PARTICIPATORY APPROACHES AND PERFORMANCE OF COMMUNITY WATER PROJECTS: A CASE OF WORLD BANK FUNDED PROGRAMME WATER PROJECTS IN GARISSA COUNTY, KENYA

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DECLARATION

This research project report is my original work and has not been presented for an academic award in any other University.

Signature……  **……** **Date……08.11.2022…….**

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The research project report has been submitted for examination with my approval as the University Supervisor

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DEDICATION

This research project is dedicated to all my family members, more so to my mother for her unflinching help and support even when things were so tough for she constantly kept on encouraging me to work extra hard. To my colleagues, the cohort of 2018 and subsequent classes; you were great company. We have come a long way and made new and lasting connections

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TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

CDC	County Development Committee
CDF	Consistency Development Fund
CIDP	County Integrated Development Plan
EACC	Ethics and Anti-Corruption Commission
ESIA	Environmental and Social Impact Assessment
KPIs	Key Performance Indicators
M&E	Monitoring and Evaluation
NACOSTI	National Commission for Science, technology and Innovation
PM&E	Participatory Monitoring and Evaluation
PPRA	Public Procurement Regulatory Authority
SDG	Sustainable Development Goals
SDGs	Sustainable Development Goals
SPSS	Statistical Package for Social Sciences

ABSTRACT

The purpose of this study was to establish participatory approaches and performance of community water projects in Kenya, the case of Garissa County World Bank Funded Programme Water Projects. Specific objectives included to: determine how project initiation influence performance of community water projects, establish the extent to which project planning influence performance of community water projects, determine influence of project execution on performance of community water projects and examine how project monitoring and evaluation influence performance of community water projects in Garissa County, Kenya. The theories that anchored the study were Stakeholders' Theory and Participatory Theory. The thesis adopted a descriptive research design. Mixed methods were adopted for this study. Study population was project supervisors, contractors, chiefs, ward administrators, water engineers, quantity surveyors, architects and project managers, totalling to 238 stakeholders. The study had a sample size of 153 respondents derived by use of Yamane's formula. Questionnaires and key interview guide were employed gather data. data was analyzed using descriptive statistics like percentage, means and standard deviation. Inferential statistics including correlation and regression were used to test the relationship between the variables. Tables were used to present the data. The study found out that stakeholder participation in project initiation influences project performance positively. When stakeholders are involved in needs analysis, proposing solutions and project identification it would increase project acceptability. Involvement of project beneficiaries through initiation of a project is a major factor to be considered in project implementation. Stakeholder's participation in project planning was a paramount factor for smooth project implementation. On involving stakeholders during planning the study found out that it would affect performance negatively. The summary of findings portrayed that lack of good stakeholder participation in project planning lead to poor project implementation. The findings showed that stakeholder's inadequate participation in project activities led to poor project implementation and end result was not met as expected. The study established that there was strong correlation of stakeholder's participatory in project monitoring and evaluation on project implementation. The study realized that most projects do not receive feedback from the stakeholders regarding the quality. The study found out that stakeholders participatory in project monitoring and evaluation influenced project performance. It would lead to empowerment and increase accountability. The researcher concluded that participatory approaches in the four phases of the project cycle influences project performance. The study recommended that training beneficiaries on planning skills would help as the major reason for that scenario is that beneficiaries lack skills and planning is a technical phase compared with the other three. Advanced inquiry about project life cycle and quality of projects out to be carried out.

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Water service performance in many developing nations has remained a formidable problem for water sector stakeholders (Adams, Sambu and Smiley, 2019). One of the 17 worldwide Sustainable Development Goals (SDGs) is clean water and sanitation (Mara and Evans, 2017). The goal's purpose is to make water and sanitation more accessible and sustainable for everyone. Due to climate changes, a significant population around the world is extremely affected by water scarcity. Despite billions of dollars in charity and government spending, studies show that one out of every three rural water delivery infrastructures in many countries, including Nigeria, is not operational. Globally, hand pumps have a non-functionality rate of 30 to 40%, with rates as high as 67 percent in Sub-Saharan Africa (RWSN, 2019). According to Seetharam Sridhar, Gadgil, and Dhingra (2020), participation in project execution is a vital component of promoting accountability, efficiency, and transparency, particularly in resource allocation and tackling social inequality issues. For the community members to be engaged in all the project phases, participatory project management should be adopted. During the phases of identification, planning, execution, monitoring, and control, as well as closing, members of the project beneficiaries participate. In this context, participation refers to when people, groups, or organizations opt to be engaged actively in policymaking on topics that impact them (Zhuang, Qian, Visscher, Elsinga and Wu, 2019).

Engaging the key stakeholders in the execution process of a project is determining factor in the outcome. Lack of or limited participatory by project stakeholders fail the realization of projects or jeopardize the projects' life and success. According to Magassouba, Tambi, Alkhlaifat, and Abdullah (2019), a participatory approach to project identification, planning, implementation, and monitoring improves project implementation in Guinea. "Understanding the project environment and ensuring that the relevant needs and technical standards are integrated into the project are also important," (Magassouba *et al.,* 2019).

Participatory project implementation can take many different shapes and occur at various stages of the project cycle and at various levels of society (Peerapun, 2018). These can range from providing inputs to predetermined initiatives and programs to exchanging information, consulting, making decisions, forming partnerships, and empowering others. Participation serves as both a means and an end in itself." Participatory project execution, on the other hand, is a method for people and communities to collaborate on development projects (Uittenbroek, Mees, Hegger and Driessen, 2019). It has also been noted as process that empowers individuals by gaining the necessary skills and knowledge which increases self-reliance and self-management.

The single most important factor in predicting project sustainability in India was found to be crucial stakeholder participation (Chawla, Chanda, Angra and Chawla, 2018). The importance of sustainability in company operations, as well as the sustainability of natural and environmental resources, has had a significant impact on the conception, planning, scheduling, execution, and participation in project management activities. In addition, Indian researchers Dick, Turkelboom, Woods, Iniesta-Arandia, Primmer, Saarela, and Zulian (2018) found that increased concept awareness and communication, as well as increased participation and collaboration, are critical to the success of the ecosystem service (ES) concept. Power dynamics, stakeholder values, and their epistemologies, or how they generate output and which types of information they consider valid, all affect participation performance. As advanced by Reed et al, (2018) when engagement mechanisms function at distinct spatial and temporal scales, they act differently and can provide diverse effects (). Sulemana, Musah, and Simon (2018) argue that low stakeholder participation has a detrimental influence on project and program transparency, accountability, and sustainability in Ghana. Project and program monitoring and evaluation by participants encourage more transparency and accountability in development governance. When a project meets the interests and expectations of its stakeholders, it is executed effectively. The desires and potentials of stakeholders ought to be met for a plan to be considered successful.

In Uganda, broad public engagement in the Environmental and Social Impact Assessment (ESIA) process for development projects is a crucial element of the operating principles (Muwaza, 2019). Simpson and Basta (2018) also discuss how the ESIA process aids in recognizing the role that public engagement should play in

decision-making, as well as the necessity for better consideration of social elements in order to meet these mandates. According to Muwaza (2019), engaging the public early enough in the planning stage and stakeholder consultation in the project execution process guarantee full public engagement. Effectiveness of stakeholder participation is realized when organized around community's schedules and their meeting expectations.

The participation method in a project entail involving the key stakeholders in the planning, directing, and project implementation phase with the purpose of achieving the specified objectives (Anantatmula and Rad, 2018). Depending on the project being executed, different scholars have conceptualized community engagement differently. The many actions that are depended on in carrying out the project as outlined in the project plan are referred to as project implementation. The community may watch the community project plan come to life during the execution process. Tanzanian researchers Chumbula and Massawe (2018) stated that the community should be involved in project selection and implementation. According to Di Maddaloni and Davis (2018), community members should be involved in project development, execution, and management.

Community engagement influences the success of donor-funded water and sanitation projects in Embu as noted by Kiara and Luketero (2018). Participatory approaches to project creation and implementation, in which individuals who will be affected by the project participate throughout the project cycle, are critical. Community involvement is frequently mentioned as a vital component that will improve the sustainability of any donor-funded initiative. Similarly, a study by Eliab and Kisimbii (2020) claims that community engagement significantly influences the success rate of community water project execution in Mombasa County. The inclusion of stakeholders improves the project's long-term viability. According to Hagarsu, Wanyonyi, and Kikwath (2020), "key stakeholders engagement in project execution process determine the effectiveness of community water projects in Saku Sub County in Marsabit County." Because these programs are by and for the communities, their participation in the execution of the projects is vital. Despite the rising body of research on stakeholder engagement (Peerapun, 2018; Reed, 2018; Sulemana *et al*., 2018; Muwaza, 2019; Uittenbroek, 2019; Zhuang *et al*., 2019), participatory methods to community water project performance have received little theoretical or empirical attention. Majority of prior research (Anantatmula *et al.,* 2018; Chawla *et al.,* 2018; Afolabi, 2018; Awuor and Daniel 2020)

have evaluated the project management process and other major dimensions of stakeholder management. Kenya's Vision 2030 planning blueprint is structured into three main pillars: economic, social, and political (Nyobange, Ogolla and Kitheka, 2019). The plan recognizes how important water is to the development of the social and economic spheres as the nation becomes more industrialized and urbanized. The plan estimates that by 2030, everyone will have access to water, which appears to be consistent with the UN's 2030 Sustainable Development Goals for water and sanitation (Chepyegon and Kamiya, 2018). The social pillar's goal is to create a fair and united society that benefits from social and equitable growth in a particularly hygienic and communal setting. This study is supported by the social strategy, which aims to make Kenya a country with a sustainable, safe, and clean environment by 2030. Therefore, Kenya Vision 2030 acknowledges the significance of establishing effective, long-lasting, and easily accessible clean water systems as the nation grows more industrialized by 2030 (Nyobange *et al.,* 2019).

The Government of Kenya's Vision 2030 affirms that challenges in the water sector, such as those related to population pressure, scarcity of water, and quality of water, as well as climate change, are not unique to Kenya and that effective management of the water sector is essential to meeting these challenges (Kilimo and Makokha, 2018). The repair and expansion of water supplies have been highlighted as some of the major projects under the economic and social pillars of Vision 2030, which also include increased irrigation and enhanced access to clean water and sanitation in both rural and urban regions. One of the difficulties that needs to be resolved for Kenya to achieve its 2030 development target is the water issue. By 2030, everyone would have access to water, according to Kenya Vision 2030. More than 2.8 billion people (or more than 40% of the world's population) reside in river basins that experience some form of water scarcity, and 1.6 billion people reside in regions that experience economic water scarcity, where, despite the availability of water, access is constrained by factors such as human, institutional, and financial capital (Aciita and Wanjohi, 2019).

Local studies have also looked at the general determinants of community water project performance, with participatory being one among them. In addition, the studies have been carried out in other Counties. As a result, the contributions of stakeholder initiation, planning, execution, and monitoring as likely determinants of participatory techniques

impacting community - based initiatives have been overlooked. However, this sought to determine the antecedents of participatory techniques on performance of community water projects in Garissa County, Kenya.

1.2 Statement of the Problem

The use of a participatory approach in project implementation has been praised for anchoring community project implementation and passing ownership to the communities who host these initiatives. Water projects in Garissa County have been plagued by time and budget overruns, unmet product standards, customer demands and requirements, and management objectives. The little participation of stakeholders is said to be the cause of the high failure rate in these initiatives. It is undeniable that proper planning and deployment of qualified personnel have been implemented.

According to Frefer, Mahmoud, Haleema, and Almamlook (2018), a project can be finished on schedule and on budget, but it will be considered a failure if it fails to satisfy the organization's strategic goals. The lack of participatory stakeholder involvement is one of the most fundamental hurdles to providing safe drinking water and sanitation in ten years (Dobbin, 2020). In Garissa County, water emerged as a priority in the first set of County Integrated Development Plans (CIDP) produced by pioneer governor during the 2013-17 administration. The CIDP set the following goal: by 2017, raise the household number with access to safe drinking water from 27,725 to 90,000 homes (Karama, 2021). Various studies conducted in Kenya, (Oraro, 2012; Kariuki, 2018; Kiara *et al*., 2018; Awuor *et al*., 2020; Eliab *et al.,* 2020 on determinants of performance of community water projects in districts established that insufficient stakeholder involvement in planning project financing delays implementation and derail programs on water implementation.

Community water projects in Garissa County have not been performing well where cases of mismanagement of resources due to malpractice have been reported. Cases of delayed completion of the projects have been reported in the county citing various challenges that such as delays involving experts from the community during the initiation of community development-based projects towards success (Kaimenyi & Wanyonyi, 2019).

Community water projects in Garissa County have poor planning and execution strategies and have weak monitoring and evaluation framework that have led to the failure of the projects to meet the required quality standards of the users. two thirds (67%) of water projects in the county do not serve the locals for five years or more, mostly ground to stop and the locals of the semi-arid area are left having to travel 20-30 kilometres in search of water. Some of the reasons explained for lack of sustainability include inadequacy of infrastructure that guide management and maintenance efforts, lack of inclusivity of the local communities, insufficient funding and no use of modern technologies. Most of the community water projects initiated in the county have not been able to exist more than two years. Despite the poor performance pf community-based water projects in Garissa County, there is scarce literature done in the county. Most of the available literature focus on other counties. Hence this study sought to bridge these gaps and establish how participatory approaches influence performance of community water projects in Garissa County.

1.3 Purpose of the Study

The purpose of this study was to examine the extent to which participatory approaches influence community water project performance in Garissa County, Kenya.

1.4 Specific Objectives

i. To determine how project initiation, influence the performance of community water projects in Garissa County, Kenya.
ii. To establish the extent to which project planning influence the performance of community water projects in Garissa County, Kenya.
iii. To determine influence of project execution on the performance of community water projects in Garissa County, Kenya.
iv. To examine how project monitoring and evaluation influence the performance of community water projects in Garissa County, Kenya.

1.5 Research Questions of the Study

Arising from the above objectives, research questions that were answered were:

i. How does project initiation influence the performance of community water projects in Garissa County, Kenya?

ii. To what extent does project planning influence the performance of community water projects in Garissa County, Kenya?
iii. What is the influence of project execution on the performance of community water projects in Garissa County, Kenya?
iv. How does project monitoring and evaluation influence the performance of community water projects in Garissa County, Kenya?

1.6 Research Hypothesis

The study, at the 95% level of significance, tested the following hypotheses:

$H0_1$: There is no significant relationship between project initiation and project performance of community water projects in Garissa County, Kenya.

$H0_2$: There is no significant relationship between project planning and project performance of community water projects in Garissa County, Kenya.

$H0_3$: There is no significant relationship between project execution and project performance of community water projects in Garissa County, Kenya.

$H0_4$: There is no significant relationship between project monitoring and evaluation no and project performance of community water projects in Garissa County, Kenya.

1.7 Significant of the Study

The study findings will be beneficial to community development practitioners who come up with the design and concept of projects and the knowledge gained in this study will help them understand the value of project performance and sustaining the projects which informs their designing. The communities will also understand the value in taking part in the project activities so as to continue enjoying the benefits of the project.

This research paper might provide a framework on how to accomplish and achieve the set goals by understanding the success factors in project performance and management. Project managers are the people who oversee the activities of the project from initiation through to termination or completion, they might therefore have a clear picture of the factors that influence on performance of community water projects in Garissa County to ensure the project is completed within the scope, cost, time and expected quality delivered.

The national and county government of Garissa will benefit from this study since it will provide insight and information on enacting policies that will lead to performance

sustaining the water projects. These governments will gain insight in what their support of community water projects means to sustainability measures and efforts for the water projects.

Finally, to the academic community and researchers, this study will increase knowledge on participatory approach and performance of community projects. This study can also be used as a source of empirical literature, referencing material and guide future researchers on topic areas to delve into.

1.8 Assumptions of the Study

The primary assumption was that the participants in the study understood the factors that determine the effectiveness of community water projects in Garissa County. Another assumption was that all Stakeholders, that is, County Development Committee, contractors, chiefs, ward administrators, water engineers, architects, quantity surveyors and Project Managers can read, interpret and also answer and write responses in the questionnaire. Furthermore, the assumption of the survey is that all the respondents would cooperate and would give responses which are accurate, reliable, and honest to the best of their knowledge.

1.9 Limitations of the Study

Limitations are restrictions of the study due to theoretical or methodological reasons which may decrease the credibility and generalizability of research findings. The elements of research methodology employed may influence the interpretation of the study results. Also, the researcher will employ questionnaire to collect data which is a self-reported and may be difficult to verify. To counteract this, the instrument's validity and reliability would assess to see if what they reported fulfils the required criteria. Furthermore, questionnaire data collection is contingent on respondents' willingness to answer the questions. The management at the construction sites were reluctant to grant permission to anyone carrying out the research. To counter this limitation, the researcher obtained a data collection letter from the ministry of higher education to show that the study was meant for academic purposes only.

In addition, the researcher assured the management that they would be provided with a copy of the final report. Further, the respondents were reluctant in giving the required information due to fear of victimization. In addition, some respondents felt as if they

were being investigated. The researcher however worked at winning their confidence by informing them that the study was only to be used for academic purposes and assured them of confidentiality of information given.

1.10 Delimitation of the Study

The research's focus is on the impact of a participatory approach on community water project performance in Garissa County, Kenya. This shows that other variables that may be used to evaluate a project's performance are missing, resulting in insufficient data. Budget and time may constrain the research; however, because the study is a flagship of major aid agencies, there is hope that it would be representative of similar projects. Although not all respondents were able to provide feedback, the total number were sufficient to make meaningful conclusions. Also, the research took two months and assessed tenets of participatory approach, that is, project identification, project planning, project M&E and how they affect execution of water projects.

1.11 Definitions of Significant Terms

Performance of community water projects: In this research, timeline, meeting deadlines, project quality, cost and relevancy will be used to measure performance.

Project Execution: In this study, project execution is indicated as task creation, informing team members on tasks, and budget management.

Project Initiation: In the current study project initiation encompasses feasibility study, project scope and project stakeholders.

Project Monitoring & Evaluation: In the current study, project monitoring and evaluation will be assessed by tracking activities, assessing work quality, and keeping the project on track.

Project Planning: This involves **c**reating a project plan, creating workflow and gathering resources.

1.12 Organization of the Study

The study began with chapter one where it was introduced by discussing the background to the study, the problem statement, the objectives and research questions guiding the study. The significance of the study was outlined; limitations and delimitations stated and key terms were defined as applied in the study. This was followed by chapter two which majored on literature review. Empirical literature was presented and the researcher was able to identify research gaps that the study purposed to fill. The theory upon which the study was based was also outlined in the chapter and the conceptual framework was illustrated. Chapter three of the study presented the research methodology where the target population, sample size and sampling design, data collection instruments and procedures, validity and reliability of data collection instruments, ethical considerations and operational definition of variables were explained. Chapter four was next and it mainly covered the respondents' response rate, their demographic data and an analysis of the data, its presentation and its interpretation. The study concluded with chapter five which stated the summary of the findings, discussions and conclusion reached by the researcher. It also gave recommendations based on the findings and suggested further areas of research and explained how the study had contributed to the body of knowledge.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The chapter investigates literature relevant to the study variables, and then provides a summary of the material studied and the corresponding research gaps in each study variable. This chapter outline the theories anchored on the study; Stakeholder's theory and Resource based theory. The chapter will also a graphical representation in forma of a conceptual framework to show relationship between participatory methods and performance of community water projects.

2.2 Performance of Community Water Projects

The past four decades, numerous investigations have been performed on performance of project worldwide. Nevertheless, among different authors, there is no agreement on appropriate definition and standard project performance measures. A project's overall performance is determined by its budget, deliverables, and budget restrictions. "Efforts to assess project performance require precise definition and measurement in order to effectively comprehend and monitor project operations," (Al-Nabae and Sammani (2021). Prior experience has shown that project performance is defined by the triple constraints of quality, time, and cost. Because the goal of project performance is to improve project success. Everyone has his or her own set of subjective success criteria, various stakeholders may interpret project success differently (Bilir, 2022).

Significant performance indicators as mentioned by Cha and Kim (2018), improvement helps in the implementation of outstanding project management processes. "Cost performance is a key criterion for determining whether a project is successful because cost is the end consequence of the scope of the project," (Al-Nabae *et al.,* 2021). Furthermore, project complexity, as evaluated by the budget and schedule outcome, is another indicator of project management performance (Bjorvatn and Wald, 2018). Key Performance Indicators (KPIs) such as cost, time and project quality are key when it comes to determine the success of any project. According to Bhuinyan, Gadekar, Agrawal, Basak, and Raut (2019), project performance may be quantified by dividing performance indicators into multiple groups such as time, cost, quality, design revisions, human resources, and financing. However, in measuring the project success in construction industry, time, cost, and quality are the three most important dimensions to

consider. In recent years, one of the most recent rising concerns of continuing concern in the water sector has been the evaluation of water supply project performance (Li and Han, 2020). Performance evaluation is only a tool whose primary goal is to improve management performance and the water industry's service level. However, Andary (2019) points out that there are no clear evaluation tools to look at water projects.

Due to a lack of capacities, resources, and maintenance and repair replacement parts, the rate of performance in water projects in underdeveloped countries is alarmingly low (Mbui and Wanjohi. 2018). The completion rate, project quality, cost and time, project goals and objectives, and beneficiary satisfaction can all be used to evaluate project performance. In Nyeri County, in assessing the performance of water projects, factors such as cost, standards and scope were the major KPIs. Project performance, particularly in the public sector, has been a key source of concern. A wide range of parties are interested in the notion. Water projects continue to perform well in terms of cost. Some of the causes for cost savings have been highlighted as prudent resource management, project downscaling, and rigorous spending regulations.

Elements that influence the performance of community water projects in another study were studied by Phinehas and Ochieng (2019). The level of community engagement fundamental management skills, as well as other elements such as financial and technical factors, were identified as important determinants of community-based water project success or failure. Results indicated that main development stakeholders and community must be engaged in formulation of policy that influence the execution process as well as frequent policy changes. Research results showed that engaging community influences the success of their development projects. Performance and sustainability are influenced by community involvement throughout the implementation process. The primary determinants that impact performance in community water projects in Marsabit County were analyzed by Hagarsu, Wanyonyi, and Kikwatha (2020). The research identified some of the primary determinants as management planning, finance availability, community participation, and project governance policies. Engaging the project stakeholders in the execution process enhanced success of community water projects. Community project performance was most influenced by management planning, followed by financing, governing policies, and finally community engagement.

Therefore, positive performance of water projects is determined by success factors hence there is need of identifying these factors before start of any project.

Project success is measured and evaluated using a range of success indicators that are linked to many variables such as time, customer support and modifications, client efficiency, cost, health and safety, and quality, (Hussein, 2020). The benchmark for measuring project success is established during the execution phase of a project to provide all stakeholders with direction to the project requirements and to ensure that they all work in the same direction.

2.3 Project Initiation and Performance of Community Water Projects

In Rwanda, Kobusingye (2017) conducted a descriptive study to assess the association between stakeholders' participation and project outcomes. Specifically, the research looked at Wash project. The research established that project stakeholders had an impact on project success. However, results from Rwanda could not be generalized to the Kenyan scenario. The research also focused on project performance or outcome, the current study will focus on community water projects implementation in Garissa County, Kenya.

Project stakeholders have their biggest impact on projects when they engage in project identification screening and selection (Wamugu and Ogollah, 2017). Result further reveal that sstakeholders participation should begin as soon as the project is launched. According to these findings, survey participants rated trust, acceptability-ownership, and receiver contentment as more important to outcome than cost, budget, and scope. However, the the study did show the level of stakeholders' involvement in project initiation and community water project execution which the current study seeks to determine. This research will focus on community water projects as opposed to CDF projects thus the results may differ.

Descriptive research was conducted by Njeri and Omwenga (2019) on the impact of long-term initiatives on monitoring and evaluation (M&E) approaches. Data was sourced from a sample of 90 people. Results from the research indicates that M&E organizational factors, human capacity, partnerships, communication and project sustainability were all found to have a positive significance influence on realizing project objectives. Organizations are yet to create appropriate Human Capacity in M&E, according to the

findings. However, the study results revealed that the various significantly affecting project sustainability.

A study was conducted to assess the effectiveness of M&E frameworks in the execution of development projects by Onyango (2019). The research used a mixed method approach. The method used was stratified random sampling. The surveys were provided to respondents when the investigator dropped the tools and picked them later. With the help of SPSS, descriptive statistics were utilized to examine quantitative data. Learning capacity factors were shown to have the strongest link and significance to the successful implementation of county programs, followed by result-based performance factors, participative tracking factors, and beneficiary accountability factors. According to Anne and Paul (2019), project monitoring and evaluation, project team competency and stakeholders' involvement. However, stakeholder involvement was shown to be the most important factor, followed by project team competency, top management support, and project monitoring and evaluation.

2.4 Project Planning and Performance of Community Water Projects

An investigation carried out by Urbaski, Haque and Oino (2019) in Pakistan and the United Kingdom through a cross-sectional strategy research meant to ascertain extent to which of project risk management through project planning do affect project success in the construction business. The researchers involved 152 project managers from both regions who were selected through purposive sampling method. According to the research, project planning significantly on project success. Another descriptive research and explanatory research in Kenya by Muute and James (2019) evaluated how construction projects performance was influenced by planning techniques. Specifically, the study sought to evaluate how to evaluate how human resource planning, financial resource planning, material consumption planning, and time management affected construction project performance. The study established that quality project planning was carried out efficiently.

According to the study findings, all the factors have a favourable and significant impact on construction project performance. Further in Rwanda, another descriptive study was carried out by Hubert and Mulyungi (2018) on the impact of M&E planning on project performance, with a focus on a few NGOs in the Gasabo District. There were 144

respondents in total who were either M&E Specialists or Finance Managers. According to the findings, AVU's M&E plans were communicated with all participating universities, 92% provided legitimate motives because they feel M&E planning affects project performance in connection to the projects under consideration. Between M&E planning and project execution. Inferential statistics revealed a positive significant correlation of 0.8. In Kiambu County, a study by Njogu, Namusonge, and Oluoch (2018) assessed the effect of project design on the effectiveness of community-based HIV interventions. A descriptive survey study was used by the researchers. Results revealed that efficiency of the programs was significantly influenced by project planning. Also, Kabiru, Theuri and Misiko (2018) investigated the performance of Kenya's agricultural state-owned enterprises to see how planning affects their success. The research aim was to see how planning influence organizational performance of agricultural state-owned enterprises. Out of the 42 agricultural state-owned enterprises that made up the target audience, 30 enterprises were selected by use of a basic ransom sampling. The findings suggested that planning has an impact on state corporate organizational performance, but based on the data gathered, it is assumed that these firms' management does not conduct planning functions adequately or effectively.

If these companies want to enhance their performance, the study suggests that effective planning become a corporate culture. In Meru County, descriptive research by Mbui *et al.,* (2018) assessed the community engagement on the performance of community water projects. Stratified sampling was employed to get a sample of 211 from the initial 413 respondents. The findings revealed that incorporating the community in financial planning improved project success moderately. In addition, Naeem *et al.,* (2018) investigated the impact of project planning on project success, utilizing risk management as a mediating factor and organizational culture as a moderator. An average of 100 respondents who were project managers took part in the research. To examine the relationship, regression and correlation approaches were applied, which revealed that planning had a beneficial impact on success. The study's findings revealed that predictors have both significant and insignificant effects on response variables.

In Kenya an investigation conducted by Mwanza, Namusonge, and Makokha (2020) ought to assess project planning practices and performance of projects in the construction industry. Investigators employed mixed research strategy. A sample of 313 individuals took part in the study in the contemporary markets making up the target population. The study is of significance to policy makers, county governments and academicians. According to the findings, project planning practices and project stakeholders' practices positively and significantly impacted the construction project performance. The study also discovered that projects whined planned for provide direction to accomplishments is completed at good period and minimizes mishaps. In Kericho County, Korir, Kyalo, and Mbugua (2021) investigated the impact of community participation in project design on the success of community water delivery projects. There were 8369 people in the target group, and 382 were chosen as a sample. According to the findings, involving community members in planning, activity planning, and resource planning are all significantly related variables, with project success at a 95% confidence level. Despite the existing literature supporting the role of project planning in project achievement, studies from above review focused on construction projects but the current study limited to water projects, specifically in Garissa County

2.5 Project Execution and Performance of Community Water Projects

In Poland, descriptive research by Demirkesen and Reinhardt (2021) assessed the influence of stakeholder involvement on performance of the government projects. The research targeted 13 governments' projects where managers of the projects participated in the study. The data analysis suggests that stakeholder involvement and performance had a positive and substantial association. Allowing all stakeholders to participate in decision-making and the implementation process is an example of stakeholder involvement. It was concluded that project success is highly dependent on stakeholder involvements in the execution phase. An empirical study was conducted in Guinea by Magassouba, Tambi, Alkhlaifat, and Abdullah (2019) to analyse the impact of stakeholder involvement on development project performance. The study adopted a literature review model where it assessed around stakeholders' involvement notions in order to determine their impact on development project performance, among other things. It's easier to manage stakeholder demands and predict hazards that could affect project success when you use an effective stakeholder involvement approach during

project implementation. The research established that involving stakeholders in regarding the execution phase of project management improves likelihoods of success as far as community projects are concerned. Locally, Githinji, Ogolla, and Kitheka (2020) did a descriptive research to to assess the ferry Services on the impact of stakeholder involvement on project performance. The findings were; involving beneficiaries of the project in the project implementation process impacted project results positively. The study specifically established that stakeholder involvement in activities of execution such as planning, funding and resource allocation was influential to project performance.

2.6 Project Monitoring and Evaluation and Performance of Water Projects

The county of Migori's study carried out using descriptive research of Minyiri and Muchelule (2018) examined the effect of community involvement on water project performance. The goal of the research was to see how communication, management competence, technology and M&E affected project success. Using a 1967 Taro Yamane equation, 145 respondents were selected from a population of 228 stakeholders and water utility business employees. According to the findings, there is association between project monitoring and project success. Furthermore, research results revealed that monitoring is the most critical part of assuring the success of many initiatives when done appropriately, at the right time and location. Another descriptive study conducted in Meru County by Obudho (2021) assessed the impact of the M&E procedure on HIV/AIDS project execution. Monitoring had a considerable impact on project performance, according to the findings. A similar study by Ndegwa (2020) revealed that monitoring procedure had a positive significant impact on project implementation. Further, using a descriptive research design, Mbaabu (2020) assessed sustainability on community water projects. A population of 70 respondents participated in this research. From the findings, a good number of community members did not participate in monitoring and evaluation community developments projects implementation. Furthermore, the timelessness involved while conducting the research was inadequate. In Kilifi County, Ochieng (2020) conducted another descriptive study to investigate the relationship between stakeholder participation and the long-term viability of Plan International's community development projects. A census sampling method was used, with 96 respondents chosen from various projects. According to the data, project monitoring activities enhanced community project sustainability. Mgoba and Kabote

(2020) also investigated the impact of participatory M&E on the success of community-based water projects. Sequential exploratory research was adopted in this research.

The study results indicated that participatory monitoring is critical for projects achievement. Similarly, Obudho (2021) conducted descriptive inquiry to explore how M&E process affect HIV/AIDS project implementation in Kenya. From the study results, project performance was significantly impacted by monitoring process. Hussein (2020) conducted research at the Kenyan Water Sector Trust Fund to see how monitoring methods affect project success. Independent variables such as monitoring planning, monitoring tools, monitoring procedures and monitoring practice adoption and their influence of project performance was carried out. Yamane (1967) provided a formula to attain a sample size of 162 from diverse organizations who took part in this study. The four factors had a positive impact on project success. In Kajiado County, Kenya, Ndegwa (2020) investigated the impact of the M&E process on the implementation of wash projects. The research problem was solved using a descriptive research design. There were 60 participants in the study. The findings demonstrated that the monitoring procedure had an impact on project implementation. Also, in Meru County, descriptive research by Mbaabu (2020) investigated the link between M&E and the long-term viability of community water projects. The findings revealed that the monitoring was insufficient because most beneficiaries were not kept informed about the project's progress, and the analysis was not finished on time. As a result, it was suggested that monitoring be done on a regular basis to avoid any future concerns that could influence the project's performance.

Although there exists literature focusing on monitoring in the aspect of project management, some of these studies relate it with other constructs like project implementation and not performance. This creates conceptual gap that the current research will seek to fill by appraising the role played by monitoring on performance of water projects in Garissa.

2.7 Theoretical Framework

In this study, Stakeholders' Theory and participatory Theory were the foundations of the research.

2.7.1 Stakeholders' Theory

Stakeholders' theory was proposed by Freeman (1984). The theory holds that in every project, there exists a group of individuals with interest, usually referred to as stakeholders, and whose interest the management endeavours to take care of. It offers a dominant criticism of the stakeholder's view, where the owner considers shareholders as the only vital part of the project. The theory posits that all individuals or groups engaged in a project do so with intentions of safeguarding their interests. The theory emphasizes on the role stakeholder participation plays in project success, the underlying emphasis being that there is relationship between participation and success. The term stakeholder traditionally focused on the economic status of an organization (Bellion, 2020).

Community engagement in water projects do not just involve gathering information, but also attending meetings, expressing thoughts and reviewing paperwork (Mbui *et al.,* (2018). In addition, contributing money and material resources, volunteering labor, demanding financial accountability, electing authorities, and deliberating on all aspects of the project are all examples of how people might get involved. According to Fiore, Galati, Gobiewski, and Drejerska (2020), stakeholder engagement theory plays a role in policy formation and execution. The factor on which the focus is directed determines how participation disparities are interpreted. "Community participation in the decision-making process has an impact on project execution and performance, resulting in physical and noticeable contributions and aftermaths that profit the community members," (Karimi, Mulwa and Kyalo, 2020).

Stakeholder theory is primarily concerned with involving all important stakeholders in the project so that they can share their ideas and perspectives on what they want to realize, the outcomes of their actions, policy formulation, and implementation of the stated objectives and goals (Githinji *et al.,* 2020). Policymakers, development agencies, and academics use it extensively. The practitioners' goals and objectives, as well as the purpose of stakeholder participation, were envisioned as impacting the interpretation of data gathering, resulting in useful knowledge. The results were used to make corrective choices and make required changes to the program and the institutions involved.

This theory is utilized for identification, initiatives, and application of the findings and it is used show how selection of project M&E instruments (Hubert *et al.,* 2018).

Stakeholder participation at various levels is linked to the theory in that the theory is adhered to when stakeholders are defining project objectives, monitoring, and evaluation plans. Stakeholders' theory was rationalized for this research in that, when the assigned stakeholders fully participate in project planning, initiation, execution and M&E of community projects, success is achieved. The overall hypothesis of the theory, that stakeholder participation is instrumental to interventions will be adopted by this research. In this study, stakeholder participation at all levels is very critical to achieve project success.

2.7.2 The Participatory Theory

Participatory theory originates from the literary works of Midgey, Hall, Hardiman and Narine (1986) and its main concept is on total involvement of the local population and other stakeholders in the creation of content, implementation of programs and development of policies that lead to changing the lives of people. The theory holds shaping and changing the future is left in the hands of the citizens (Carpentier & Dahlgren, 2019). Thus, for enacting any changes there is need to participation of the local community members in the decision-making process and guide the interventions. The participatory theory suggests the need to recognize the efforts, capacities and contribution of the locals since engaging them leads to higher chances of the project being on target and being sustainable in the long run (Fischer, 2017). Li, *et al.* (2018) share that participatory theory looks at stakeholder engagement and its collaboration with all stakeholders and the interest they have in the program or project. The stakeholders include donors of the project, staff, managers and community members and their ability to work together increases their individual capacity and competence leading to performance and a successful project. Stakeholder engagement is also a tool that can be used educate the locals on maintenance of the project and easily manage any dissent and create synergy. According to Borda (2018), the concept of participation has been changing where in the 1960s it was exploring the concept and its link to development of the communities; the 1970s saw the idea as paramount for community development, well-being of the poor and implementing of programs and projects. From the 1990s to present date, participation is the conventional way in handling development and attaining project success. While Carpentier and Dahlgren (2020) further noted that it is wise for

project owners and leaders to involve the locals if they wish for success and sustainability of projects.

Participatory theory is based on six principles for its effectiveness in inclusivity for high project output. The principles include equal partnership by all stakeholders; transparency by encouraging openness in handling all project activities and having open communication; power-sharing which allows balanced sharing of authority among the different project stakeholders; sharing responsibilities in the project; empowerment and cooperation. These principles can be employed in any project by encouraging partnership and engaging all stakeholders that will lead to success of the project and adoption of sustainability measures (Fischer, 2017).

The weaknesses present in participatory theory are that it presents a situation of equal partnership which might create tensions that cannot be resolved during the planning and implementation of the project. Planning might be a lengthy exercise as there is need to hear the voice of all concerned parties before coming to a final conclusion (Bartels, 2019).

In light of this study, the participatory theory supported the first variable of stakeholders' participation. This is because when the entire local community members, internal and external project stakeholders are included in planning, execution and maintenance and repairs for the water projects; then the projects can be sustained for a longer period. The theory attempts to describe that the views shared by stakeholders'/community members can help in performance and sustainability efforts of the water projects.

2.8 Conceptual Framework

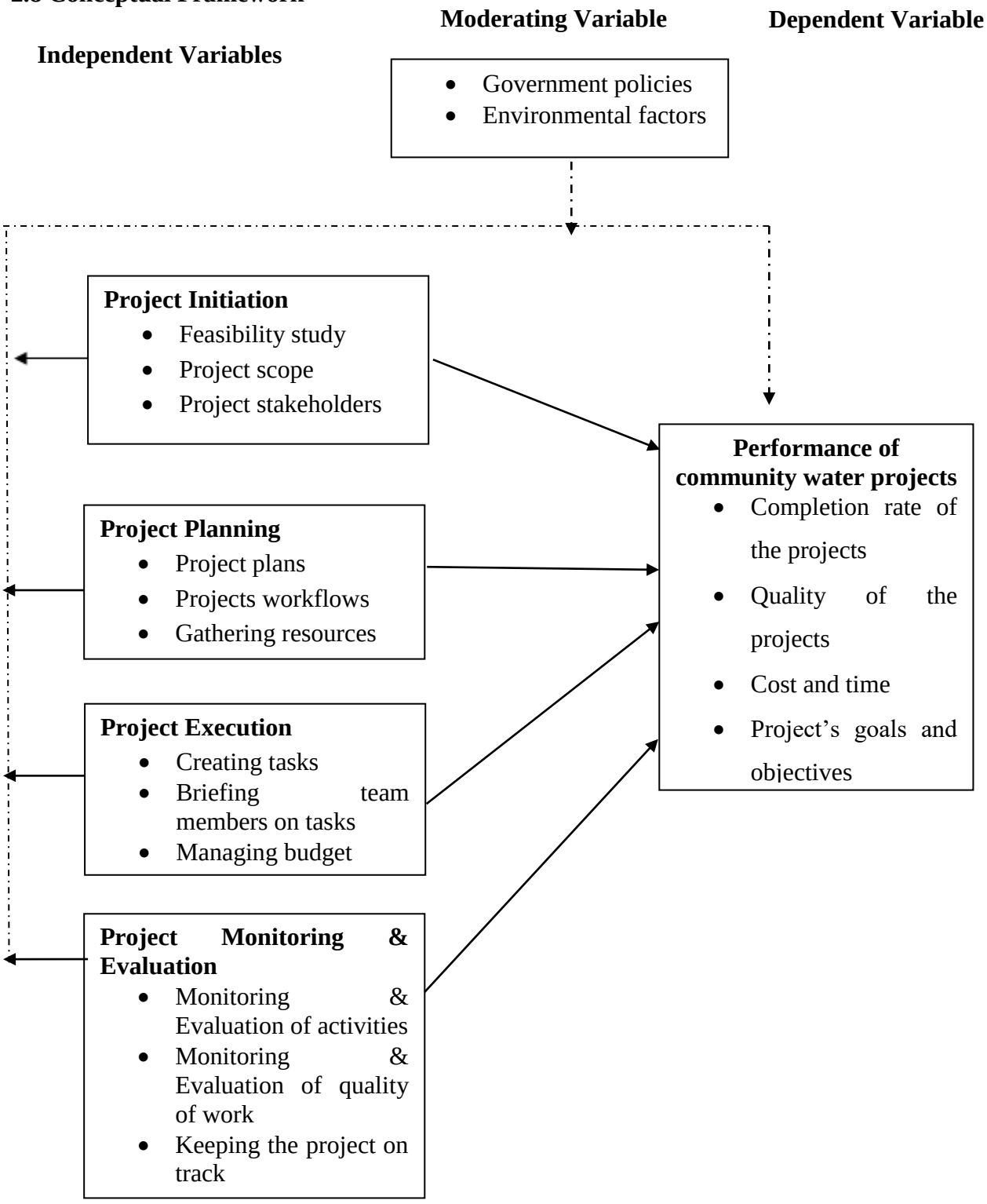

Figure 2.1: Conceptual Framework on Participatory Approaches on Performance of Projects

2.9 Relationships between Variables

2.9.1 Performance of Community Water Projects

Project performance is a broad concept that has attracted significant attention among scholars. Projects are designed to meet some specific objectives; hence performance can be examined in the context of how these goals have been attained by the project at the end of its implementation (Rugiri and Njangiru, 2018). A successful project should strive to achieve the goals established during the planning and beginning phases. Traditionally, project success has been measured in terms of quality, budget, and timeliness, as well as the happiness of the end users who will benefit from the finished product (Feghaly, El Asmar and Ariaratnam, 2021).

Water access is a global need that the United Nations has identified as one of the Sustainable Development Goals (SDG) (Maimuna and Kidombo, 2017). Water is required for both human and industrial manufacturing processes to function properly. Water supports the general livelihood of people including farming of both crops and keeping of livestock and dairy animals (Kariuki, 2018). Water projects are designed to ensure all these objectives are attained, such that there is a steady supply of clean water. Water projects should be completed in time, so that people can rip the benefits as soon as possible. Delays in completion of water projects can increase the costs that may go beyond the budget outlines (Eliab and Kisimbii, 2020).

Quality is an important construct when it comes to water projects. Water projects should ensure people have access to clean and steady supply of water (Kiara and Luketero, 2018). Contaminated and unhygienic water conditions arise from compromised water quality concerns that may pose serious health implications on beneficiaries (Mohamud, 2017). Water projects should be guided by clear goals and objectives and these need to be attained after conclusion and accomplishment of these development activities. At the same time, the end users who are the beneficiaries of water projects should be satisfied with the available water (Ochieng and Onyango, 2019).

2.9.2 Project Initiation and Performance of Community Water Projects

Project initiation as sets the basis for the subsequent stages of the project. Initiation starts with a feasibility whose essence is to come up with clear expectations the project and decide on whether it should be undertaken (Söderberg, 2020). The feasibility study helps

to identify assumptions and constraints that are likely to impact on success of the project (Mbiru, Wickham and Ayentimi, 2021). Feasibility study aims at documenting relevant solutions towards the problems or opportunities that have been identified which are to be addressed by the proposed project. During feasibility studies, potential risks to the project are highlighted and relevant solution towards the same are also proposed (Mutwiri, Were and Odhiambo, 2018).

The scope of the proposed project should be clearly specified at the initiation phase. This includes the need to identify the schedule, budget, deliverables and goals of the project. Although the scope of the project may change as time goes on, efforts should be made to ensure that it is established as early as possible (Kihuga, 2018). Timeliness and budget are critical scope requirements that must be stated properly before commencing into project execution. The aim and deliverables of the project, as well as the appropriate resources required to execute the plan, are all defined in the scope of the project (Matu, Kyalo, Mbugua and Mulwa, 2020). Here, emphasis is put along the objectives of the project, possible constraints, deliverables, relevant assumptions, schedule as well as the budget (Afolabi, 2018).

A project should have right stakeholders in order to remain successful (DiNapoli, O'Flaherty and Joy Garcia-Dia, 2019). At the initiation phase, the project managers should place emphasis on those who may be impacted by or have a stake in the plan of the project, the outcomes or deliverables (Yemini, Oplatka and Sagie, 2018). A project can have internal as well external stakeholders and the degree of their influence on the project may vary. Stakeholders may even be mapped on a stakeholder map depending on their degree of interest and influence on the project so that their needs and expectations are well specified (Russell, Pferdehirt and Nelson, 2018). Communicating and negotiating with these stakeholders is important as this keeps them briefed and informed on the progress of the project.

2.9.3 Project Planning and Performance of Community Water Projects

Project planning aims at developing the alternative options required to achieve the project objectives. Project plans are prepared in order to produce clear and consistent records that may be used to guide project implementation (Tesfaye, Lemma, Berhan and

Beshah, 2017). Throughout the delivery of the project, planning is an ongoing and continuous undertaking (Naeem, Khanzada, Mubashir and Sohail, 2018).

Project planning involves the need to set up goals that may guide the project. They are these goals that will provide direction on what needs to be undertaken for success of the project. Scheduling of different tasks of the project is important activity undertaken during project planning process (Igwe and Ude, 2018). The man aim of project planning is to optimize the costs and time needed for undertaking the project activities. Project planning is important for performance of the water projects. This assertion is consistent with Naeem, Khanzada, Mubashir and Sohail (2018) who undertook an analysis on planning and the role it plays as far success of the project is concerned. It was discovered that planning significantly enhances success of the project.

The important role played by project planning regarding project success was demonstrated by Muute and James (2019) who identified human resource, material resource, time and financial resources as key constructs that need careful planning. Human resource planning involves determination of right people to be involved in carrying out the project activities. Financial planning entails estimation of revenues and costs which are best handled through creation of a budget. It can thus be inferred that project planning is the formulation of the project plans that guide how different project activities are conducted. There are different plans that are needed for successful operationalization of the project; these include the material resource plan, stakeholder plans as well as the risk management plans (Amadi, 2017).

Project planning has been appraised to be a key factor that significant contributes towards performance of the project (Awuor and Daniel, 2020). Project managers should come up with resource management plans that should cover the relevant resources needed for success of the project. As shared by Ondiek (2020), project planning entails time planning, scope plans, cost planning and risk planning which basically results into the project plans. The foregoing discussion point out the planning is the backbone of the subsequent stages and activities undertaken in a project.

2.9.4 Project Execution and Performance of Community Water Projects

Execution is the process of implementing the established project including the activities established at the initiation and planning phase. During this execution phase, the project plans are put into action and practice. This is the most important step in a project since the deliverables are to be realized (Kjersem, Jünge and Emblemsvåg, 2017).

During this phase, the tasks are coordinated simultaneously to meet the goals established at the planning phase. These tasks include procurement of materials and other supplies, payment of creditors and management of the project team as they carry out the daily duties (Golini, Corti and Landoni, 2017).

All activities should be executed within the established budget to avoid cost overruns which may hurt the project organization and progress of the project. Unnecessary variances should be investigated and reported on time such that relevant courses of action are undertaken to avoid further deterioration (Ike and Gift, 2020).

Cost overruns depend on complexity of the project as well as how the budget is monitored at the implementation phase of the project. This is in line with Mirza and Ehsan (2017) who shared that an increase in complexity of the project will increase the cost overruns of the project. The implication of the cost overrun to a project is manifested in delays during the implementation phase. This is in line with Tulu (2017) who identified the causes of delays during implementation phase of the project to include miss-utilization of the funds that have been allocated to the project, poor scheduling and planning as well as inappropriate feasibility studies.

It is no doubt from the literature reviewed that execution is an important process of any project. The present study will seek to explore how execution can contribute to success of the water projects in Garissa County.

2.9.5 Project Monitoring and Evaluation and Performance of Community Water Projects

When the project goals and objectives are being put into practice, it is important they are monitored to identify deviations. Project monitoring ensures that the project activities are conducted as established in project plans (Kerzner, 2017). The scope specified at the initiation and planning phase as well as the expectations should be realized once the project has been implemented. Monitoring helps to check if these deliverables are being

realized and any deviations so that proper courses of action are undertaken. Monitoring is therefore an important undertaking during the implementation of the project (Nishimura and Okamuro, 2018).

In order to produce quality outputs, project activities should regularly be monitored during the implementation phase. Quality is important because this is specified in the scope of the project and it is one of the deliverables that end users will base on to accept or reject the final product of the project (Reilly, 2019). Quality standards should be maintained as the project is being implemented. Any deviations in quality should be appropriately rectified once the same has been noted. This will keep the project on track to ensure it is successfully implemented. The importance that may arise when the project is kept on track is that timelines will be adhered to since delays will not be evident. This is important because timeliness is one of the minimum requirements that are usually specified in the project scope (Nguyen, Killen Kock and Gemünden, 2018).

2.10 Gaps in Literature Reviewed

In the current research, several studies looking into the relationship between independent factors and project performance have been summarized in Table 2.1. Nonetheless, the studies were conducted in different countries, counties, institutions and sectors and using diverse target populations. Therefore, to generalize results to the current research will be imprudent.

Table 2.1 Summary of Literature Reviewed and the Associated Research Gaps

Variable	Author & Year	Study	Key Finding	Knowledge Gap	Focus of Present Study
Project Planning	Irfan, Khan, Hassan, Hassan, Habib, Khan and Khan (2021)	Planning of the project, competency of the project manager and success of projects in public sector	planning has a positive and significant interaction with success of the project	The study concentrated on projects in the public sector	The present study will look at water projects in private and public sector
Project Planning	Ondiek (2020)	Planning of projects and performance of road construction projects	project planning entails time planning, scope plans, cost planning and risk planning which basically results into the project plans	The study focused on road construction projects	The present study will focus on water projects
Project Initiation	Mutwiri, Were and Odhiambo (2018)	Identification and initiation practices and project success: case of CDF projects in Kenyan context	initiation process of the project positively contributes towards success of the project	The study covered identification and initiation separately	The present study will focus on initiation as one of the independent variables
Project Initiation	Afolabi (2018)	Initiating issues that are	initiation process	The study concentrated	The present study

		linked with ability of system projects to be successful	support engagement of stakeholders and governance of the project	on system projects	will focus on water projects
Project Execution	Mirza and Ehsan (2017)	Complexity of the project and its link with performance of projects related with infrastructure development	an increase in complexity of the project will increase the cost overruns of the project	The study focused on infrastructure development projects	The present study will focus on water projects
Project Execution	Tulu (2017)	Key issues linked with delays in implementation of projects in Ethiopian context	causes of delays during implementation phase of the project to include miss-utilization of the funds that have been allocated to the project	The study was conducted in the context of Ethiopia	The present study will be conducted in Kenya
Project monitoring	Mutua, Juma and Owuor (2020	monitoring practices and their implication on implementation of projects	monitoring plays an important role in a project	The study concentrated on implementation as the dependent variable	Project performance will be the dependent variable in the present study
Project monitoring & evaluation	Muchelule (2018)	monitoring and its role as far as performance of the project is concerned	monitoring has a positive contribution towards performance of the project	The study focused on road construction projects	The present study will focus on water projects

2.11 Summary of the Literature Review.

Various studies have been undertaken on the impact of participatory approaches on water project performance, both worldwide and nationally. This research, on the other hand, have been limited to specific countries and industries, as well as distinct independent and dependent variables. However, the findings from these studies cannot be generalized into the Kenyan perspective and specifically in Garissa County. This is because the studies that have been done in the past focused on other variables and not the current research variables.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers research design, population sampling process and sample size as well as the validity and reliability of research tools were addressed. Other topics covered in this chapter include the procedures used in data gathering, data analysis methodologies, and ethical considerations.

3.2 Research Design

The research design is a blueprint that directs the study's data collecting and analysis (Abutabenjeh and Jaradat, 2018). A descriptive survey utilized as the study design, allowing the researcher to acquire data, summarize, analyse, interpret, and offer it as a foundation for explanation. According to Kothari (2017), surveys attempt data collection from members of a population for knowledge about the population’s status regarding several variables. Research objectives are predetermined in descriptive research, allowing collection of study problem’s enough and relevant data. Researchers are enabled to gather information with cost reduction in data collection because the descriptive research combines qualitative and quantitative procedures in collection of the data.

3.3 Target Population

Study refers to the whole group of study subjects which include organizations, plants, animals, objects, people of whom one can get a sample (Creswell, 2017). The management of the County water sponsored projects in Garissa County will be the study's target audience. These are the analytical units. The County's development committee, contractors, community leaders (Ward Administrators and Chiefs), project supervisors, engineers, and architects, quantity surveyors, and project managers will be among those involved. A total of 248 (Water Department, Annual Report, County Government of Garissa County, 2021) respondents will take part in this research as outlined. Target population is shown in Table 3.1 that was accessed from Water Department, Annual Report, County Government of Garissa County, 2021 records through the County secretary.

Table 3.1: Target Population

Stratum	Target
Project Supervisors	78
Contractors	39
Chiefs	57
Ward Administrators	30
Water Engineers	9
Quantity Surveyors	11
Architects	9
Project Managers	15
Total	**248**

Source: Water Department Garissa County, 2021

3.4 Sample Size and Sampling Procedures

The sample size and sampling processes are covered in depth in this section.

3.4.1 Sample Size

The respondents in each category were chosen via stratified proportionate random sampling. Stratified random sampling helps in achieving the required representation of various sub-groups within the population (Bhardwaj, 2019). According to Mweshi and Sakyi (2020), stratified random sampling is an unbiased sampling approach that divides a heterogeneous population into homogeneous subsets and then selects from each subset to ensure representativeness. The purpose of stratified random sampling was to acquire the appropriate population representation from distinct subgroups. Subjects are chosen in stratified random sampling in such a way that the population's existing sub-groups are represented in the sample. When the target population is below 10,000, the sample size is smaller and can be determined using Yamane's (1973) sample size formula.

$$n = \frac{N}{1 + N(e^2)}$$

Here,

Sample size id noted by n

N represented the target population

As e denotes acceptable sampling error (e = 0.05, when confidence level is 95%)

$= 248/ (1+248) (0.05)^2$

n= 153

The examination preferred proportionate stratification to obtain the sample size for all the identified strata. The overview utilized proportional stratification since the sample size from each stratum was proportional to the population size of the stratum (Fernandes, 2018). Strata sample sizes was calculated using the following formula:

nh = (Nh / N) * n

Where nh is the sample size for stratum h,

Nh is the population size for stratum h,

N is total population size,

and n is total sample size.

Table 3.2 shows the target population's projected numbers and how the sample size was calculated.

Table 3.2: Target Population and Sample Size

Stratum	**Target**	**Proportional Allocation (Nh / N) * n**	**Sample (nh)**
Project Supervisors	78	(78/248) 153	48
Contractors	39	(39/248) 153	24
Chiefs	57	(57/248) 153	35
Ward Administrators	30	(30/248) 153	18
Water Engineers	9	(9/248) 153	6
Quantity surveyors	11	(11/248) 153	7
Architects	9	(9/248) 153	6
Project Managers	15	(15/248) 153	9
Total	**248**		**153**

Source: Author, 2022

3.4.2 Sampling Procedure

Owing to the nature of the study population, simple random sampling was adopted to sample the study population. The sample size for each category was thereafter computed. Simple random sampling was used since it gives each individual equal and independent

chance of participating in the study.

3.5 Data Collection Instrument

The study used questionnaires to collect data. Questionnaire as instruments were vital in gathering primary data where respondents would read and respond to questions; this covered many subjects (Moyo, 2017). This research instrument comprised of structured and semi-structured as they were developed along the study variables of the study to gain more in-depth understanding of the research problem and topic. Additionally, this research instrument is suitable for studies that are constrained by time. Questionnaire coding and discrete analysis of respondents' private details ensured high level of privacy. According to Flick (2018), the use of questionnaires is not as meddling as interviews that involve telephone conversations and interviews or face to face conversations.

3.5.1 Piloting of Research Instruments

Suitability of research tool questionnaire is investigated at this point. Malmqvist, Hellberg, Möllås, Rose and Shevlin (2019) argued that the outcome of the study is determined by the quality of research tools. A pilot study was conducted in Wajir County because its neighbours Garissa County. A total of 15 respondents (being 10% of the study population) was used in the pilot study. Piloting made known if the instrument measured adequately the construct; find out if there were ease on the part of respondents answering questions; to get to know if the instrument were exhaustive enough to bring out the information intended and respondents' level; and find out if data collection allocated time was enough.

3.5.2 Validity of Research Instruments

In research, validity implies ability of research instruments to be tested represents the content measured by the test (Abdalla, Oliveira, Azevedo and Gonzalez (2018). Enough cases for pilot studies are two or three. A sample of five was enough in this research to perform the pre-test whose purpose was to enable the research pinpoint areas of shortcoming that would require alterations and work on unclear items. Checking of content validity was done to ensure all research questions answered (Nghia and Duyen, 2019). Checking validity of the content was the researcher's responsibility as the supervisor came in to help.

Three methods are used to test the validity of research work: criteria validity, content validity, and construct validity. Construct validity involves the far to which research instruments measure what they were designed for (answered (Nghia *et al.*, 2019). Two experts (the supervisor and other lecture in UON) were given the instruments to check validity and measure items on relevance scale. The Content Validity Index (CVI) was used to determine validity, with judges' ratings of 3 or 4 divided by the total number of items. A value of 0.6 or more found using the above formula showed a good rate

3.5.3 Reliability of Research Instruments

It is the uniformity and accuracy in which measuring instruments exposes over similar situations (Mugenda and Mugenda, 2013). The study carried out a pre-test as a way of examining reliability of instruments where data obtained from 5 questionnaires issued were keyed into the SPSS in quest for reliability of tools. Alpha coefficient was used to measure the internal consistence, and score of 0.7 and beyond show a reliable instrument for research study (Adel, Akbar and Ehsan, 2019).

3.6 Data Collection Procedures

Before embarking to collecting data, a permit from UON to authorize the study was issued to the researcher. Also, a permit from NACOSTI was sought in advance. The instruments were administered to respondents in person and respondents given enough time to answer questions for best answering rate. All respondents were allowed to seek interpretation on areas they would experience difficulties.

3.7 Data Analysis Techniques

After data was first accumulated and altered and labelled to dispose of ambiguities, unimportant data, and exclusions. After that, the collected information was imported into excel spreadsheets and analysed with the Statistical Package for Social Science (SPSS) 23.0 program. Utilizing SPSS factual computer program, the information was changed to numerical images reflecting properties of measured factors and assessed utilizing graphic measurements.

The quantitative information was counted and analyzed utilizing recurrence charts and percentages, and the results were shown in recurrence tables. Analysis, presentation and interpretation of quantitative data employed the use of descriptive statistics which involve the use of cross tabulation and frequency distribution tables were employed to

produce values between participation approaches and project performance. To show a relationship between variables, regression model was used because it gives powerful explanation and convincing in revealing the association between two variables.

The following regression model was adopted:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

Where;

Y = Performance of community water projects

X_1= Project initiation

X_2 = Project planning

X_3 = Project execution

X_4 = Project monitoring and evaluation

β_1, β_2 β_3 and β_4 are the coefficients of X_1, X_2 X_3 and X_4 respectively.

β_0 is the Y intercept while ε is the error term.

3.8 Ethical Consideration

Any research work should consider ethical issues since they are essential (Kaewkungwal and Adams, 2019). Proper behaviour of the investigator, making sure there was privacy and confidentiality of received information was the ethical considerations in this research. A letter from the UON was also obtained to introduce the researcher, and the researcher ensured that the respondents participated willingly or voluntarily, and that they provided informed consent. Talks with managers and heads to agree and approve dates for collecting data and receive permission to carry on with research in their jurisdictions was done to eliminate possible conflicts with heads, management boards and associations in the project. The relevant research clearances and authorizations from the county and national ministries was looked for and used during the period of data collection to make clear the purposes of the research and the kind of study to cultivate respondent cooperation while collecting data. Also, information provided by the respondents was confidential through avoiding use of people's specific names as data collection is done.

3.9 Operational Definition of the Variables

Table 3.3 covered operationalization of study variables. It outlined independent as well as dependent variables, measurement scale, data collection tools and analysis of data.

Table 3.3: Operationalization of Variables

Objectives	Variable	Indicators	Research Approach	Measurement Scale	Data Collection Tools	Data Analysis Technique
To determine how project initiation influence project performance.	**Independent** Project Initiation	● Feasibility study ● Project scope ● Project stakeholders	● Quantitative ● Qualitative	● Ordinal ● Nominal	Questionnaire	● Descriptive ● Inferential
To establish the extent to which project planning affect project.	**Independent** Project Planning	● Creating a project plan ● Creating workflow ● Gathering resources	● Quantitative ● Qualitative	● Ordinal ● Nominal	Questionnaire	● Descriptive ● Inferential
To assess the extent to	**Independent**	● Creating	● Quantitative	● Ordinal	Questionnaire	● Descriptive

which a project execution influence performance of community water projects in Garissa County, Kenya.	Project Execution	tasks ● Briefing team members on tasks ● Managing budget	● Qualitative	● Nominal		● Inferential		
To determine the influence of project monitoring & evaluation on the performance of community water projects in Garissa County, Kenya.	**Independent** Project Monitoring & Evaluation	● Monitoring & Evaluation of activities ● Monitoring & Evaluation of quality of work ● Keeping the project on track	● Quantitative ● Qualitative	● Ordinal ● Nominal	Questionnaire	● Descriptive ● Inferential		
The aim of this study is to establish how participatory approaches affect the	**Dependent** Performance of	● Completion rate of the projects	● Quantitative ● Qualitative	● Ordinal ● Nominal	Questionnaire	● Descriptive ● Inferential		

performance of community water projects in Garissa County, Kenya.	community water projects	● Quality of the projects ● Project's goals and objectives ● Beneficiary satisfaction

CHAPTER FOUR

DATA ANALYSIS PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter covers data analysis, presentations and interpretation of the research findings. The sub themes covered are introduction, questionnaire return rate, general characteristics of the respondent, data presentation and the chapter's summary. The analysis of research objectives then followed. Quantitative data was coded using the SPSS analytical tool and analysed using arithmetic mean, standard deviation, frequencies and percentages and presented in figure and tables.

4.2 Questionnaire Return Rate

The study sought to determine the response rate and the findings were as shown in Table 4.1. The quantitative data was obtained using closed-ended questionnaires. The research study's sample size was one hundred and fifty-three, and therefore one hundred and fifty-three questionnaires were administered. It was established that 120 of the 153 application form apportioned to participants were submitted completely by the population sampled. This translated to a 91 percent response recurrence. The reaction rate was more often than not satisfactory, as expressed by Babbie (2020), who expressed that a reaction rate of 50% is suitable for examination and recording, a rate of 60% is good, and a rate of 70% or more is extraordinary. The reaction rate accomplished from this overview was excellent and appropriately representational of the specified demographics in this circumstance.

Table 4.1 Questionnaire Return Rate

Questionnaires	Sample Size	Percentage
Total issued	153	100
Returned	120	78.4
Not returned	33	21.6

4.3 Pilot Testing Results

4.3.1 Reliability Test Results

Reliability denotes the repeatability, dependability and interior consistency of a questionnaire. Cronbach's alpha was utilized to test the reliability of the measures in the questionnaire. As per Hennink, Hutter and Bailey (2020) Cronbach's alpha has the most utility for multi-item scales at the interim level of estimation, it gives a one-of-a-kind, quantitative measure of the inner consistency of a scale. The results of reliability are presented in table 4.2.

Table 4.2: Reliability Coefficient of Variables

Variable	Number of items	Cronbach's Alpha	Recommendation
Project initiation	6	0.875	Accepted
Project planning	6	0.729	Accepted
Project execution	6	0.735	Accepted
Project monitoring and evaluation	6	0.862	Accepted
Performance of community water projects	5	0.715	Accepted

The questionnaire responses were input into statistical package for social sciences (SPSS) and Cronbach’s alpha coefficient generated to assess reliability. The nearer Cronbach's alpha coefficient is to 1, the higher the interior consistency reliability test (Sekaran, 2018). Results in table 4.2 shows that the Cronbach alpha for all the variables in this study was above the threshold of 0.7. From these results the measuring instrument for this study was taken to be reliable. This is in agreement with previous studies by (Sekeran, 2018).

4.3.2 Validity of the Research Instrument

Validity is the accuracy of the data and the extent to which the data collection instruments measure correctly what it purports to measure (Miller, 2019). Mouton (2020) put it in other words that validity is the extent to which empirical measure adequately reflects the real meaning of the concept under consideration. There are a number of ways to establish the validity of the measurement namely: content, construct and criterion related. Validity is concerned with whether the findings are really about what they

appear to be about (Balta, 2018). In the current study, the study considered three types validity: face validity, content validity and construct validity.

4.4 Demographic Information

Demographics are characteristics of a population that provide information on data regarding research participants and are necessary for the determination of whether the individuals in a particular study represent a sample of the target population for generalization purposes. Demographic analysis was done to study the nature in which the population changes over time, and this is important as it allows us to study how changes to the population. The demographics characteristics included, gender, age brackets, level of education and working experience.

4.4.1 Respondents' Sex

Participants were prompted to indicate their sex or gender. This information was vital in finding out gender parity. Investigation wanted to assess how the sample population was distributed in terms of gender. The question sought to find out whether there was genders parity. A frequency distribution of responses is shown in Table 4.3 below which represents the findings obtained from the respondents under the study.

Table 4.3 Respondents' Sex

Sex	Frequency	Percentage
Male	72	60
Female	48	40
Total	**120**	**100**

It was clear from the study that majority of respondents were male represented by 60% and female at 40% hence affirmative action. This indicated a gender diversity of the respondents as the representation margin was slim. A study by McKinsey Global Institute (2017) found out that lack of gender diversity is associated with a greater likelihood of below par performance and when institutions commit themselves to diverse leadership, they are more successful. One the other hand, in organizations where gender diversity is lacking, employees gave lower marks to their institutions for such factors as motivation, capability, accountability, and innovation.

4.4.2 Respondents' Educational qualifications

Education level refers to the academic credentials or degrees an individual has obtained. The respondents were asked to indicate their level of education.

Table 4.4: Respondents' Top Educational Qualifications

Educational Level	Frequency	Percentage
College certificate	24	20
College diploma	36	30
First Degree	48	40
Postgraduate	12	10
Total	**120**	**100**

The results as shown in Table 4.4 above show that most of the respondents had a bachelor's degree represented by 40% followed by diploma at 30%. Certificate level had 20% while masters and PhD had 10%. This implied that respondents were educated, and they provided correct information concerning the topic under study. According to Mesároš, et al (2017), education process is a first step and presumption for better performance and results of every leader. The achievement of higher level of education increases the precondition for its successful results in the management and involvement of institutions. Knowledge and a high level of education is only one prerequisite for achieving successful results.

4.4.3 Work Experience

The researcher asserted that the duration of experience at the institution had helped to understand the subject of study. Results were as under:

Table 4.5: Work Experience

Work Experience	Frequency	Percentage
Less than 3 years	36	30
Between 4 and 6 years	4	40
Between 7 and 10 years	36	30
> 10 years	0	0
Total	**120**	**100**

The study sought out to establish the years that the respondents had worked in the organization, the findings of the study indicated that those who worked in the

organization for less than 3 years were 30%, those between 4 and 6 years was 40% and those who had worked between 7 and 10 years stood at 30%. These results indicated that most of the employees had worked in the organization for between 4 and 6 years and they were therefore fit to participate in this study

4.5 Project Performance in in Garissa County

The study was conducted to determine the extent to which the respondents agreed with statements relating to performance of water projects in Garissa County, Kenya. The participants were requested to indicate with: Likert scale of 1-5 was adopted where 1 stood for strongly disagree and 5 represented strongly agree. This results were tabled as shown in Table 4.6.

Table 4.6: Project Performance in in Garissa County

Statements	1	2	3	4	5	Mean	Std Dev
The initiated water projects have been completed on time	18(15%)	18(15%)	12(10%)	24(20%)	48(40%)	3.67	1.59
The projects project quality water to the community	6(5%)	6(5%)	6(5%)	30(25%)	72(60%)	3.91	1.35
All the goals of the project have been achieved	24(20%)	24(20%)	0(0%)	12(10%)	60(50%)	3.50	1.11
The objectives of this project have been attained	6(5%)	18(15%)	18(15%)	60(50%)	18(15%)	3.28	1.08
The end users are satisfied with the quality of water from this project	18(15%)	6(5%)	0(0%)	84(70%)	12(10%)	3.63	1.33
Composite Mean and Standard Deviation						**3.60**	**1.32**

The findings in Table 4.6 revealed that 48 (40%) of the respondents strongly agreed with the statement that the initiated water projects have been completed on time, 24 (20%)

agreed, 12 (10%) had a neutral attitude, 18 (15%) disagreed with the statement and 18 (15%) strongly disagreed. The line statement had a mean score of 3.67 and standard deviation of 1.59 which is higher than composite mean of 3.60 and standard deviation of 1.32, implying that the line item influenced performance of community water projects in Kenya positively.

Regarding the statement that the projects project quality water to the community, 72 (60%) did strongly agree, 30 (25%) agreed, 6 (5%) remained neutral attitude, 6 (5%) disagreed and 6 (5%) strongly disagreed. The line statement had a mean of 3.91 and standard deviation of 1.35 higher than composite mean of 3.60 and standard deviation of 1.32, implying that the line item positively influenced performance of community water projects in Kenya.

On the statement that all the goals of the project have been achieved, 60 (50%) strongly agreed with the statement, 12 (10%) did agree with the statement, 0 (0%) had a neutral attitude, 24 (20%) disagreed and 24 (20%) strongly disagreed. The line statement had a mean score of 3.50 and standard deviation of 1.11, which is lower than composite mean of 3.60 and standard deviation of 1.32, implying that the line item negatively influenced performance of community water projects in Kenya.

Further, 18 (15%) of the respondents strongly agreed with the statement that the objectives of this project have been attained, half that is, 60 (50%), agreed with the statement, 18 (15%) opted to remain neutral, another 18 (15%) disagreed with the statement and 6 (5%) strongly disagreed. The line statement had a mean score of 3.28 and standard deviation of 1.08, which is lower than composite mean of 3.60 and standard deviation of 1.32, implying that the line item negatively influenced performance of community water projects in Kenya.

Finally, 12 (10%) of the respondents strongly agreed with the statement that the end users are satisfied with the quality of water from this project, 84 (70%) agreed with the same, 0 (0%) were neutral, 6 (5%) did disagree with the statement while 18 (15%) strongly disagreed. The line statement had a mean score of 3.63 and standard deviation of 1.33, which is higher than composite mean of 3.60 and standard deviation of 1.32, implying that the line item positively influenced performance of community water

projects in Kenya. The participants generally rated aspects related to the performance of community water projects as good (Mean=3.60, standard deviation=1.32).

4.6 Project Initiation and Performance of Community Water Projects

The study sought to determine how project initiation influence performance of community water projects in Garissa County, Kenya. The participants were requested to indicate with: Strongly Disagree = 1; Disagree =2; Neutral =3; Agree =4; Strongly Agree =5. The study findings are as shown in Table 4.6

Table 4.7 Project Initiation and Performance of Community Water Projects

Statements	1	2	3	4	5	Mean	Std Dev
The community participates in feasibility studies of this project	0(0%)	12(10%)	42(35%)	12(10%)	12(10%)	4.42	0.70
Feasibility studies of this project are driven by the community	6(5%)	6(5%)	12(10%)	30(25%)	66(55%)	3.20	0.77
The community participates in determination of project scopes	24(20%)	24(20%)	0(0%)	12(10%)	60(50%)	4.17	0.73
The scope of this project was defined by the community	6(5%)	18(15%)	18(15%)	60(50%)	18(15%)	3.73	0.82
The community participates in identification of the project stakeholders	9(7.5%)	15(12.5%)	48(40%)	30(25%)	18(15%)	4.30	0.46
Beneficiaries participates in project stakeholder analysis	18(15%)	2(3.5%)	0(0%)	87(72.5%	12(10%)	3.97	0.61
Composite Mean and Standard Deviation						**3.93**	**0.64**

The results in Table 4.7 indicated, 12(10%) of the respondents strongly agreed that the community participates in feasibility studies of this project, 12 (10%) agreed with the statement, 42 (35%) were neutral regarding the statement, 12 (10%) disagreed and 0 (0%) strongly disagreed. The line statement attained a mean score of 4.42 and standard deviation of 0.70 which was higher that the composite mean of 3.93 and standard deviation of 0.64, implying that the line statement positively influenced performance of community water projects in Kenya.

Regarding the statement that feasibility studies of this project are driven by the community, 66 (55%) of the respondents strongly agreed with the statement, 30 (25%) did agree with the same, 12 (10%) had a neutral attitude towards the statement, 6 (5%) disagreed and another 6 (5%) strongly disagreed. The line statement attained a mean score of 3.20 and standard deviation of 0.70 which was higher that the composite mean of 3.93 and standard deviation of 0.64, implying that the line statement positively influenced performance of community water projects in Kenya.

On the statement that on the statement that the community participates in determination of project scopes, 60 (50%) of the respondents strongly agreed, 12 (10%) agreed with the same, 0 (0%) were neutral, 24 (20%) did disagree with the statement and another 24 (20%) strongly disagreed. The line statement attained a mean score of 3.20 and standard deviation of 0.70 which was higher that the composite mean of 3.93 and standard deviation of 0.64, implying that the line statement positively influenced performance of community water projects in Kenya.

On the other hand, 18(15%) of the respondents strongly agreed with the statement that the scope of this project was defined by the community, half, 60 (50%) did agree with the statement, 18 (15%) remained neutral, another 18 (15%) did disagree with the statement and 6 (5%) strongly disagreed. The line statement attained a mean score of 3.73 and standard deviation of 0.82 which was lower that the composite mean of 3.93 and higher standard deviation of 0.64, implying that the line statement positively influenced performance of community water projects in Kenya.

Further, 18 (15%) strongly agreed that the community participates in identification of the stakeholders of these projects, 30 (25%) agreed, 48 (40%) had a neutral attitude towards the statement, 15 (12.5%) disagreed with the statement and 9 (7.5%) strongly disagreed with the statement. The line statement attained a mean score of 4.30 and standard deviation of 0.46 which was higher that the composite mean of 3.93 and standard deviation of 0.64, implying that the line statement positively influenced performance of community water projects in Kenya.

Finally, the results showed that 12 (10%) of the respondents strongly agreed with the statement that the community participates in analysing the needs of the stakeholders of this project, 87 (72.5% agreed with the statement, 0 (0%) were neutral, 2 (3.5%) did disagree with the statement while 18 (15%) disagreed with the statement. The line statement attained a mean score of 3.97and standard deviation of 0.61 which was higher that the composite mean of 3.93 and standard deviation of 0.64, implying that the line statement positively influenced performance of community water projects in Kenya.

4.7 Project Planning and Performance of Community Water Projects in Garissa County

The study sought to determine how the respondents rated the influence of project planning on performance of community water projects in Garissa County. The results were as shown in Table 4.7. The participants were requested to indicate with: Strongly Disagree = 1; Disagree =2; Neutral =3; Agree =4; Strongly Agree =5.

Table 4.8: Project Planning and Performance of Community Water Projects

Statements	1	2	3	4	5	Mena	Std Dev
The community participated in creation of the plan for this project	0(0%)	36(30%)	48(40%)	24(20%)	12(10%)	3.87	.65
Comprehensive project was created by the community	24(20%)	36(30%)	36(30%)	12(10%)	12(10%)	3.83	0.89
The community participates in creating workflow	0(0%)	0(0%)	24(20%)	48(40%)	48(40%)	3.83	0.72
Allowing the community to create workflows has allowed coordination of project activities	0(0%)	24(20%)	12(10%)	60(50%)	24(20%)	3.80	0.71
Project beneficiaries take part in financial information search	12(10%)	6(5%)	48(40%)	42(35%)	12(10%)	3.78	0.83
The community participates in gathering of material resources needed for this project	24(20%)	24(20%)	18(15%)	36(30%)	18(15%)	3.77	0.79
Composite Mean and Standard Deviation						**3.81**	**0.76**

Table 4.8 revealed that 12 (10%) of the respondents strongly agreed with the statement that the community participated in creation of the plan for this project, 24 (20%) agreed, 48 (40%) remained neutral, 36 (30%) did disagree with the statement and none, 0 (0%), of the respondents strongly disagreed. The line statement had a mean score of 3.87 and

standard deviation of 0.65 which is higher than composite mean of 3.81 and standard deviation of 0.76, implying that the line item influenced performance of community water projects in Kenya positively.

The findings also showed that 12 (10%) of the respondents strongly agreed with the statement that comprehensive project was created by the community, another 12 (10%) indicated that they agreed with the statement, 36 (30%) were neutral on the statement, similar number, 36 (30%), disagreed with the statement and 24 (20%) strongly disagreed. The line statement had a mean score of 3.83 and standard deviation of 0.89 which is higher than composite mean of 3.81 and standard deviation of 0.76, implying that the line item influenced performance of community water projects in Kenya positively.

Regarding the statement that the community participates in creating workflow, 48 (40%) of the respondents strongly agreed, similar number, 48 (40%) did agree with the statement, 24 (20%) of the respondents opted to remain neutral on the statement and none, 0(0%), of the respondents either disagreed or strongly disagreed with the statement. The line statement had a mean score of 3.83 and standard deviation of 0.72 which is higher than composite mean of 3.81 and standard deviation of 0.76, implying that the line item influenced performance of community water projects in Kenya positively.

Half of the respondents, 60 (50%) agreed with the statement that allowing the community to create workflows has allowed coordination of project activities, 24 (20%) of the respondents strongly agreed with the statement, 12 (10%) were neutral on the statement, 24 (20%) disagreed and 0 (0%) strongly disagreed with the statement. The line statement had a mean score of 3.80 and standard deviation of 0.71 which is lower than composite mean of 3.81 and standard deviation of 0.76, implying that the line item negatively influenced performance of community water projects in Kenya.

Nearly half of the respondents, 48 (40%), were neutral on the statement that the community participates in gathering of financial resources for this project, 42 (35%) of the respondents disagreed with the statement, 12 (10%) of the respondents strongly agreed with the statement, another 12 (10%) strongly disagreed with the statement and 6 (5%) disagreed with the statement. The line statement had a mean score of 3.80 and standard deviation of 0.71 which is lower than composite mean of 3.78 and standard

deviation of 0.83, implying that the line item negatively influenced performance of community water projects in Kenya.

On the statement that the community participates in gathering of material resources needed for this project, 36 (30%) of the respondents agreed, 24 (20%) of the respondents disagreed, another 24 (20%) strongly disagreed, 18 (15%) strongly agreed and another 18 (15%) had a neutral attitude. The line statement had a mean score of 3.80 and standard deviation of 0.71 which is lower than composite mean of 3.77 and standard deviation of 0.79, implying that the line item negatively influenced performance of community water projects in Kenya.

4.8 Project Execution and performance of Community Water Projects in Garissa County

The third objective was to establish extent to which Project Execution influence performance of community water projects in Garissa County, Kenya. The findings were tabulated in Table 4.5. The results were as shown in Table 4.5. The participants were requested to indicate with: Strongly Disagree = 1; Disagree =2; Neutral =3; Agree =4; Strongly Agree =5.

Table 4.9: Project Execution and Performance of Community Water Projects

Statements	1	2	3	4	5	Mena	Std Dev
Tasks of the projects are collectively created	6(5%)	18(15%)	18(15%)	60(50%)	18(15%)	4.58	.74
The community plays an active role in creation of project tasks	18(15%)	6(5%)	0(0%)	84(70%)	12(10%)	4.38	.50
Regular meetings are organized to brief team members on project tasks	24(20%)	24(20%)	0(0%)	12(10%)	60(50%)	4.35	.62
The community is briefed on relevant tasks of the project	18(15%)	18(15%)	12(10%)	24(20%)	48(40%)	3.67	.86
The budget for the project activities is collectively managed	6(5%)	6(5%)	6(5%)	30(25%)	72(60%)	3.57	.78
The community actively participates in management of the project budget	9(7.5%)	15(12.5%)	48(40%)	30(25%)	18(15%)	3.55	0.55
Composite Mean and Standard Deviation						**4.02**	**0.68**

Half of the respondents, 60 (50%), as shown in Table 4.8 above revealed that they agreed with the statement that tasks of the projects are collectively created, 18 (15%) strongly agreed with the same, 18 (15%) did disagree with the statement, another 18 (15%)

remained neutral on the statement while 6 (5%) strongly disagreed with the statement. The line statement had a mean score of 4.58 and standard deviation of 0.74 which is higher than composite mean of 4.02 and standard deviation of 0.68, implying that the line item influenced performance of community water projects in Kenya positively.

Majority of the respondents as represented by 84 (70%) agreed with the statement that the community plays an active role in creation of project tasks, 18 (15%) strongly disagreed with the statement, 12 (10%) strongly agreed, 6 (5%) disagreed and 0 (0%) were neutral. The line statement had a mean score of 4.38 and standard deviation of 0.50 which is lower than composite mean of 4.02 and standard deviation of 0.68, implying that the line item negatively influenced performance of community water projects in Kenya.

Half of the respondents, 60 (50%) strongly agreed with the statement that regular meetings are organized to brief team members on project tasks, 24 (20%) disagreed with the statement, another 24 (20%) strongly agreed, 12 (10%) agreed with the statement and 0 (0%) remained neutral. The line statement had a mean score of 4.35 and standard deviation of 0.62 which is lower than composite mean of 4.02 and standard deviation of 0.68, implying that the line item negatively influenced performance of community water projects in Kenya.

Regarding the statement that the community is briefed on relevant tasks of the project, 48 (40%) of the respondents strongly agreed, 24 (20%) of the respondents did agree with the same, 18 (15%) disagreed, another 18 (15%) strongly disagreed and 12 (10%) had a neutral attitude. The line statement had a mean score of 3.67 and standard deviation of 0.86 which is lower than composite mean of 4.02 and standard deviation of 0.68, implying that the line item negatively influenced performance of community water projects in Kenya.

Majority of the respondents, 72 (60%), strongly agreed with the statement that the budget for the project activities is collectively managed, 30 (25%) agreed with the statement, 6 (5%) remained neutral on the statement, 6 (5%) disagreed and another 6 (5%) strongly disagreed with the statement. The line statement had a mean score of 3.57 and standard deviation of 0.78 which is lower than composite mean of 4.02 and standard deviation of

0.68, implying that the line item negatively influenced performance of community water projects in Kenya.

Finally, 48 (40%) of the respondents had a neutral attitude on the statement that the community actively participates in management of the project budget, 30 (25%) agreed with the statement, 18 (15%) strongly agreed, 15 (12.5%) disagreed and 9 (7.5%) strongly agreed with the statement. The line statement had a mean score of 3.55 and standard deviation of 0.55 which is lower than composite mean of 4.02 and standard deviation of 0.68, implying that the line item negatively influenced performance of community water projects in Kenya.

4.9 Project Monitoring & Evaluation and Performance of Community Water Projects in Garissa County

The fourth and final objective of the study was to examine the influence of project monitoring & evaluation on performance of community water projects in Garissa County, Kenya. The participants were requested to indicate with: Strongly Disagree = 1; Disagree =2; Neutral =3; Agree =4; Strongly Agree =5.

Table 4.10 Project Monitoring & Evaluation and Performance of Community Water

Statements	1	2	3	4	5	Mean	Std Dev
Relevant activities of this project are collectively monitored	24(20%)	24(20%)	0(0%)	12(10%)	60(50%)	3.91	0.99
The community participates in monitoring the progress of the project activities	18(15%)	6(5%)	0(0%)	84(70%)	12(10%)	3.89	0.48
There is collective monitoring of the quality of this project	6(5%)	18(15%)	18(15%)	60(50%)	18(15%)	3.87	1.27
The community actively participates in monitoring the quality of this output from this project	9(7.5%)	15(12.5%)	48(40%)	30(25%)	18(15%)	4.04	1.46
The project is monitored to ensure it is on track	18(15%)	18(15%)	12(10%)	24(20%)	48(40%)	3.86	1.09
The community participates in ensuring that this project is on track	6(5%)	6(5%)	6(5%)	30(25%)	72(60%)	3.72	1.11
Composite Mean and Standard Deviation						**3.91**	**1.09**

Table 4.10 indicated that 60 (50%) of the respondents strongly agreed with the statement that relevant activities of this project are collectively monitored, 12 (10%) did agree with the statement, 24 (20%) disagreed with the statement and 24 (20%) strongly agreed. The line statement had a mean score of 3.91 and standard deviation of 0.99 which is lower than composite mean of 3.91 and standard deviation of 1.09, implying that the line item negatively influenced performance of community water projects in Kenya.

Regarding the statement that the community participates in monitoring the progress of the project activities, 84 (70%) of the respondents did agree with it, 18 (15%) strongly disagreed, 12 (10%) strongly agreed, 6 (5%) did disagree with the statement and 0 (0%) were neutral on the statement. The line statement had a mean score of 3.89 and standard deviation of 0.48 which is lower than composite mean of 3.91 and standard deviation of 1.09, implying that the line item negatively influenced performance of community water projects in Kenya.

On the other hand, 60 (50%) of the respondent agreed with statement that there is collective monitoring of the quality of this project, 18 (15%) of the respondents strongly agreed with the statement, 18 (15%) opted to remain neutral on the statement, another 18 (15%) disagreed and 6 (5%) strongly disagreed. The line statement had a mean score of 3.87 and standard deviation of 1.27 which is lower than composite mean of 3.91 and standard deviation of 1.09, implying that the line item negatively influenced performance of community water projects in Kenya.

Further, 48 (40%) were neutral on the statement that the community actively participates in monitoring the quality of this output from this project, though 30 (25%), did agree with the statement, 18 (15%) strongly agreed, 15 (12.5%) disagreed with the statement and 9 (7.5%) strongly disagreed. The line statement had a mean score of 4.04 and standard deviation of 1.46 which is higher than composite mean of 3.91 and standard deviation of 1.09, implying that the line item influenced performance of community water projects in Kenya positively.

The results further showed that 48 (40%) of the respondents strongly agreed with the statement that the project is monitored to ensure it is on track, 24 (20%) agreed with the same, 18 (15%) agreed on the statement, another 18 (15%) strongly agreed while 12 (10%) had a neutral attitude. The line statement had a mean score of 3.86 and standard deviation of 1.09 which is lower than composite mean of 3.91 and standard deviation of 1.09, implying that the line item negatively influenced performance of community water projects in Kenya.

Majority of the respondents as represented by 72 (60%) strongly agreed with the statement that the community participates in ensuring that this project is on track, 30 (25%) of the respondents did agreed with the statement, 6 (5%) opted to remain neutral, 6 (5%) strongly disagreed with the statement and the other 6 (5%) did disagree with the statement. The line statement had a mean score of 3.72 and standard deviation of 1.11 which is lower than composite mean of 3.91 and standard deviation of 1.09, implying that the line item negatively influenced performance of community water projects in Kenya.

4.10 Content Analysis

The responses from interview guide were analyzed using content analysis. The responses were received from clerk of works, engineers, project managers, quantity surveyors, land surveyors and architects. They respondents were confident that their qualifications matched the role played in the water Projects assigned.

The notable major factors affecting project success in constituencies from these responses were challenges to do with financial cash flow from the government, the lack of enough stakeholder participation due to few attendances by the members of public once called to contribute and give suggestions on priority project that were beneficial to them and the delays in project completion.

Majority of these respondents indicated that they were involved during the project design level within their constituency. They noted that stakeholders by a large extend influenced the success of projects. The stakeholders can influence the project quality, time and value for money.

The respondents indicated that project leaders and stakeholder's involvement allocated project resources according to need and list of preference. This was continuously

reviewed and altered depending on the cash flows, arising urgent needs and emergencies facing the constituency members. Allocation was purely based on the prioritization of needs and solutions.

The most highlighted competencies lacking with respect to the success of the projects were project management skills. The personnel involved in the project were limited in terms of good understanding of the entire project cycle. The limited appreciation of the need of having good synergies and building teams with all the project staff and the lack of good communication skills that hindered information flow.

The respondents recommended a holistic review when composing project team members. The team should be diverse to enable then complement each other. They should be committed and completely understands the need for project initiation and its delivery.

Stakeholders contribute in several ways to project management, they identify the need, the initial required steps and foresee the project delivery and acts as the final consumers of these projects. The major obstacles encountered as a project manager in the constituency were clash in the conflict of interest by the stakeholders followed by cash flow challenges.

To ensure project success in future projects, more attention should be put in all the processes cycle way before execution. The cycle should be clearly understood and well communicated with all the deliverables. Planning phases of the project took more of the time comparative to other phases. Planning required a lot of studies and comparisons to ensure project success. The project cycle involved the initiation, planning, control, execution and finally closure for most of the respondents which was in line with the study order.

The key informants indicated that their involvement enabled them to identify their needs, enabled project managers to secure additional funding from the donors, allowed clear communications during periodic updates. The key informants indicated that it enabled projects managers to select the best most sustainable project, pave way for designing of better and effective procedures of management and enabled the project managers to avoid risk sinking of essential resources into non-feasible activities.

Through communicate participation in project planning. The respondents indicated that participation in project planning leads to generation of new ideas since the community members and other stakeholders are able to patriate in decision making, prevent unforeseen technicalities which they may arise during project development, it enables both the project managers and other stakeholders to have a shared vision on the project accomplishment. In addition, key informants indicated that it enhances clarification of responsibilities among stakeholders and it supplements verbal communication which can be used by other stakeholders' as well as project managers to improve on performance of community water projects.

The respondents indicated that stakeholder involvement in project implementation enabled project managers of effectively coordinate as well as direct project resources which ultimately lead to achievement of anticipated outcomes. They also indicated that it effectively outlines the task which the project managers should accomplish, ensured accountability of all stakeholders as it enhance budgeting of project resources. The key informants indicated that it enhances project ownership thus improve the sustainability of project since each stakeholder or community members feel that they are beneficiary of the project. In addition, it leads to designing of actionable goals and lead to underground investigation during project implementation.

The community members and project managers reported that stakeholders' involvement in project monitoring and evaluation indicated that shareholders to effectively monitor project success, influence design and execution of sustainable projects. In addition, result to feedback provision so as to assess whether the produce the anticipated outcomes. The key informants indicated that track progress of the project, link project activities to requisite resources and enhanced reporting of project success to project managers.

> "…*The projects in Garissa County require that and community participates community participates in decision making regarding water projects. This is ensured through awareness on the intention and plan to initiate projects'*"" …….(Project Officer)
>
> *"……I consider personal engagement and community involvement as significant features of effective community participation*" …….(Project Officer)

When asked the role community play during the monitoring stage of community water projects, one of the respondents indicated that"

> *"…For effective M&E to take place proper M&E structural work plans need to be in place at the organization level and this has been hindered by a lack of financial support and personnel training on M&E practices……"* (Project Officer)

The project also sought to find out if project stakeholders were involved before the implementation of M&E related project activities and this is what some of the respondents noted;

> *"…. we are not given an opportunity to give our opinions and to contribute towards the implementation of the project activities hence we don't feel a sense of ownership to the project or duty to ensure its success…"* (Water User, Garissa).

> *"…the water project that supplies us water developed a water committee which has representatives from the organization, the community and sub-county personnel who deliberate and supervise water project activities."* (Project Officer, water project).

This was a positive response that shows that a few of the water projects are doing their part to ensure success and sustainability but from the responses of the project stakeholders more needs to be done to reach a level where water is available to all stakeholders and at all times.

One of the project officer cited the following concerning challenges faced in engaging the community to participate in the various stages of project development

> *"…….The challenges we face when engaging the community to participate in the various stages of project development include low educational level of the community members who don't know the role and right in project participation. There is also publication ignorance whereby most of the community members say they don't have time to take part in community barazas that are meant to engage the project beneficiaries and other stakeholders. There is also issue of resource constraints where funds to do public barazas are limited thus we involve representatives of the community instead of the entire community who are the beneficiaries……."* (Project Officer)

On overcoming the above-mentioned challenges, the following was indicated

> *"We seek partnership with the government through local administration (chiefs) to explain to the community on the importance of their participation in project management through invitation/conceptualization. We also liase with the county*

government and national government in funding the projects that are meant to tackle challenges of access to water resource……..……" (Project Officer)

When asked on what can be done to ensure the project remains successful, the following was cited:

"……..According to my past experience in project lifecycle, there should be frequent review on project progress so as to prevent resource wastage. This can ensure that there is no frequent changing of contractors thus lowering project costs. A contract with past experience and the already existing projects should be awarded the tender to work on community projects to guarantee success of the projects. ……." (Project Officer)

Regarding the aspect on participatory approaches by community participation, the respondents indicated that:

"…. From my experience of participatory approaches, I have learned that community participation in general is essential because it will ensure quality of a project, project success and sustainability……." (Project Officer)

4.11 Inferential Analysis - Pearson Correlation Co-Efficient

The data on the independent variables, that is, project initiation, project planning, project execution and project monitoring and evaluation on the dependent variable, performance of community water projects were analysed using Pearson Correlation Co-efficient and averages for each factor calculated into single variables. The test was performed at a confidence interval of 95% and a 2-tailed confidence level of 5% significance. Results are as indicated in the correlation matrix between the factors and Performance of Community Water Projects in Garissa County.

Table 4.11 Correlation Matrix

		Performance of community water projects in Garissa County	Project initiation	Project planning	Project execution	Project monitoring and evaluation
Performance of community water projects in Garissa County	Pearson Correlation	1				
	Sig (2 tailed)	0.000				
Project initiation	Pearson Correlation	0.633**	1			
	Sig (2 tailed)	0.000	0.000			
Project planning	Pearson Correlation	0.562*	0.762**	1		
	Sig (2 tailed)	0.003	0.000			
Project execution	Pearson Correlation	0656**	0.485*	0.490*	1	
	Sig (2 tailed)	0.000	0.000	0.000		
Project monitoring and evaluation	Pearson Correlation	0.775**	0.097	0.151	0.09	1
	Sig (2 tailed)	0.011	0.512	0.274	0.470	0.260

Inferential statistics through correlation of variables of between project initiation and performance of community water projects had a positive correlation coefficient of 0.633 with a p-value of 0.00 meaning that the outcome was significant at α=5%, and if initiation of a project was adequate, it would improve performance of community water projects. Project planning and performance of community water projects achieved a positive correlation of 0.562 and a p-value of 0.003, an indication of a significant at 5%. Execution of project had a positive correlation of 0.656 and a p-value of 0.00. Monitoring and evaluation of the project and performance of community water projects had a positive correlation of 0.775 and a p-value of 0.011 meaning that project monitoring and evaluation had the greatest influence on performance of community water projects followed by project execution and then project initiation while project planning has the least influence on performance of community water projects in Garissa County.

4.11 Regression Analysis

The study used multivariate regression analysis in establishing the relationship between the dependent and independent variables. The dependent variable of the study was project performance while the independent variables were participation in project initiation, participation in project planning, participation in project execution and participation in project monitoring and evaluation.

Table 4.12: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.390[a]	.152	.055	.26850

a. Predictors: (Constant), project initiation, project planning, project execution, project monitoring and evaluation.

b. Dependent Variable: Project Performance

The regression analysis done using data from respondents shows that there is a positive relationship between independent variables (participation in project initiation, project planning, project execution, project monitoring and evaluation) and dependent variable (project performance) as indicated by the value of R (0.390). The results also show a weak correlation between the dependent and the independent variables as shown by the values of R^2 (0.152). The R^2 value (15.20%) indicates how much of the dependent variable, project external audit plan is explained by the independent variables, participation in project initiation, project planning, project execution, project monitoring and evaluation. In this case, the variation that has been explained is 15.20%. The remaining 84.80% are explainable by other factors not examined in this study.

Table 4.13: Coefficients of independent variables Coefficients of the Model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.917	.702		1.305	.200
	Project initiation	-.010	.093	-.020	-.111	.912
	Project planning	-.132	.116	-.206	-1.144	.261
	Project execution	.090	.099	.177	.907	.370
	Project monitoring and evaluation	.153	.096	.251	1.587	.122

a. Dependent Variable: Project Performance

Multiple regression analysis was conducted as to determine the relationship between participatory approaches and project performance. Project performance is the dependent variable and the independent variables being participation in project initiation, participation in project planning, participation in project execution and participation in project monitoring and evaluation. As per the SPSS generated Table 4.13 the equation ($\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$) becomes:

Where;

Y = Performance of community water projects

X_1= Project initiation

X_2 = Project planning

X_3 = Project execution

X_4 = Project monitoring and evaluation

β_1, β_2 β_3 and β_4 are the coefficients of X_1, X_2 X_3 and X_4 respectively.

β_0 is the Y intercept while ε is the error term.

$Y= 0.917-0.010X_1-0.132X_2 +0.090X_3+0.153X_4 \varepsilon$

From the regression model, project initiation has a Beta = -0.010 while project planning has a Beta =-0.132, project execution Beta=0.090, while project monitoring and evaluation has a Beta =0.153. These results show that when factors (project initiation, project planning, project execution and project monitoring and evaluation) are held

constant project performance would be achieved at unit of 0.917. It also shows that a unit increase in participation in project initiation would decrease project performance by a value of 1.00%, increasing participation in project planning would decrease project performance by a value of 13.2%, while a unit increase in participation in project execution would cause an increase in project performance by a value of 9.00% and an increase in participation in project monitoring and evaluation will increase project performance by a value of 15.3%.

The study further shows that, there is no significant relationship between project performance and the independent variables (participation in project initiation, participation in project planning, participation in project execution and participation in project monitoring and evaluation) studied as shown: participation in project initiation $p = 0.912$, participation in project planning $p = 0.261$, participation in project execution $p = 0.370$ and participation in project monitoring and evaluation $p = 0.122$.

At 5% level of significance and 95% level of confidence, participation in project initiation showed a 0.912 level of significance; participation in project planning showed a 0.261 level of significance, participation in project execution a 0.370 level of significance and participation in project monitoring and evaluation showed a 0.122 level of significance. This shows that all the variables were not significant ($p>0.05$).

CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter contains the following: summary of findings, discussions, conclusions and recommendations obtained from the analysis of the study data, driven by research objectives. It also outlines the suggestions for further research, in line with the study's outcomes.

5.2 Summary of Findings

The following is the summary of findings.

5.2.1 Project Performance in in Garissa County

The findings revealed that 40% of the respondents strongly agreed with the statement that the initiated water projects have been completed on time and 24% agreed. Regarding the statement that the projects project quality water to the community, 60% strongly agreed and (25%) were in agreement. On the statement that project goals have been achieved, 50% of the participants indicated that they strongly agreed, while 20% disagreed and 20% strongly disagreed. Further, half of the respondents agreed with the statement that with the statement that the objectives of this project have been attained and 15% opted to remain neutral. Finally, majority of the respondents, (70%) agreed with the statement that the end users are satisfied with the quality of water from this project while 15% strongly disagreed.

5.2.2 Project Initiation and Performance of Community Water Projects

The outcome showed, 35% of the participants remained undecided regarding the statement which stated community participates in feasibility studies of this project and 10% were in agreement with the statement. Regarding the statement that feasibility studies of this project are driven by the community, 55%) of the respondents strongly agreed with the statement as 35% did agree with the same. On the statement that on the statement that the community participates in determination of project scopes, 50% of the respondents strongly agreed and 10% did agree. Further, 50% of the participants strongly agreed on 'project scope was defined by the community and 15% remained neutral. Further, 48 (40%) had a neutral attitude towards the statement that beneficiaries take part

in project stakeholders' identification while 25% agreed. Finally, study outcome indicated that 72.5% of the participants did agree on a statement that read project beneficiaries are involved in analysing the needs of the stakeholders of this project while 15% disagreed with the statement.

5.2.3 Project Planning and Performance of Community Water Projects

The findings also showed that 30% of the respondents disagreed with the statement that comprehensive project was created by the community and another 30% were neutral on the statement. Regarding the statement that the community participates in creating workflow, 40% of the respondents strongly agreed, similar number, 40% did agree with the statement. Half of the respondents agreed with the statement that allowing the community to create workflows has allowed coordination of project activities as 20% of the respondents strongly agreed with the statement. Nearly half of the respondents, 40%, were neutral on the statement that the beneficiaries are involved in searching in gathering of project financial information and 35% disagreed with the statement. On the statement that the community participates in gathering of material resources needed for this project, 30% of the respondents agreed while 20% of the respondents disagreed.

5.2.4 Project Execution and performance of Community Water Projects in Garissa County

Half of the respondents revealed that they agreed with the statement that tasks of the projects are collectively created as 15% strongly agreed with the same. A bigger number of participants (70%) approved the statement that project beneficiaries an active role in creation of project tasks and 15% strongly disagreed with the statement. Half of the respondents strongly agreed with the statement that regular meetings are organized to brief team members on project tasks and 20%. Regarding the statement that the community is briefed on relevant tasks of the project, 40% of the respondents strongly agreed while 20% of the respondents did agree with the same. Majority of the respondents, 60%, strongly agreed with the statement that the budget for the project activities is collectively managed as 25% agreed with the statement.

Finally, 40% of the respondents had a neutral attitude on the statement that the community actively participates in management of the project budget and 25% agreed with the statement.

5.2.5 Project Monitoring & Evaluation and Performance of Community Water Projects in Garissa County

The results indicated that half of the respondents strongly agreed with the statement that relevant activities of this project are collectively monitored and 20% strongly agreed. On beneficiaries' involvement as far as monitoring of project progress deeds, 70% of the respondents did agree with it, as 15% strongly disagreed. On the other hand, half of the respondent agreed with statement that there is collective monitoring of the quality of this project as 15% participants did strongly agree. Further, 40% remained undecided on the statement that the community actively participates in monitoring the quality of this output from this project, though 25% did agree with the statement. The results further showed that 40% of the respondents strongly agreed with the statement that the project is monitored to ensure it is on track and 20% agreed with the same. A good number of participants in this study (60%) indicated that they strongly agreed on 'beneficiaries participate in ensuring that this project is on track and 25% of the respondents did agreed with the statement.

5.3 Discussion of Findings

This section focuses on the discussion of the study findings based on the objectives of study: project initiation, project planning, project execution and project monitoring and evaluation on performance of community water projects in Kenya, the case of Garissa County World Bank funded programme water

5.3.1 Project Performance in in Garissa County

The findings revealed that 40% sampled population strongly agreed with the statement that the initiated water projects have been completed on time and 20% agreed. A project's overall performance is determined by its budget, deliverables, and budget restrictions. Efforts to assess project performance require precise definition and measurement in order to effectively comprehend and monitor project operations, (Al-Nabae and Sammani (2021). Prior experience has shown that project performance is defined by the triple constraints of quality, time, and cost.

The primary determinants that impact performance in community water projects in Marsabit County were analyzed by Hagarsu, Wanyonyi, and Kikwatha (2020). The research identified some of the primary determinants as management planning, finance

availability, community participation, and project governance policies. Engaging the project stakeholders in the execution process enhanced success of community water projects. Community project performance was most influenced by management planning, followed by financing, governing policies, and finally community engagement. Project success is measured and evaluated using a range of success indicators that are linked to many variables such as time, customer support and modifications, client efficiency, cost, health and safety, and quality," (Hussein, 2020). The benchmark for measuring project success is established during the execution phase of a project to provide all stakeholders with direction to the project requirements and to ensure that they all work in the same direction.

5.3.2 Project Initiation and Performance of Community Water Projects

Study outcome showed that 35% of the respondents remained undecided when it come to a statement that read project beneficiaries take part in feasibility studies of this project and 10% agreed with the statement. Regarding the statement that feasibility studies of this project are driven by the community, 55% of the participants indicated that they strongly agreed as 35% did agree with the same. The findings of this objective were consistent with Mwangi and Ravallion (2018) findings who reported that, a community development project starts with the identification and initiation of a need or the realization that there is a need. Project initiation is the creation of sound guideline for management of a project by identifying key elements and determining the steps to be followed to achieve objectives

During the initiation stage, research is done on whether the project is feasible and if it should be undertaken (Turner, & Zolin, 2019). In project management the feasibility study is done after the business case has been presented. A feasibility study is used to determine the viability of a project and includes ensuring that the project is economically justifiable, the identification of required resources, if the project is worth the investment and if it enables the organization to earn back. A well-designed feasibility study should offer historic background of the business including: product description, operational details, marketing research, policies, financial data, resource requirements and tax obligations. Feasibility studies offer benefits such as identification of new opportunities, valuable information for decision making, improves project team focus, narrows business alternatives and identifies reasons to proceed or stop the project.

5.3.3 Project Planning and Performance of Community Water Projects

The findings also showed that 30% of the respondents disagreed with the statement that comprehensive project was created by the community and another 30% were neutral on the statement. Regarding the statement that the community participates in creating workflow, 40% of the respondents strongly agreed, similar number, 40% did agree with the statement. Half of the respondents agreed with the statement that allowing the community to create workflows has allowed coordination of project activities.

The findings of this objective were consistent with that of Ehler (2017) who proposed that project planners ought to incorporate a well-defined monitoring and evaluation strategy. This plan should include activities carried out to get feedback, involve people to carry out these activities, design the frequency of carrying out the activities, budget expectations for activities and specific insights expected to be achieved from the monitoring and evaluation feedback. Osman and Kimutai (2019) observe that monitoring enhances project management decision making during the implementation thereby increasing the chances of good project performance.

Kerzner (2019) asserted that the planning process must be systematic, flexible, disciplined, and capable of accommodating input from diverse functions. The planning process is most effective when it occurs throughout the life of the project. Consequently, time spent planning for the project is time well spent. All projects must have a plan with enough detail so that everyone involved knows where the project is going. A good plan provides the following benefits: clearly documented project milestones and deliverables, a valid and realistic timescale, accurate cost estimates and detailed resource requirements. Every phase of the project processes requires substantial planning.

The planning process is most effective when it iterated and occurs throughout the life of the project. Earlier studies report that formal planning has a direct impact on project success (Young, 2016). He considered that a rigorously prepared plan is a foundation for project success. A clear and thoroughly defined project plan reduces risks, failure and the cost of the project

5.3.4 Project Execution and performance of Community Water Projects in Garissa County

Half of the respondents revealed that they agreed with the statement that tasks of the projects are collectively created. Majority of the respondents agreed with the statement that the community plays an active role in creation of project tasks. Half of the respondents strongly agreed with the statement that regular meetings are organized to brief team members on project tasks. The findings of this objective were consistent with that of Oberlender (2020) that execution phase involves implementing the plans created during the project planning phase of the project. Tasks completed during the execution phase include develop team, assign resources, execute project management plans, manage procurement, execute the project, manage status meetings set up tracking systems, execute task assignments, update project schedule and modify project plans as needed. The project manager should monitor and control the activities, resources and expenditure required to build each deliverable to ensure that the customer's requirements are fully met.

5.2.5 Project Monitoring and Evaluation and Performance of Community Water Projects in Garissa County

The results indicated that half of the respondents strongly agreed with the statement that relevant activities of this project are collectively monitored. Regarding the statement that the community participates in monitoring the progress of the project activities, 70% of the respondents did agree with it

The findings agreed with the study in Kajiado County, Kenya, Ndegwa (2020) investigated the impact of the M&E process on the implementation of wash projects. The research problem was solved using a descriptive research design. There were 60 participants in the study. The findings demonstrated that the monitoring procedure had an impact on project implementation. The research outcome of this objective were consistent with study a review by Mbaabu (2020) conducted in Meru County, descriptive research by investigated the link between project monitoring and evaluating criteria and the long-term viability projects undertake in the communuity. The findings revealed that the monitoring was insufficient because most beneficiaries were not kept informed about the project's progress, and the analysis was not finished on time. As a result, it was

suggested that monitoring be done on a regular basis to avoid any future concerns that could influence the project's performance

5.4 Conclusions

From the results, the study concludes that there was significant positive relationship between project initiation and performance of community water projects in Garissa County. The study concluded that community water projects in Garissa County to a significant extent embraced community participation in assessing, analysing and selecting the viable, tenable and beneficial community water projects to most of the citizens in the region.

There is sufficient evidence from the study to show that each of the project cycle phase activities contribute in different percentages to performance of community water projects in Garissa County. Stakeholders of community water projects have established appropriate project planning by focusing on: the establishment of a proper and approved plan; the inclusion of end-user adoption within the project scope management procedures that ensure project delivery of the business results in accordance of customer requirements; achieving effective control of operational costs; the use of foreign partnerships to get financing, grants, technical assistance, and investment promotion; the adoption of effective quality management practices such as quality control,

From the results, the study concludes that there is significant positive relationship between project execution activities and performance of community water projects in Garissa County. Stakeholders of community water projects have established appropriate measures for project execution including: the hiring of supervision consultants to oversee the execution of complex energy projects; maintaining acceptable levels of collaboration among multidisciplinary teams; utilizing project managers as a means of coordinating the efforts of contractors through delegation and communication; incorporating a monitoring plan and tools for facilitating monitoring, scheduling, budgeting and scope management; and exploiting an integrated approach for providing opportunities for optimization. However, the stakeholders were only to moderate success in management of complex projects which were hampered by poor communication systems, inadequate specifications in the contract, delayed payments to contractors, and increase in scope.

On monitoring tools, the study concluded that monitoring tools helps in knowing if the intended results are being achieved as planned, what actions are needed to achieve the intended results during the project implementation, and whether these initiatives are creating a positive impact towards the project. It brings out the problems which occur, or which might occur during the implementation of the project and which demands solutions for smoother progress in the project.

5.5 Recommendations for Policy Action

Recommendations were such that these water projects to employ elements of project planning so as to sustain the operations and functionality of the project. The water projects should employ stakeholder participation since it had the largest influence on sustaining the water projects. All project stakeholders must be included in making major and minor decisions, contribute in covering the costs, and take part in maintaining and doing minor repairs.

The study recommends that there should be incorporation of planning at all levels of project cycle and review the same in order to ensure that the project is on the right part and inclusive planning which should involve all the stakeholders. The management, project officers and the field officers should be able to come up with a plan for each project level, the implementation level, the monitoring and evaluation level and the level of project closure right from the initiation. In this way, time which is a factor in project performance will not be wasted especially during transactions from one level to the next. The management should also ensure that all relevant stakeholders are involved in the planning process in order to bring all views into consideration including the project beneficiaries. Preliminaries to this inclusion should be done at the project initiation level. The beneficiaries and all other relevant stakeholders should be furnished with the project details in order to effectively contribute to the project plan.

The study recommends that the county government and the general management of the water projects should ensure maximum community participation and support for this increases project efficiency. Community. The local community should be mobilized so as to build an interest in participating during project activities. Mobilization should start at the initial stages of project conceptualization. Frequent facilitation, support and

monitoring from relevant institutions at different levels of project development are important and highly recommended so as to guarantee project sustainability.

The theoretical and empirical findings show the interplay between participatory approach and performance of water projects. The participatory theory makes demand for participation of all stakeholders in projects and the stakeholder theory plays a role in policy formation and execution. The study then recommends that since these theories helped to conceptualize the study variables, managers should consider application of theories when handling various project and program demands.

5.5.1 Suggestions for Further Studies

It is vital to do inquiry on the relationship between project life cycle and quality of projects in Kenya.

5.6 Contribution to the Body of Knowledge

Given the high rate of projects that fail to reach their objectives or creating the wanted effects, research that approach the topic of successful projects bring positive inputs both to literature and to practice. This study adds knowledge to students pursuing professional courses like civil engineering, architecture, and quantity surveying and construction management leading to the construction industry both in the academic line and also in the industry by offering solutions to the impediments in the application of project management in the industry.

This study contributes to the existing body of knowledge by offering an insight on influence of participatory approach on project performance. The study has established that participation in the various phases of the project cycle influences project performance and that it has a role in ensuring accountability, empowering stakeholders, increasing project acceptability, creating a sense of ownership and increasing chances of project sustainability.

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Ahmed Gedi Dahir
P.O Box-636
Nairobi, Kenya
+254726782866

Dear Sir/Madam

Re: Permission to Participate in the Study

I'm University of Nairobi postgraduate student Pursuing a Master of Arts in Project Planning and Management. As part of the requirements for the award of this degree I will be conducting a study on ***"participatory approaches and performance of community water projects: a case of World Bank Funded Programme Water Projects in Garissa County, Kenya."***

It is my pleasure to inform you that you have been selected to be part of the study and am therefore requesting for your authority to collect the required information from you. The data will be collected with your consent and will be treated with necessary confidentiality. Names of any form of identity will not be included in the research instruments and the information offered will be used solely for this study.

Thank you in advance.

Yours faithfully

Ahmed Gedi Dahir

APPENDIX II: QUESTIONNAIRE FOR RESPONDENTS

PART A: BIODATA

1. Sex

Male [ ]

Female [ ]

2. What is your educational qualification?

Did not go to school [ ]

College Certificate [ ]

College diploma [ ]

First Degree [ ]

Postgraduate [ ]

Other……..

3. Working experience

Less than 3 years [ ]

Between 4 and 6 years [ ]

Between 7 and 10 years [ ]

>10 years [ ]

PART B: Information on Project Performance

4. To what extent do you agree with the following statements? Please tick (√) in the space corresponding to the correct answer

1= Strongly Disagree (SD) 2=Disagree (D) 3= Neutral (N) 4= Agree (A) 5= Strongly Agree (SA)

	1	**2**	**3**	**4**	**5**
The initiated water projects have been completed on time					
The projects project quality water to the community					
All the goals of the project have been achieved					
The objectives of this project have been attained					
The end users are satisfied with the quality of water from this project					

SECTION C: Project Initiation

5. Indicate the extent to which you agree with the following statements? Please tick (√) in the space corresponding to the correct answer

1= Strongly Disagree (SD) 2=Disagree (D) 3= Neutral (N) 4= Agree (A) 5= Strongly Agree (SA)

	1	2	3	4	5
The community participates in feasibility studies of this project					
Feasibility studies of this project are driven by the community					
The community participates in determination of project scopes					
The scope of this project was defined by the community					
Project beneficiaries take part in project management sake holder's identification					
Project beneficiaries are involved in analysis of the stakeholders' project needs					

SECTION D: Project Planning

6. Indicate the extent to which you agree with the following statements? Please tick (√) in the space corresponding to the correct answer; 1= Strongly Disagree (SD) 2=Disagree (D) 3= Neutral (N) 4= Agree (A) 5= Strongly Agree (SA)

	1	2	3	4	5
The community participated in creation of the plan for this project					
Comprehensive project was created by the community					
The community participates in creating workflow					
Allowing the community to create workflows has allowed coordination of project activities					
Project beneficiaries are involved financial management and resources planning					
Project beneficiaries do gather material related resources necessary for the project					

SECTION E: Project Execution

7. Indicate the extent to which you agree with the following statements? Please tick (√) in the space corresponding to the correct answer

1= Strongly Disagree (SD) 2=Disagree (D) 3= Neutral (N) 4= Agree (A) 5= Strongly Agree (SA)

	1	2	3	4	5
Tasks of the projects are collectively created					
The community plays an active role in creation of project tasks					
Regular meetings are organized to brief team members on project tasks					
The community is briefed on relevant tasks of the project					
The budget for the project activities is collectively managed					
The community actively participates in management of the project budget					

SECTION F: Project Monitoring & Evaluation

8. Indicate the extent to which you agree with the following statements? Please tick (√) in the space corresponding to the correct answer

1= Strongly Disagree (SD) 2=Disagree (D) 3= Neutral (N) 4= Agree (A) 5= Strongly Agree (SA)

	1	2	3	4	5
Relevant activities of this project are collectively monitored					
The community participates in monitoring the progress of the project activities					
There is collective monitoring of the quality of this project					
The community actively participates in monitoring the quality of this output from this project					
The project is monitored to ensure it is on track					
The community participates in ensuring that this project is on track					

Thank you

APPENDIX III: INTERVIEW SCHEDULE FOR THE PROJECT MANAGER

1(a) Can you relate the level of achievement of the project objectives to community participation?

Yes [ ] No [ ]

(b) If yes, please tick (√) the number that best describes the level of community participation in the following project activities KEY: 5=Excellent, 4= Good, 3=Fair, 2=Poor, 1=Very poor

Activity	**1**	**2**	**3**	**4**	**5**
Initiation of community water project					
Planning for community water project					
Execution of community water project					
Community water project Monitoring and evaluation					

2. What arrangements does the project use to ensure community participates in decision making regarding water projects?

3. What do you consider as significant features of effective community participation?

4. What is the role of the community initiation stage at the community water projects?

5 (a) What role does the community play during the planning stage of community water projects?

(b) Are there any problems associated with community participatory planning? If any, mention them.

6. What role does the community play during the implementation stage of community water projects?

7. What role does the community play during the monitoring stage of community water projects?

8 (a) What challenges did you face when engaging the community to participate in the various stages of project development?

(b) How did you overcome the above-mentioned challenges?

9. According to your past experience in project lifecycle, what can be done to ensure the project remains successful?

10. From your experience of participatory approaches what have you learned as regards community participation in general?

APPENDIX IV: WATER PROJECTS IN GARISSA

1. Bore holes water supplies
2. Garissa Water & Sewerage Project Phase II
3. Masalani Water Supply
4. Saka water supply
5. Garissa Sewerage Project
6. Kenya Development Response to Displacement Impacts Project (KDRDIP) in Garissa
7. Masalani Water Project in Garissa
8. UMR water wells projects
9. The Kasha Water Supply project

Source: Garissa County

APPENDIX V: UNIVERSITY DATA COLLECTION LETTER

UNIVERSITY OF NAIROBI
FACULTY OF BUSINESS AND MANAGEMENT SCIENCES
OFFICE OF THE DEAN

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Nairobi, Kenya
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Our Ref: **L50/29639/2019** June 29, 2022

National Commission for Science, Technology and Innovation
NACOSTI Headquarters
Upper Kabete, Off Waiyaki Way
P. O. Box 30623- 00100
NAIROBI

RE: INTRODUCTION LETTER: AHMED GEDI DAHIR

The above named is a registered Master of Project Planning candidate at the University of Nairobi, Faculty of Business and Management Sciences. He is conducting research on ***"Participatory Approaches and Performance of Community Water Projects in Kenya: A Case of Carissa County World Bank Funded Programme Water Projects."***

The purpose of this letter is to kindly request you to assist and facilitate the student with necessary data which forms an integral part of the Project.

The information and data required is needed for academic purposes only and will be treated in **Strict-Confidence**.

Your co-operation will be highly appreciated.

Dean's Office
University of Nairobi
Faculty of Business
and Management Science

Jane Muturi
For: Dean,
Faculty of Business & Management Sciences

APPENDIX VI: NACOSTI RESEARCH PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **675058**

Date of Issue: **18/July/2022**

RESEARCH LICENSE

This is to Certify that Mr.. Ahmed Gedi Dahir of University of Nairobi, has been licensed to conduct research in Garissa on the topic: PARTICIPATORY APPROACHES AND PERFORMANCE OF COMMUNITY WATER PROJECTS IN KENYA: A CASE OF GARISSA COUNTY WORLD BANK FUNDED PROGRAMME WATER PROJECTS for the period ending : 18/July/2023.

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