% of the respondents did state in a great and a very great deal as availed resources been instrumental in ensuring that the number of projects was completed while 10.1% and 13.5% of the respondents stated that not at all and in a little extent does so. About 5.1% of the respondents stated that it does so in a moderate extent. The study finding is supported by Tigabu et al (2013) who stated in their study, communities provided the required resources to projects that they needed implemented thus expected these projects to serve the main objective of their implementation thus the community benefitting from the final outcomes of the project.

Information from the interview schedules revealed that:

> *When communities were not involved in the project identification process and the project did not address their needs, they did not participate in the entire project implementation thus accepting the project becomes difficult and also they would not mobilize resources for projects that did not address the problems they were facing [Interview schedule: Community chairpersons of water projects].*

The general composite Mean of 3.4945 shows that community participation in resource mobilization in a great deal contributes to sustainability of water projects. This finding shows that if community participates in resource mobilization it contributes in a great deal to sustainability of water projects.

4.6.3. Association between Resource Mobilization and Sustainability of Water Projects

The study sought to establish the association that exists between community participation in resource mobilization and sustainability of water projects. Cross tabulation that entailed use of chi square test for independence was used to establish this associations at 95% significance level. The findings of this test were presented in Table 14.

Table 14 Chi square test of Project Resource Mobilization and Sustainability of Water Projects

	Chi-Square Tests		
	Value	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	24.224[a]	3	.010
Likelihood Ratio	9.234	1	.006
Linear-by-Linear Association	9.145	2	.000
N of Valid Cases	178		

a. 2 cells (32.1%) have expected count less than 5. The minimum expected count is 1.87.

Table 14 shows that the chi square (x^2) test statistic=24.224, where the p value (2, 178) <0.05 which leads to the rejection of the null hypothesis that states that; no significant influence of community participation in resource mobilization on sustainability of water projects. The alternative hypothesis that states that there is significant influence of community participation in resource mobilization on sustainability of water projects. This finding shows that there is association between community participation in resource mobilization and sustainability of water projects.

4.7. Community Participation in Oversight on Sustainability of Water Projects

The study sort to establish to what extent community participation in oversight influenced the sustainability of water projects in Elgeyo – Marakwet County. Key informants and unit of study provided responses that sought to answer objective of the study.

4.7.1. Community Participation in Oversight

The study sought to establish the extent to which respondents are participating in oversight of the projects. The findings of the community participation in oversight were presented in Table 15.

Table 15 Community Participation in Oversight

Aspects	Response	Frequency	Percent
Are you involved in oversight of the water projects	Yes	76	42.7
	No	102	57.3
	Total	**178**	**100**
If yes, how can you rate your level of involvement in oversight of the water projects?	Poor	13	17.1
	Fair	20	26.3
	Good	19	25.0
	Excellent	24	31.6
	Total	**86**	**100**
Do you provide any form of supervisions for the water projects?	Yes	66	30.3
	No	112	69.7
	Total	**178**	**100**

Finings in Table 15 shows that 42.7% of the respondents agreed to be involved in oversight of the water projects while 57.3% of the respondents stated that they are not involved with oversight of the water projects. Among those involved in oversight 17.1% and 26.3% stated that they are poorly and fairly respectively involved in oversight of the water projects while 25.0% and 31.6% of the respondents rated their involvement to be good and excellent respectively. Furthermore 30.3% of the respondents agreed to be providing all forms of supervision while 69.7% stated that they do not provide any form of supervisions. The findings are in line with those of Ogolla and Moronge (2016) who attributed the importance of oversight on proper utilization of resources within projects

and how it contributed in ensuring that the various project deliverables but agreed that communities in most cases are not participants.

4.7.2. Community participation in oversight and Sustainability of Water Projects

The respondents were asked to state their level of agreement on the association existing between community participation in oversight and sustainability of water projects. The findings of this agreement were reported in Table 16.

Table 16 Community oversight and Sustainability of water projects

Statements	Level of agreement					Mean	SD
	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)		
To what extent is the aspect of community supervision is ensuring that the numbers of water projects are completed.	26 (14.6)	27 (15.2)	8(4.5)	63(35.4	54 (30.3)	3.517	1.431
To what extent is the aspects of monitoring have been instrumental in ensuring that the number of community's benefits from the completed water projects.	43 (24.2)	24(13.5)	3(1.7)	42(23.6)	66(37.1)	3.359	1.415
To what extent the methods of monitoring have been useful in ensuring the number of projects provide adequate water to the communities.	28(15.7)	19(10.7)	9(5.1)	63(35.4)	59(33.1)	3.567	1.363
To what extent through the supervisory committee the community benefits from the water projects.	28(15.7)	19(10.7)	2(1.1)	51(28.7)	78(43.8)	3.708	1.496
			Composite mean=		**3.538**		

The findings showed that respondents with a mean of 3.517 (SD=1.431) agreed moderately that aspect of community supervision is ensuring that the numbers of water projects are completed. Specific responses of the statement showed that 14.6% and 14.2% of the respondents stated that not at all and in a little extent does aspect of community supervision is ensuring that the numbers of water projects are completed while 4.5% of the respondents agreed that it does moderately. In addition, 35.4% and 30.3% of the respondents stated that in a great and in a very great extent does aspect of community supervision is ensuring that the numbers of water projects are completed. The findings are in line with those stated by Roger and Tim (2008) who discussed the importance of including the community in the oversight of the project through supervisions which contributed to acceptability of the project by all the community members.

Findings obtained from the interview schedules of key informants were reported as follows:

> *The community leaders and other members were selected on the oversight committee to ensure that the project was as per the discussed plans through several supervision initiatives thus minimizing resistance from the community during handing over of the project to the community [Interview schedule: County government staff].*

The study established with a mean of 2.652 (SD=1.415) that moderately aspects of monitoring have been instrumental in ensuring that the number of communities' benefits from the completed water projects. Specific responses to the statement showed that 13.5% and 23.6% of the respondents stated that in a very great and in a great extent respectively that the aspects of monitoring have been instrumental in ensuring that the number of communities' benefits from the completed water projects while 1.7% of the respondents stated it does moderately. Additionally, 24.2% and 37.1% of the respondents stated that not at all and in a little extent that the aspects of monitoring have been instrumental in ensuring that the number of communities' benefits from the completed water projects. The findings concur with those of ALNAP, (2009) who attributed the importance of the community in participating in various aspects of monitoring within the projects and the benefits realized from such engagements.

Findings from the interview schedule of key informants were as follows:

> *The community members are provided with fundamental tools and basics of monitoring projects which are used in the oversight, which were jointly developed by all stakeholders to assist the project team to provide the community with the best water projects that would be self-sustaining into the near future [Interview schedule: County government staff}.*

Findings from Table 16 showed that respondents with a mean of 2.354 (SD=1.363) did state in a little extent does methods of monitoring have been useful in ensuring the number of projects provide adequate water to the communities. The specific responses to the statement showed that 33.1% and 35.4% of the respondents stated not at all or in a little extent respectively does methods of monitoring have been useful in ensuring the number of projects provide adequate water to the communities. About 5.1% of the respondents stated that it does on a moderate extent. Additionally, 15.7% and 10.7% of the respondents stated that in a great and a very great extent respectively does methods of monitoring have been useful in ensuring the number of projects provide adequate water to the communities. According to Ogolla and Moronge (2016) affirms the findings by stating that majority of the communities lack the necessary knowledge on the methods used in monitoring of projects.

The study further found that respondents with a mean of 2.258 (SD=1.496) stated that in a little extent does supervisory committee brings out community benefits from the water projects. Specific responses of the statements showed that 43.8% and 28.7% of the respondents stated that not at all and in a little extent does supervisory committee brings out community benefits from the water projects while 1.1% of the respondents stated that it does so moderately. In addition, 10.7% and 15.7% of the respondents stated that in a great and in a very great extent does supervisory committee brings out community benefits from the water projects. The findings agreed with those of Wanyera (2016) who argued that supervisory committees are critical in oversighting activities thus providing feedback that allows the project team to ensure that the final project goals of providing the required results is realized.

The interview schedules findings of key informants were as follows:

> *Through the oversight committees within the various wards had assisted in ensuring that the projects were well undertaken and that the locals received the best quality of projects which resulted in sustainability of these projects. The supervisors to undertake oversight roles are chosen among the locals [Interview schedule: County government staff].*

This analysis shows that the roles of the oversight committee are instrumental in ensuring that the project is carried out within the specified time, and delivered as per the design and quality agreed upon by other members and other stakeholders in the community as stated by majority of the respondents.

The composite (general) mean of 3.538 shows that community participation in oversight does in a great deal influence sustainability of water projects. This finding shows that if the community participate in oversight of the water projects it contributes moderately to sustainability of these projects.

4.7.3. Association between Community Participation in Oversight and Sustainability of Water Projects

The study sought to establish the association between community participation oversight and sustainability of water projects. The cross tabulation that entailed the use of chi square test of independence was used to establish this association. Table 17 shows the findings.

Table 17 Chi square test of Oversight and Sustainability of Water Projects

Chi-Square Tests			
	Value	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	34.214[a]	3	.012
Likelihood Ratio	10.123	1	.010
Linear-by-Linear Association	7.002	2	.005
N of Valid Cases	178		

a. 2 cells (32.1%) have expected count less than 5. The minimum expected count is 2.24.

Table 17 shows that the chi-square test statistics (x^2) =34.214, with a p-value (2, 178) <0.05 the null hypothesis that states that there is no statistical influence of community participation in oversight on sustainability of water projects was rejected. This led to the alternative hypothesis that states that there is statistical influence of community participation in oversight on sustainability of water projects to be adopted. This finding shows that there exist association between community participation in oversight and sustainability of water projects.

CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter represents summary of the findings as per the objectives researched on, conclusions derived from the findings, recommendations and suggestions for further studies.

5.2 Summary of Findings

The section shows summary of the findings as per the objectives of the study.

5.2.1. Demographic Information

The study questionnaire response rate was 91.3% among the unit of study while all the key informants of the study response rate were 100%. From the analysis, the males were the dominant persons who were involved in the water projects, and had diploma level of education which is a good indicator of literacy. The study established that 43.9% of the respondents were aged between 36 – 45 years. The findings from qualitative data show that majority of community water project chairpersons and county government staffs have managed one project and have been in the project for a period of one year. The findings on the depended variable showed that there is moderate sustainability among the water projects in the study localities, and furthermore the unit of study and key informants showed that the water projects in the region suffer sustainability issues. The composite general mean of 2.952 showed that in a moderate amount there is sustainability of water projects in the region.

5.2.2. Community Participation in Water Project Identification and Sustainability of Water Projects

Project identification is one of the important aspects of any community as each community has specific needs that require addressing. The study findings further established that respondents stated in a great extent that the community being involved in feasibility studies contributed to a number of completed water projects. Majority of the community leaders were consulted in the identification of water projects initiated in their areas, and with a great extent they agreed that attendance of the project conceptualization meeting have contributed to a number of completed water projects. Findings further showed that respondents agreed that in a moderate extent that frequency of having conceptual project meetings assisted the number of communities benefitting from water projects. In a great extent the appraisal reports have contributed in assisting the community realized the number of projects providing adequate water, and in a great extent the

community being involved in feasibility studies contributed to a number of completed water projects. The study did seek to establish the extent is stakeholder analysis been instrumental in determining number of communities benefiting from water projects respondents stated that it does so in a great extent. The general composite mean of 3.6472 shows that in a great deal community participation in identification influences sustainability of water projects. The p-value (2, 178) <0.015 shows that there is significance influence of community participation in identification on sustainability of water projects.

5.2.2 Community Participation in Planning and its influence on Sustainability of water Projects.

The study sort to establish to what extent the community participation in planning for the water projects influenced the sustainability of these water projects. The findings showed that the community members and other leaders participated in forums that they used to provide feedback to the involved donors and project implementers within the various wards. The study established that respondents did moderately agreed that aspects of involvement in by the various stakeholders contributed to number of completed water projects. The study further established that respondents agreed moderately that preparation of meeting conducted has been instrumental in assisting in the number of completed water projects in different wards, and in a great extent the frequency of initiation community forums contributed to the number of projects providing adequate water. Lastly, the study established that in a great extent the community leadership involvement in initiation contributed in ensuring that the number of water projects benefits the communities. Therefore, the community leadership is instrumental in ensuring that the water projects are completed on time so as their people get adequate supply of water to assist them realize their potential and also improve their livelihoods. The study established that there is a close relationship between community participating in project planning and sustainability of the water projects. The general composite Mean of 3.45075 shows community participation in project planning contributes in a great deal to sustainability of water projects. The P-value (2, 178) <0.00 shows that there is a significant influence of community participation in project planning on sustainability of water projects

5.2.3 Community Participation in Resource Mobilization and its Influence on Sustainability of Water Projects

The study sort to establish to what extent the community participated in mobilization of resources and how it influenced the sustainability of the water projects. It was noted that mobilizing of resources was a key ingredient in the success of the project from implementation and its continued project life. The community was found to provide different levels of resources from labour, land etc. that were used within the project. Findings showed that respondents moderately agreed that aspects of resource mobilization have been instrumental in providing the number of completed water projects, and moderately agree that aspects of resource meetings benefitted from the number of projects are benefitting the communities. The study further found that respondents that in a great deal, the nature of the resources contributed to the number of communities benefitting from water projects, and in a great deal availed resources that have been instrumental in ensuring that the number of projects was completed. Community participation in resource mobilization it contributes in a great deal to sustainability of water projects. The p value (2, 178) <0.05 shows that there is a significant influence of community participation in resource mobilization on sustainability of water projects.

5.2.4 Community Participation in Oversight on Sustainability of Water Projects

From the findings it was found that the communities do not participate in the oversight to ensure sustainability of water projects. The findings showed that respondents agreed moderately that aspect of community supervision is ensuring that the numbers of water projects are completed, and moderately aspects of monitoring have been instrumental in ensuring that the number of communities' benefits from the completed water projects. Findings showed that respondents stated in a little extent that methods of monitoring have been useful in ensuring the number of projects provide adequate water to the communities. The study further found that the respondents stating that in a little extent does supervisory committee brings out community benefits from the water projects. The composite Mean of 3.538 shows that community participation in oversight does moderately influence sustainability of water projects. There is statistical influence of community participation in oversight on sustainability of water projects.

5.3 Conclusion

The study therefore concludes that it is important for the community to be involved in the project identification phase. It is through these kinds of interactions that the project team will understand the problems the community is facing thus incorporate the various solutions to the proposed project to meet the expectations of the community in the long run thus achieving the overall objective of the entire project thus sustainability. Project planning is important in any project in that it allows all the stakeholders to come together and made decisions that will be used to in ensuring that the project activities are well spelled out and the required resources availed to realize the overall project goals and objectives. For any project to be undertaken, resources have to be available. For any community-based project, the community in many scenarios contributes various resources that are used during the project implementation. Therefore, the need for community participation in the project is instrumental in allowing them contribute towards the project which in the end results in project acceptability thus sustainability is achieved. The role of oversight is important has it allows the various stakeholders to monitor the progress made by the project teams and other persons involved in the implementation of the project. For communities, oversight allows them to work hand in hand with the project teams to ensure that the project deliverables are achieved and the various concerns are addressed during the implementation thus avoiding the wrath of the both the community and the project sponsors.

5.4. Contribution to the Body of Knowledge

Table 18 shows a summary of the main contributions that was deducted from the findings to guide the body of knowledge.

Table 18 Contribution to the body of knowledge

Objectives:	Main contributions
To establish the influence of community participation in identification on sustainability of county government funded water projects of in Elgeyo Marakwet, County	In a great deal community participation in identification influences sustainability of water projects. There is a linear to linear association between community participation in identification and sustainability of water projects. If the community members through their community leadership

Objectives:	Main contributions
	representatives are not involved, project cannot be sustainable.
To establish the influence of project planning on sustainability of county government funded water projects of in Elgeyo Marakwet, County.	The community participation in project planning contributes in a great deal to sustainability of water projects. There is existence of linear to linear association between community participation in project planning and sustainability of water projects. Non-involvement of community leadership members in project planning affects its progress and sustainability in the long-term
To determine the influence of project resource mobilization on sustainability of county government funded water projects in Elgeyo Marakwet, County.	The community participates in resource mobilization it contributes in a great deal to sustainability of water projects. There is linear to linear association between community participation in resource mobilization and sustainability of water projects. Lack of involving community in resource mobilization of water projects would ensure that the water project will not achieve its objectives as expected as it would just be sustained for a while since residents do not claim ownership of the same
To establish the influence of oversight on sustainability of county government funded water projects in Elgeyo Marakwet County.	The community participation in oversight in a great deal influence sustainability of water projects. There exist a linear to linear association between community participation in oversight and sustainability of water projects. Non-involvement of community through their representative in oversight in most cases results in disputes and conflict arising from not achieving what was planned which could have been attained by oversight process being

Objectives:	Main contributions
	conducted. Therefore, at every stage of project cycle, oversight is key

5.5. Recommendations

With regard to the findings of the study recommends that:

i. There is need for the county and national government to formulate suitable and relevant policies that will ensure that community are involved in projects to ensure sustainability. Policies need to cover aspects of planning, identification, resource mobilization and oversight.
ii. Holistic involvement of all stakeholders in all project cycles in required. Decentralization of decision-making to the lowest appropriate level is crucial for all community projects. This demand responsive approach includes key principles such as the recognition of w residents in every ward, location or sub location as principal user and their inclusion by communities at the forefront of decision-making and management rather than concentrating these functions at County staff or ward level. The involvement of all should trickle down to the grassroots.
iii. There is need for county government to provide regular information to the residents on what is happening and guiding them towards full participation in county government funded projects aimed at improving community livelihoods.
iv. Capacity enhancement of project management committee members through continuous training and development is important to ensure that they are abreast of the provisions of the law regarding citizens' participation in development project. The training should broad and touch on all areas relating to development, not narrowly on project identification and implementation
v. There is need for County Government to ensure that initiated water projects are fully funded to completion rather than starting multiple projects that end up being incomplete and in the long run project objectives are not realized. This could be achieved by ensuring that phased projects become first charge in the next cycle of planning and budgeting.

5.6. Suggestions for Further Studies

Based on the contribution to body of knowledge that the study has tried to achieve, there are many community-based projects that are being undertaken by various donors and county governments including the national government that have different models of operations and different levels involvement of the community. Therefore, there is a need for further studies to be conducted within the areas of community involvement and participation and how it is influencing the sustainability of various projects from the aspects of community involvement and participation and determining

if the projects are self-sustaining or not. Through these findings, the challenges that contribute to sustainability of community projects will be analyzed fully and the findings assist in drawing of different frameworks that will assist in ensuring that all the projects being implemented continue to serve the communities in the future.

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APPENDICES
APPENDIX I: LETTER OF TRANSMITTAL

KOSGEI TITUS

P.O. BOX 265

ITEN

Re: Request To Participate In Research on Influence of Community Participation on Sustainability of County Government Water Projects in Elgeyo Marakwet County, Kenya

My name is Kosgei Titus Biwott a student at University of Nairobi. I am carrying out a study on the "**Influence of Community Participation on Sustainability of County Government Water Projects in Elgeyo Marakwet County, Kenya"** and you have been identified as one of the people who can be of assistance to me.

Please note that the information you will provide will entirely be used for academic purposes and will be treated with utmost confidentiality. Your name is not required on the questionnaire and your identity will not be disclosed in any way.

Your honest response to the questions will be of great value to the study.

Thank you for your cooperation.

Titus B. KOSGEI

University of Nairobi

Eldoret Sub Centre

APPENDIX II: QUESTIONNAIRES FOR COMMUNITY LEADERSHIP

Instructions: TICK the appropriate answer

SECTION A: DEMOGRAPHIC INFORMATION

Demographic Data		
1. Gender	Male Female	[ ] [ ]
2. Age of the respondents	Less than 25 years 26 – 35 years 36 – 45 years More than 46 years	[ ] [ ] [ ] [ ]
3. Level of education	Primary & below Secondary level Diploma level Undergraduate & above	[ ] [ ] [ ] [ ]

SECTION B: Dependent variable: Sustainability of Water Projects

In the following table provided, kindly by use of rate scale of 1-5; where 1 is not at all and 5 to a very great extent the statements regarding to suitability of water infrastructural projects. The Key: 1=Not at all, 2= little extent, 3=Moderate extent, 4= Great extent, 5=Very great extent.

Place a tick [ ] against the relevant number

Statement	1	2	3	4	5
At what extent are the number of water projects been completed in the ward					
At what extent has the number of communities benefited from the completed water projects.					
At what extent have been the number of projects completed provides adequate water to the communities.					
At what extent has community participation enhanced sustainability of water infrastructural projects in the ward					

SECTION C: Community Participation in Project Identification and Sustainability of Projects

4. Are you involved in the project identification process	Yes No	[ ] [ ]
If yes, how can you rate your level of involved in the project identification process	Poor Fair Good Excellent	[ ] [ ] [ ] [ ]
5. Are your suggestions or ideas considered in identification of water projects?	Yes No	[ ] [ ]

6. In the following table provided, kindly by use of rate scale of 1-5; where 1 is not at all and 5 to a very great extent the statements regarding to community awareness. 1=Not at all, 2= little extent, 3=Moderate extent, 4= Great extent, 5=Very great extent.

   Place a tick [ ] against the relevant number.

Statement	1	2	3	4	5
To what extent has attendance of the project conceptualization meeting contributed to a number of completed water projects.					
To what extent has the frequency of having conceptual project meetings assisted the number of communities benefitting from water projects.					
To what extent is appraisal reports contributed in assisting the community realized the number of projects providing adequate water.					
To what extent has the community being involved in feasibility studies contributed to a number of completed water projects					
To what extent is stakeholder analysis been instrumental in determining number of communities benefiting from water projects.					

SECTION D: Community Participation in Planning and its impact on Sustainability of water Projects

7. Are you involved in the project planning process	Yes No	[ ] [ ]
If yes, how can you rate your level of involved in the project planning process	Poor Fair Good Excellent	[ ] [ ] [ ] [ ]
8. Are you involved in initiation of planning meetings?	Yes No	[ ] [ ]

9. In the following table provided, kindly by use of rate scale of 1-5; where 1 is not at all and 5 to a very great extent the statements regarding to community awareness. The Key: 1=Not at all, 2= little extent, 3=Moderate extent, 4= Great extent, 5=Very great extent

Place a tick [ ] against the relevant number

Statement	1	2	3	4	5
To what extent have aspects of involvement in preparation by the various stakeholders contributed to number of completed water projects.					
To what extent have initiation of meeting conducted being instrumental in assisting in the number of completed water projects in different wards.					
To what extent have the frequency of initiation community forums contributed to the number of projects providing adequate water.					
To what extent have the community leadership involvement in initiation contributed in ensuring that the number of water projects benefits the communities.					

SECTION E: Community Participation in Resource Mobilization and its Influence on Sustainability of Water Projects

10. Are you involved in resource mobilization for the water projects	Yes No	[ ] [ ]
If yes, how can you rate your level of involvement in resource mobilization?	Poor Fair Good Excellent	[ ] [ ] [ ] [ ]
11. Do you provide any form of resources for the water projects?	Yes No	[ ] [ ]

12. In the following table provided, kindly by use of rate scale of 1-5; where 1 is not at all and 5 to a very great extent the statements regarding to community awareness. The Key: 1=Not at all, 2= little extent, 3=Moderate extent, 4= Great extent, 5=Very great extent.

Place a tick [ ] against the relevant number

Statement	1	2	3	4	5
To what extent have aspects of resource mobilization been instrumental in providing the number of completed water projects.					
To what extent aspects of resource meetings benefitted from the number of projects benefitting the communities.					
To what extent has nature of the resources has contributed to the number of communities benefitting from water projects.					

To what extent is availed resources been instrumental in ensuring that the number of project was completed.					

SECTION F: Community Participation in Oversight on Sustainability of Water Projects

13. Are you involved in oversight of the water projects	Yes No	[ ] [ ]
If yes, how can you rate your level of involvement in oversight of the water projects?	Poor Fair Good Excellent	[ ] [ ] [ ] [ ]
14. Do you provide any form of supervisions for the water projects?	Yes No	[ ] [ ]

15. In the following table provided, kindly by use of rate scale of 1-5; where 1 is not at all and 5 to a very great extent the statements regarding to community awareness. The Key: 1=Not at all, 2= little extent, 3=Moderate extent, 4= Great extent, 5=Very great extent.

Place a tick [ ] against the relevant number

Statement	1	2	3	4	5
To what extent is the aspect of community supervision is ensuring that the numbers of water projects are completed.					
To what extent is the aspects of monitoring have been instrumental in ensuring that the number of communities benefits from the completed water projects.					
To what extent the methods of monitoring have been useful in ensuring the number of projects provide adequate water to the communities.					
To what extent through the supervisory committee the community benefits from the water projects.					

END THANK YOU

APPENDIX III: INTERVIEW FOR CHAIRPERSONS OF COMMUNITY WATER PROJECT COMMITTEES

Please write the answer in the blank spaces

1. How long have you been a community water project member?

   _____

   _____

2. For the past one year, how many water projects have you managed on behalf of the community in this county?

   _____

3. Would you be in a position to give the actual progress of the projects that you participated in initiating since you assumed office? (Completed and non-completed ones)

   _____

4. What is the procedure that you follow in identification of water projects to be funded by county government?

   _____

5. Do you involve community members (if all) in identification and prioritization of water projects (to indicate the degree to which they are involved)?

   _____

6. What about involvement of community members in planning, resource mobilization and oversight process? Enumerate them

   _____

7. What are the benefits of involvement of community members in county government funded water project cycles? _____

8. Do you think participation of community members is key to sustainable county government water development project?

   _____

The End

Thank You for your Participation

APPENDIX IV: INTERVIEW SCHEDULE FOR COUNTY GOVERNMENT OFFICIALS

Please write the answer in the blank spaces

1. How long have you been a county government official?

   _____
   _____

2. For the past one year, how many water projects have you initiated?

   _____

3. Would you be in a position to give the actual progress of the water projects that you initiated since you assumed office? (Completed and non-completed ones)

   _____

4. What is the procedure that you follow in identification of water projects to be funded by county government of Elgeyo Marakwet?

   _____

5. Do you involve community members (if all) in identification and prioritization of water projects (to indicate the degree to which they are involved)?

   _____

6. What about involvement of community members in planning, resource mobilization and oversight? Enumerate them

   _____

7. What are the benefits of involving community members in county government funded water project cycles? _____
8. Do you think participation of community members is key to sustainable water development project?

   _____

The End

Thank You for your Participation

APPENDIX V: RESEARCH AUTHORIZATION LETTERS

UNIVERSITY OF NAIROBI
ODeL CAMPUS
SCHOOL OF OPEN AND DISTANCE LEARNING
ELDORET LEARNING CENTRE

Telephone: +254-773215904
Our Ref: Uon/Odel/Eld/2/5/(53)

P.O. Box 594 - 30100
ELDORET
K ENYA

3rd June, 2020

TO WHOM IT MAY CONCERN

REF: BIWOTT TITUS KOSGEI – L50/83552/2015

The above-named person is a bonafide student at the University of Nairobi, ODeL Campus, School of Open and Distance Learning, Department of Open Learning, Eldoret Learning Centre, pursuing Postgraduate Studies leading to the award of Master of Arts in Project Planning Management (MAPPM). He has completed his course work and now working on his Project Paper entitled "**INFLUENCE OF COMMUNITY PARTICIPATION ON SUSTAINABILITY OF COUNTY GOVERNMENT FUNDED WATER INFRASTRUCTURAL PROJECTS IN ELGEYO MARAKWET COUNTY".**

Any assistance accorded to him will be appreciated.

Yours faithfully,

Dr. Migosi Joash
Regional Coordinator (Learner Support)
NORTH RIFT REGION

Page 1 of 1.

COUNTY GOVERNMENT OF ELGEYO MARAKWET
OFFICE OF THE COUNTY SECRETARY

All correspondence to be
Addressed to; County Secretary

P.O BOX 220 – 30700, ITEN
TEL: 05342277
Email: emcounty2013@gmail.com

Your Ref: .....
Our Ref: EMC/ADM/69/II/214.

DATE: 5th June, 2020

THE REGIONAL CORDINATOR,
UNIVERSITY OF NAIROBI, SCHOOL OF OPEN & DISTANCE LEARNING,
ODeL CAMPUS, ELDORET LEARNING CENRE,

RE: GRANTING OF PERMISSION FOR BIWOTT TITUS KOSGEI- L50/83552/2015 TO UNDERTAKE RESEARCH PROJECT PAPER WITHIN ELGEYO MARAKWET COUNTY.

The above subject matter refers.

Reference is made to your letter Ref.**Uon/Odel/Eld/2/5/ (53)** and dated 3rd June,2020. I confirm that the above-mentioned person has submitted the request to undertake research work within the county entitled **"INFLUENCE OF COMMUNITY PARTICIPATION ON SUSTAINABILITY OF COUNTY GOVERNMENT FUNDED WATER PROJECTS IN ELGEYO MARAKWET COUNTY"** and has been granted permission for the same.

The student has been granted permission to undertake the aforementioned research within the County.

By a copy of this letter, the chief Officers in charge of Water, Lands, Environment and Climate Change and Public Service Management are requested to accord him the necessary assistance.

THE COUNTY SECRETARY
ELGEYO MARAKWET COUNTY
P. O. Box 220-30700, ITEN
Email: info@elgeyomarakwet.go.ke

PAUL CHEMMUTTUT
COUNTY SECRETARY & HEAD OF COUNTY PUBLIC SERVICE

Cc: CECM WATER, LANDS, ENVIRONMENT AND CLIMATE CHANGE
CECM PUBLIC SERVICE MANAGEMENT & ADMINISTARTION

APPENDIX VI: RESEARCH PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **481017**

Date of Issue: **18/June/2020**

RESEARCH LICENSE

This is to Certify that Mr.. TITUS BIWOT KOSGEI of University of Nairobi, has been licensed to conduct research in Elgeyo-Marakwet on the topic: INFLUENCE OF COMMUNITY PARTICIPATION ON SUSTAINABILITY OF COUNTY GOVERNMENT FUNDED WATER PROJECTS IN, ELGEYO MARAKWET COUNTY, KENYA A CASE OF FY 2018/19 for the period ending : 18/June/2021.

License No: **NACOSTI/P/20/5264**

481017

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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