

**INFLUENCE OF PROJECT MANAGEMENT TOOLS ON COMPLETION OF
DONOR FUNDED WATER PROJECTS IN BARINGO COUNTY**

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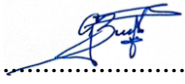


**A Research Project Submitted in Partial Fulfilment of the Requirements for the
Award of a Master Degree in Project Management and Planning of
Mount Kenya University**

JUNE, 2025

DECLARATION AND APPROVAL

This project is my original work and has not been presented for a degree in any other University or for any other award.

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I confirm that the work reported in this project was carried out by the candidate under my supervision as the university Supervisor

Signature . 

Dat...02/07/2025.....

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DEDICATION

This research Project is dedicated to my wife Lorna, my dad , Kutol and My programme coordinator Kaitany, thank you for your moral support.



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I would like to express my heartfelt gratitude to Almighty God for His guidance and strength throughout my academic journey. I am sincerely thankful to my supervisor, Dr. Denis Ouma, for his invaluable insights, encouragement, and constructive feedback, which greatly enhanced the quality of this research. My appreciation also goes to my program coordinator, Mr. Dickson Kaitany, for his unwavering support and for fostering a conducive learning environment. Additionally, I extend my gratitude to all the lecturers at Mount Kenya University for their dedication and commitment to excellence in teaching, which has motivated me to strive for greater heights. Thank you all for being significant pillars in my academic journey.



ABSTRACT

Water is an essential resource for human survival and economic growth, yet access to clean and safe water remains a significant challenge, particularly in developing regions. This study focused on the adaptation of project management tools in the successful completion of donor-funded water projects in Baringo County, Kenya, where many initiatives struggle to meet their objectives despite substantial investment. Specifically the research aimed to explore and to determine the influence of stakeholder's analysis on Completion of Donor Funded Water Projects in Baringo County., to establish the influence of project planning on Completion of Donor Funded Water Projects in Baringo County, to assess the influence of risk management on Completion of Donor Funded Water Projects in Baringo County and to examine the influence of monitoring and evaluation on Completion of Donor Funded Water Projects in Baringo County. The study was anchored in stakeholder theory, the theory of planning, prospect theory, and realistic evaluation theory The study employed a descriptive research design, the study gathered data from 357 stakeholders across various donor-funded water initiatives through a structured questionnaire. The sample size of 84 respondents included project managers, staff, donor representatives, community members, and government officials. Data analysis utilized both quantitative and qualitative methods, with the Statistical Package for Social Sciences (SPSS) being employed for statistical computations, including descriptive and inferential statistics. Findings were presented in tables and chats. The study found that stakeholder analysis had the strongest positive correlation with project completion ($r = 0.634$, $p < 0.001$), highlighting the critical role of engaging relevant stakeholders in donor-funded water projects in Baringo County. Project planning, risk management, and monitoring and evaluation also showed significant positive relationships with project completion, with correlation coefficients of 0.300 ($p = 0.041$), 0.410 ($p = 0.006$), and 0.425 ($p = 0.003$) respectively. Regression analysis revealed that these four factors collectively explained 47.9% of the variance in project completion ($R^2 = 0.479$), indicating their substantial influence. The findings conclude that effective stakeholder engagement, thorough planning, proactive risk management, and consistent monitoring and evaluation are vital for successful project completion. It is recommended that project managers strengthen stakeholder involvement throughout the project lifecycle, ensure comprehensive planning with adequate resource allocation, implement rigorous risk assessment and mitigation strategies, and maintain structured M&E frameworks to improve timely and quality completion of donor-funded water projects in the county.

ABBREVIATIONS AND ACRONYMS

AVU	: African Virtual University
IWRM	: Integrated Water Resources Management
MNP	: Multi-National Partnership
NACOSTI	: National Commission for Science, Technology and Innovation
NGO	: Non-Governmental Organization
NHIF	: National Health Insurance Fund
NSE	: Nairobi Securities Exchange
PMBOK	: Project Management Body of Knowledge
PWC	: Price water house Coopers
SDG	: Sustainable Development Goals
SPSS	: Statistical Package for the Social Sciences
SWOT	: Strengths, Weaknesses, Opportunities, and Threats
UNDP	: United Nations Development Programme
UNEP	: United Nations Environment Programme
UNICEF	: United Nations International Children's Emergency Fund
WASREB	: Water Services Regulatory Board
WHO	: World Health Organization
WRMA	: Water Resources Management Authority

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CHAPTER ONE

BACKGROUND OF THE STUDY

1.1 Introduction

Water is a critical resource essential for human survival, economic development, and environmental sustainability. Globally, access to clean and safe water remains a significant challenge, especially in developing regions. As populations grow and industries expand, the demand for water continues to rise, placing immense pressure on existing water systems. Various management strategies and tools have been introduced to address these challenges and ensure the efficient and sustainable implementation of water projects. However, despite these efforts, many water projects, particularly in rural and underdeveloped areas, struggle with completion and long-term sustainability (UN-Water, 2021; World Bank, 2020).

In Kenya, water projects, including donor-funded initiatives, play a vital role in alleviating water scarcity, especially in rural counties. Despite substantial investments, many projects still fail to achieve their objectives due to challenges such as insufficient planning, inadequate stakeholder engagement, and weak project management practices (Chepyegon & Kamiya, 2018; Mwangi & Mutua, 2022). This study explores the adaptation of project management tools and their impact on the successful completion of donor-funded water projects, aiming to identify effective strategies for improving project outcomes and ensuring sustainable water access for local communities.

Water scarcity remains a significant global challenge, with approximately 2.2 billion people lacking access to safely managed drinking water services as of 2021 (UNICEF & WHO, 2021). Freshwater and water resources are not evenly distributed across different regions, including Asia and the Pacific, Europe and Central Asia, Latin America and the Caribbean, North America, and West Asia. Between 1900 and 1995, global freshwater

consumption increased sixfold. As populations in these regions continue to grow and industries such as mining, agriculture, and horticulture expand, maintaining the sustainability of the water supply for human populations remains a significant challenge (WRMA, 2018).

Effective project management tools have become indispensable in addressing water-related challenges, especially as governments and international agencies prioritize sustainable water supply solutions. Globally, project management frameworks such as the Project Management Body of Knowledge (PMBOK) and PRINCE2 have been widely adopted to streamline project execution and improve efficiency. In particular, the use of these frameworks in water projects has been credited with enhancing accountability, improving time management, and ensuring the allocation of resources to meet the Sustainable Development Goals (SDG 6), which focuses on clean water and sanitation (United Nations, 2021). However, despite these efforts, many water projects around the world face significant delays and cost overruns due to inadequate adaptation and implementation of project management tools (World Bank, 2022).

Water is one of many crucial natural resources, and project managers in both government and private sectors face tough decisions when it comes to allocating water. As water supplies dwindle and demand increases, managers are under pressure to distribute these resources effectively. This strain is further intensified by factors such as population growth and climate change. The outdated, fragmented approach to water management is no longer sufficient, leading to a global shift towards the Integrated Water Resources Management (IWRM) approach. Endorsed by the international community, IWRM aims to manage and develop the world's limited water resources in a sustainable, efficient, and equitable way to address competing demands (UN-Water, 2021).

Recent findings by Pulse indicate that fewer projects are being completed on budget and achieving their original goals. Globally, only 55% of projects are finished within their initial budget, 51% are completed on time, and 32% of failed projects suffer significant budget losses (PMI, 2016). To improve project outcomes, Lin, Ho, and Huang (2019) recommend focusing on reducing rework and enhancing efficiency and effectiveness in project delivery to meet time, cost, and quality standards in China.

To boost water project implementation, stakeholders such as project owners, consultants, and contractors can utilize these insights, collaborating with NGOs, Community Water Projects (CWPs), and Public-Private Partnerships. These findings can also contribute to policy development aimed at improving water service delivery. However, one of the biggest challenges is the lack of financial resources, which limits the ability to monitor water resources, ultimately affecting planning and management efforts, particularly across trans-boundary waters (WRMA, 2018).

In Africa, water scarcity is exacerbated by rapid population growth, climate change, and inadequate infrastructure. Although several governments have initiated water projects to address these challenges, many projects fail to meet their completion timelines, with up to 50% of water projects stalling or failing entirely in some countries (African Development Bank, 2021). In response, many African nations are adapting project management tools to enhance project delivery. For instance, Nigeria has successfully utilized agile project management methodologies in large-scale water projects, reducing completion times by over 30% (Akinyemi et al., 2022). Similarly, Rwanda has incorporated digital project management platforms that allow for real-time tracking of water projects, leading to improved transparency and increased stakeholder participation (World Bank, 2021). Nonetheless, several countries continue to face challenges in

adapting these tools effectively due to lack of capacity, political interference, and insufficient funding.

In Ghana, water shortages are largely due to the underdevelopment of available water resources and their uneven distribution, making it difficult to sustain catchment areas. A Price Waterhouse Coopers study, which examined major sectors across continents like Africa, Asia, Australia, Europe, and the Americas, revealed that 50% of business projects failed, with only 2% achieving complete success (PWC, 2004). With over 75% of Africa's poor population living in rural areas, developing sustainable water services for these regions is critical. Many water projects fail because of a poor understanding of the specific needs of the communities or a lack of effective support systems.

Africa's primary goal is to participate actively in the global economy while responsibly developing its natural and human resources without repeating the mistakes made by other regions. According to UNEP (2020), only 5% of Africa's potential water resources have been developed, with an average water availability of 200 cubic meters per capita—compared to 6,000 cubic meters in North America. Furthermore, only 5% of Africa's farmland is irrigated, and less than 10% of its hydropower potential is used for electricity generation. Rapid population growth, urbanization, industrialization, and increasingly water-intensive lifestyles have all contributed to a worsening global water crisis (UNEP, 2020).

Kenya has made substantial progress in addressing water accessibility, particularly through government-led and donor-funded projects. The Kenyan government, in line with Vision 2030, has prioritized water sector reforms aimed at enhancing sustainability and accessibility. Despite these efforts, many water projects experience delays and inefficiencies due to inadequate implementation of project management tools. The

National Water Master Plan 2030, launched on March 26, 2014, resulted from a comprehensive study of Kenya's water resources and climate conditions to guide the country's development and management of water resources. Its main goals, as outlined by the Ministry of Water (2007), are to assess the availability, reliability, quality, and vulnerability of water resources up to 2050, factoring in climate change. Additionally, it aims to renew the National Water Master Plan and create a roadmap for the Water Resources Management Authority (WRMA) through 2022, enhancing their capacity. The plan also focuses on strengthening water management by incorporating advanced technology.

The Water Act of 2002 led to the creation of the Water Services Regulatory Board (WASREB), which is responsible for licensing water providers, setting service standards, and managing consumer complaints. This law was replaced by the Water Act of 2016, operationalized in April 2017, which introduced reforms aimed at improving water and sewerage services, along with other related matters (Chepyegon & Kamiya, 2018).

Key components of Kenya's national water and sanitation program include a well-defined policy and legal framework and an implementation strategy that has provided water infrastructure to over 9 million people in less than a decade. The sustained political commitment to water and sanitation is crucial to the program's success. Clear legislation helps to guide and give confidence to agencies working in the sector, while devolution of authority to local governments improves the accountability of water and sanitation programs. Involving local institutions, civil society, and media empowers communities and drives local development. Additionally, external agencies, when providing sensitive and adaptable support, can significantly accelerate progress in the water and sanitation sector (Chepyegon & Kamiya, 2018).

In Baringo County, decision-making is dominated by knowledgeable individuals, often excluding vulnerable groups like women and the poor, who are disadvantaged in water resource planning due to a lack of access to resources such as knowledge, time, and finances (Cheruiyot, 2019). The legal framework provides little guidance on equitable water distribution, leading to further inequality in allocation. Additionally, issues such as poor response to water rights, a lack of transparency, and inadequate funding and accountability within the Ministry of Water and Irrigation contribute to these problems. As a result, existing water dams in the county are unable to provide a continuous supply of clean and safe water, leaving residents in desperate need of improved access.

1.2 Statement of the Problem

Globally, many projects struggle to achieve full success. A survey of 10,640 implemented projects globally, valued at approximately US\$7.2 billion, found that only 2.5% achieved 100% project success, with over 50% of global business projects failing (PWC, 2014). In Kenya, 25% to 30% of water projects completed recently become dysfunctional within the first three years of completion (GoK, 2021). Despite the government's efforts in water resource management, significant challenges remain, particularly in rural areas. The provision of clean and safe drinking water is still lacking, with 67% of rural households unable to access such resources (UNDP, 2022). In Baringo County, water access stands at only 25%, and boreholes in certain regions produce unreliable yields. This situation is worsened by recurring droughts, environmental degradation, and inadequate infrastructure, which continue to impede the completion and functionality of donor-funded water projects.

Poor maintenance, political interference, inadequate stakeholder engagement, and lack of proper project planning are among the factors contributing to the failure of water projects in Baringo. These issues have led to delays, cost overruns, and ultimately, the inability to

meet the needs of the community. Moreover, insufficient risk management and ineffective monitoring and evaluation practices further complicate project delivery. While there has been some research on the factors affecting water project completion in other parts of Kenya, limited studies have focused on the adaptation of project management tools specific to donor-funded water projects in Baringo County.

Empirical studies have given varying findings on the effect of project management tools and project completion. Ndugu (2019) investigated the factors affecting the completion of water services in Kiambu County, while Munene (2020) and Adek (2019) explored water project implementation under devolved governments in Meru and Mombasa counties, respectively. However, most of these studies primarily focused on project management practices, project performance, and stakeholder participation, with limited attention given to the role of project management tools in water project implementation. Despite project management tools being a critical aspect of project management, particularly in relation to execution, there remains a significant gap in research on how project management tools influence water project outcomes. This gap is especially evident in counties like Baringo, where the drying of rivers due to deforestation of the Mau Forest has severely impacted water levels. The environmental degradation resulting from ongoing deforestation has caused a substantial decrease in water resources. Given the critical need for sustainable water solutions in this region, This study selected Baringo County because of the limited research available on how project planning tools can enhance the implementation of water projects, and it seeks to address this knowledge gap by focusing on key influencing factors like stakeholder analysis, project planning, risk management, and monitoring and evaluation influence the completion of donor-funded water projects in Baringo County. understanding how to effectively adapt project

management tools were key to ensuring successful project outcomes and long-term water security.

1.3 Purpose of the Study

The purpose of this study is to examine the influence of adaptation of Project Management Tools on Completion of Donor Funded Water Projects in Baringo County.

1.4 Objectives of the Study

- i. To determine the influence of stakeholder's analysis on Completion of Donor Funded Water Projects in Baringo County.
- ii. To establish the influence of project planning on Completion of Donor Funded Water Projects in Baringo County.
- iii. To assess the influence of risk management on Completion of Donor Funded Water Projects in Baringo County.
- iv. To examine the influence of monitoring and evaluation on Completion of Donor Funded Water Projects in Baringo County.

1.5 Hypothesis of the Study

H0₁: Stakeholder's analysis has no significant influence on Completion of Donor Funded Water Projects in Baringo County.

H0₂: Project planning has no significant influence on Completion of Donor Funded Water Projects in Baringo County.

H0₃: Risk management has no significant influence on Completion of Donor Funded Water Projects in Baringo County.

H0₄: Monitoring and evaluation has no significant influence on Completion of Donor Funded Water Projects in Baringo County.

1.6 Significance of the Study

The significance of this study extends to several key stakeholders, beginning with policymakers. For policymakers, understanding the factors that influence the successful completion of donor-funded water projects is crucial for developing effective strategies and regulations. Insights from this study can guide the formulation of policies that address gaps in stakeholder analysis, project planning, risk management, and monitoring and evaluation. By applying these findings, policymakers can improve the efficiency and effectiveness of water projects, ensuring that resources are utilized optimally and that projects meet their intended goals. This can lead to better water access and management practices, ultimately contributing to the overall development and well-being of communities in Baringo County and beyond.

Donors, who invest significant resources into water projects, may benefit from this study as it highlights the factors that contribute to project success or failure. By incorporating the study's findings, donors can refine their funding strategies and project selection criteria. This can enhance the likelihood that their investments lead to successful and sustainable outcomes. Additionally, the study can help donors establish more effective monitoring and evaluation frameworks to track project performance and address challenges proactively. Improved project success rates may ensure that donor funds achieve their intended impact, supporting the broader goal of improving water access and quality in underserved areas.

For scholars, this study contributes to the academic literature on project management and water resource management by providing a focused examination of donor-funded projects in a specific context. The research fills a notable gap by exploring how various project management tools and practices influence project outcomes in a developing region like Baringo County. The findings can inspire further research on the adaptation

and effectiveness of project management tools in similar contexts, advancing theoretical and practical knowledge in the field. This study's results offer valuable insights that can be used to develop new theories, models, and practices for managing water projects, thereby advancing the academic discourse on effective project management in resource-constrained settings.

1.7 Scope of the Study

This study focused on the adaptation of project management tools and their impact on the completion of donor-funded water projects in Baringo County. It examined four key areas: stakeholder analysis, project planning, risk management, and monitoring and evaluation. The research was conducted over a three-month period, during which data was collected from various stakeholders involved in water projects in the county, including project managers, donors, and local community representatives. The study analyzed how these factors influence project completion and offered recommendations for improving project implementation and success. The scope is limited to donor-funded water projects specifically within Baringo County, providing a detailed examination of these projects' management practices and challenges.

1.8 Limitations of the Study

The study faced some limitations, including potential biases in self-reported data from project stakeholders, limited access to comprehensive project documentation, and the challenges of generalizing findings from a single county to other regions. To mitigate these limitations, the research employed a mixed-methods approach, combining quantitative surveys with qualitative interviews to cross-verify information and reduce bias. Additionally, efforts were made to access a broad range of project documents and reports to ensure a comprehensive analysis. By focusing on Baringo County, the study provides in-depth insights while acknowledging that findings may not be universally

applicable. Recommendations were contextualized to reflect the specific conditions and challenges of Baringo County, with suggestions for further research to explore the applicability of results in different settings.

1.9 Delimitations of the Study

The delimitations of this study include its focus exclusively on donor-funded water projects within Baringo County, thereby excluding water projects funded through other sources or those in different regions of Kenya.

1.10 Assumptions of the Study

This study assumed that all participants involved in the donor-funded water projects in Baringo County provided honest and accurate responses during data collection. It is also assumed that the data obtained from project documents and reports were comprehensive and representative of the actual project conditions. The study further assumed that the project management tools and practices being analyzed are uniformly applied across the projects under review and that the findings reflected typical challenges and successes experienced in similar donor-funded water projects. Additionally, it is assumed that the three-month timeframe was sufficient to gather relevant data and conduct a thorough analysis of the factors influencing project completion.

1.11 Operational Definition of Key Terms

Monitoring and Evaluation (M&E): Monitoring and evaluation refer to the systematic process of collecting, analyzing, and using information to track the progress and performance of a project or program.

Project Completion: Project completion refers to the successful finalization of all project activities and deliverables, meeting the predefined goals, objectives, and criteria.

Project Management Tools: Project management tools are techniques, software, or methodologies used to plan, execute, monitor, and control project activities.

Project Planning: Project planning is the process of defining the scope, objectives, deliverables, and timeline of a project.

Risk Management: Risk management involves identifying, assessing, and prioritizing potential risks that could impact the project's success.

Stakeholder Analysis: Stakeholder analysis is the process of identifying and assessing the interests, influence, and needs of individuals or groups who have a stake in a project.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter highlights the diverse literature review that the researcher incorporated in order to show the various studies that have been carried out on the relationship between Project Management Tools and Completion of Donor Funded Water Projects.

2.2 Empirical Review

An empirical literature review involves examining past research related to the problem being studied and understanding how these previous studies inform the current research. It also plays a crucial role in identifying gaps in existing knowledge that the current study seeks to address.

2.2.1 Stakeholder's Analysis on Project Completion

Kaur and Lechner (2019) examined the impact of stakeholder analysis on the completion of renewable energy projects in India. The study targeted project developers, government officials, and environmental stakeholders in the renewable energy sector. A mixed-method approach was used, involving both quantitative and qualitative data collection methods, including surveys, interviews, and focus group discussions. The findings indicated that early identification of stakeholders and continuous engagement throughout the project lifecycle were critical in minimizing conflicts and ensuring project completion. The study emphasized the importance of balancing the interests of diverse stakeholder groups, including local communities and environmental activists, to avoid delays. A notable gap identified was the lack of a structured framework for addressing conflicts that arise between stakeholders, particularly those involving environmental concerns and local communities.

Ngilambi and McCubbin (2022) examined the role of communication between stakeholders and municipal officials in the implementation of community-based water safety plans in Afghanistan. The target population consisted of municipal officials, community leaders, and relevant service providers. The researchers used a descriptive research design, employing qualitative methods such as interviews and surveys to gather data on the communication processes and stakeholder involvement in the projects. The findings revealed that effective communication between municipal officials and stakeholders was crucial for successful project implementation. When stakeholders were excluded from decision-making processes, it negatively impacted service provision and project outcomes. The study concluded that involving stakeholders early in the project lifecycle and encouraging their participation in decision-making led to more efficient service delivery. Despite these insights, the study lacked a detailed framework for improving communication and did not use quantitative methods to measure the direct impact of stakeholder analysis on project success.

Aapaoja and Haapasalo (2019) investigated the importance of stakeholder analysis during the initiation phase of public projects. The target population for the study included project managers and stakeholders in various public infrastructure projects. The study used a case study approach, collecting data through interviews and project documentation to assess how early stakeholder involvement influenced the project's development and success. The study found that many public projects face challenges in identifying and managing stakeholder expectations during the early stages. However, projects that integrated stakeholders early in the planning phase were more likely to succeed, as stakeholder input helped align the project's goals with the needs of the community. This early involvement also reduced the uncertainty typically present during the initiation phase. The study, however, did not explore the long-term effects of

stakeholder analysis and lacked a structured framework for continuous stakeholder management throughout the project lifecycle.

Mok and Shen (2021) focused on managing stakeholder relationships in complex project environments, particularly large-scale infrastructure projects in urban areas. The study targeted project managers and teams responsible for overseeing these complex projects. It used both qualitative and quantitative research methods, including interviews and surveys, to analyze how stakeholder analysis and engagement strategies influenced project outcomes. The study concluded that stakeholder analysis is critical in understanding the interests, preferences, and influence of various stakeholders. This understanding allows project teams to develop effective engagement strategies that align stakeholders' expectations with project goals, ultimately leading to better project outcomes. However, the study did not offer specific tools or methods for managing stakeholder relationships in complex projects and focused primarily on large-scale endeavors, leaving a gap in applicability for smaller projects.

Waweru and Muturi (2021) conducted a study on the influence of stakeholder analysis on the completion of water projects in Kiambu County, Kenya. The target population consisted of project managers, contractors, and community leaders involved in various water projects. A descriptive survey research design was employed, with data collected through structured questionnaires and interviews. The study applied both descriptive and inferential statistical techniques to analyze the data. The findings revealed that proper stakeholder analysis, particularly identifying key stakeholders and their roles early in the project, positively impacted project completion rates. Projects where stakeholders were regularly consulted experienced fewer delays and budget overruns. However, the study highlighted a gap in the continuous engagement of stakeholders, noting that their involvement often diminished after the project initiation phase, which sometimes led to

conflicts later in the project. This gap suggests that ongoing stakeholder engagement throughout the project lifecycle is crucial for timely completion.

Odhiambo and Njeru (2020) explored the role of stakeholder analysis on the completion of road construction projects in Nairobi County, Kenya. The study focused on project managers, engineers, and government officials involved in public road construction. The researchers used a cross-sectional research design, collecting data through structured questionnaires and interviews. The study found that stakeholder identification and effective communication strategies were vital for ensuring the timely completion of road construction projects. The researchers concluded that projects with well-managed stakeholder engagement were more likely to be completed on time and within budget. However, the study identified a gap in the application of modern tools for stakeholder analysis, such as digital platforms for communication, which could improve efficiency in stakeholder management.

2.2.2 Project Planning and Project Completion

In the project planning phase, all activities and resources related to the project are identified and systematically organized to ensure the successful delivery of a specific product or service. The main outcome of this phase is the creation of a project plan. According to Baars (2022), the planning process outlines key aspects of the project, including the tasks that need to be completed, who is responsible for them, the timeline for task completion, the resources allocated, and the sequence in which the tasks will be carried out.

Effective project execution relies on this plan, ensuring that the project activities are implemented efficiently and according to the established guidelines. The success of the execution phase is measured against the project plan, specifications, and the original

feasibility concept. Anbari (2023) emphasizes that without a clearly defined execution process, project teams would rely on their own methods and experience, which would make it challenging to monitor, control, and make necessary adjustments during the project.

Ogogo et al. (2018) conducted a study on the "Influence of Contractor Competence on the Performance of Government Construction Projects" in Kenya, and while the focus was on contractor competence, the findings underscored the importance of effective planning in project completion. The study, targeting contractors and government officials involved in construction projects, used a descriptive research design to establish relationships between variables. It was found that competent contractors often engaged in thorough planning, which positively influenced the completion of government construction projects. A major gap in this study was the limited focus on the direct impact of project planning on project completion, leaving room for further exploration into how detailed project planning could enhance timely project completion, regardless

Mwangi (2020) conducted a study on the influence of project planning on the completion of road construction projects in Nairobi County, Kenya. The study targeted project managers, contractors, and government officials involved in road projects. Using a descriptive research design, Mwangi found that comprehensive planning significantly improved project completion rates by ensuring that resources were allocated efficiently, timelines were adhered to, and potential risks were mitigated. However, the study highlighted a gap in addressing how changes in project scope during the implementation phase impacted the original project plan.

Njoroge (2021) researched the role of planning in the Completion of Donor-Funded Water Projects in Machakos County, Kenya. The study targeted project beneficiaries, government officials, and NGOs involved in water projects. Through a mixed-method

approach, the research found that the lack of detailed project planning contributed to delays and increased project costs, which often resulted in incomplete or poorly implemented projects. The major gap identified was the lack of focus on the use of modern project management tools during the planning phase, which could have improved project completion.

Nyaga (2019) carried out a study examining the impact of project management skills on the performance of construction projects, focusing on selected construction firms in Mombasa County, Kenya. The research utilized a descriptive design and targeted 111 staff members from these firms, with a sample size of 33 respondents. Questionnaires were used as the primary data collection tool, and both quantitative and qualitative methods were employed for data analysis. The findings were presented in tables for clarity. The study revealed that many projects faced challenges due to insufficient planning skills, which are critical for effective project execution. It also highlighted that project planning is complex and risky, demanding a diverse set of skills for successful management. Furthermore, the study noted that as projects become more complex and time-pressured, advanced software and hardware tools are increasingly necessary, requiring skilled planners. This study identified a geographical gap as it focused on Mombasa County, while the current research broadens the focus to water projects in Baringo Kenya.

Singh and Gupta (2019) conducted a study on the impact of project planning on the Completion of Infrastructure Projects in India. The study targeted contractors, engineers, and government officials in charge of infrastructure projects in various states in India. Using a quantitative research design, Singh and Gupta found that effective project planning, particularly in the areas of resource allocation, scheduling, and risk management, significantly contributed to the timely completion of projects. The study,

however, highlighted a gap in understanding the role of stakeholder involvement during the planning phase, which could have further improved project completion rates.

Martins and Silva (2020) examined the influence of project planning on the completion of public housing projects in Brazil. This study targeted project managers, architects, and government agencies involved in housing projects across different regions of Brazil. Using a case study approach, Martins and Silva found that poor planning led to delays and cost overruns, resulting in many incomplete housing projects. The study emphasized the importance of early planning, particularly in risk management and stakeholder engagement, for successful project completion. However, a gap was identified in the integration of new technologies and digital tools in the planning process, which could have optimized project outcomes.

2.2.3 Risk management and Project Completion

Muli (2020) examined the role of risk management practices in the success of water projects in Machakos County, Kenya. The study employed a descriptive research design and targeted project managers and stakeholders from various donor-funded water initiatives. The findings indicated that effective risk identification, assessment, and mitigation strategies contributed significantly to the successful completion of water projects. However, the study did not delve deeply into the specific challenges faced in different contexts, such as Baringo County, leaving a gap for further exploration.

Wanyonyi (2020) investigated the impact of risk management on project performance within selected international development organizations in Nairobi County, Kenya. The study utilized a quantitative research design and involved a target population of employees from various international organizations. The findings revealed a statistically significant relationship between the risk response strategies avoidance, transference,

reduction, and acceptance and the successful completion of projects funded by international organizations. However, the study's focus on a specific sector and location presents a gap, as it does not address the influence of risk management on donor-funded water projects, particularly in Baringo County, Kenya.

Gitau (2020) explored the effect of risk management during the project planning phase on the performance of construction projects in Rwanda. This study employed a mixed-methods approach, incorporating both qualitative and quantitative data collected from construction professionals, including architects and engineers. The results indicated that early selection of consulting engineers and architects was crucial, with only 14.3% of projects involving consultants before the planning phase. This study's limitation lies in its narrow focus on the planning phase, lacking an examination of comprehensive risk management strategies throughout the project lifecycle. The current study aims to fill this gap by assessing the influence of risk management on the completion of donor-funded water projects in Baringo County.

Kisaka and Musomi (2022) analyzed the effect of risk management practices on the performance of investment firms in Nairobi. Using a descriptive research design, the study surveyed a target population of 26 investment firms listed on the Nairobi Securities Exchange (NSE). The findings indicated that various risk identification tools, such as SWOT analysis and employee experience assessments, significantly impacted firm performance. However, this study's focus on investment firms presents a gap, as it does not consider the specific context of donor-funded water projects in Baringo County.

Shair (2021) examined the influence of project management skills on the performance of government-funded projects in Kibera, Kenya, specifically the Kazi Kwa Vijana Initiative. Utilizing a case study research design, the study included a target population of project staff and beneficiaries. The research found that risk recognition based on

historical data significantly affected project outcomes. However, the study concentrated solely on project management skills, neglecting the broader implications of risk management practices. The current study seeks to address this gap by investigating how risk management influences the completion of donor-funded water projects in Baringo County.

Aduma and Kimutai (2018) focused on project risk management strategies and their impact on project performance at the National Health Insurance Fund (NHIF) in Nairobi County, Kenya. Their survey employed a descriptive research design and involved a target population of NHIF project managers and stakeholders. The findings indicated that risk reduction had the most significant impact on project performance, while risk transfer had the least. However, this study was limited to the NHIF context, lacking insights into other sectors. The present study aims to broaden the scope by assessing the influence of risk management on the completion of donor-funded water projects in Baringo County.

Maghanga (2019) investigated the effects of project risk management practices on the performance of cement-manufacturing projects in Nairobi County, utilizing a purposive sampling method within a descriptive research design. The target population included project managers and staff from various cement-manufacturing firms. The findings showed that project risk avoidance, retention, transfer, and control significantly influenced project performance. Despite the significant relationships found, this study was limited to the cement industry and did not explore the context of donor-funded projects. The current study intends to fill this gap by assessing how risk management affects the completion of donor-funded water projects in Baringo County, thereby providing insights relevant to this specific area.

Bourne and Walker (2021) conducted a study on the influence of stakeholder engagement and risk management on project success in various sectors, including

construction and infrastructure. Using a mixed-methods approach, the study surveyed project managers and stakeholders across multiple countries, revealing that effective stakeholder communication and risk management strategies positively correlated with project success. However, the findings did not focus on donor-funded projects, which represents a gap in understanding the unique risks and management practices applicable to these types of initiatives. The current study aims to contribute to this area by assessing how risk management influences the completion of donor-funded water projects specifically in Baringo County, Kenya.

2.2.4 Monitoring & Evaluation and Project Completion

Phiri (2020) investigated the influence of monitoring and evaluation (M&E) on project performance at the African Virtual University (AVU) in Nairobi, Kenya. The study employed a mixed research design, utilizing both ex-post facto and survey methods to assess the relationship between M&E practices and project success for two specific AVU projects: the MNP and the VUCC net. The findings indicated a positive correlation between effective M&E and project completion, as demonstrated by Spearman's rank correlation coefficient. However, this research was confined to a university setting, while the current study focuses on the influence of M&E on the completion of donor-funded water projects in Baringo County.

Waithera and Wanyoike (2019) explored the impact of M&E on the performance of youth-funded agribusiness projects in Bahati Sub-County, Nakuru County, Kenya. The research employed a descriptive survey design, revealing that project management and assessment significantly influenced staff training, which in turn affected project outcomes. However, this study was limited to agribusiness projects, whereas the present research aims to examine the influence of M&E on the completion of water projects funded by donors in Baringo County.

Ngatia (2016) examined the determinants of institutional participatory monitoring and evaluation systems on the implementation of community-based development projects in Kibera Slum, Kenya. This study utilized a qualitative research design, revealing that vulnerabilities within government M&E programs severely hindered project effectiveness. While this study highlighted important institutional factors, it primarily focused on implementation rather than completion. The current study seeks to assess the influence of M&E specifically on the completion of donor-funded water projects in Baringo County.

Ochenge (2018) established the effect of project management practices on the performance of road infrastructure projects constructed by local firms in the Lake Basin Region of Kenya. Using both descriptive and explanatory research designs, the findings indicated that tracking and assessment processes significantly impact project efficiency. This research was limited to road infrastructure projects, while the current study investigates the influence of M&E on the completion of donor-funded water projects in Baringo County.

Wambua (2019) investigated the effects of M&E practices on the performance of county-funded education projects in Makueni County. Utilizing a descriptive survey design, the results indicated that training M&E teams, conducting baseline surveys, and engaging the public in M&E plans led to improved project outcomes. However, this study did not address Women and Girls Economic Empowerment programs. In contrast, the present study focuses on the influence of M&E on the completion of such programs in Baringo County.

Through the examination of these studies, the current research seeks to fill the gaps related to the specific influence of monitoring and evaluation on the completion of

donor-funded water projects in Baringo County, contributing to the broader understanding of project management practices .

Muthoni and Kimani (2021) conducted a study on the impact of monitoring and evaluation systems on the completion of community-based water projects in Laikipia County, Kenya. The study adopted a descriptive research design and targeted project managers, staff, and community representatives. Findings revealed that M&E tools, particularly real-time tracking and community feedback mechanisms, had a significant positive effect on the timely completion of water projects. However, the study was limited to community-based water projects, whereas the current research focuses on donor-funded water projects in Baringo County, Kenya.

Smith and Jones (2020) examined the role of monitoring and evaluation in the successful implementation of rural water supply projects in Uganda. The study utilized a mixed-methods research design, involving surveys and interviews with project managers and field staff. Results indicated that regular M&E activities, combined with adaptive management strategies, contributed to the high completion rate of donor-funded water projects in rural areas. The study emphasized that continuous M&E adjustments were essential to mitigate challenges encountered during project implementation. Although this study provides valuable international insights, the focus was on rural Uganda, while the current research investigates donor-funded water projects in Baringo County, Kenya.

2.3 Theoretical Review

The study was anchored on the following four theories stakeholder theory, theory of planning, prospect theory, and realistic evaluation theory

2.3.1 Stakeholders Theory

The study is anchored on stakeholder theory which aids in understanding how organizations function in relation to their diverse stakeholders (Miles, 2017). This theory, first developed by Freeman in 1984, categorizes stakeholders into various groups and highlights the importance of recognizing the relationships between them. Freeman defined stakeholders as individuals or groups affected by an organization's objectives. According to this theory, stakeholders put either financial or human capital at risk, meaning they stand to gain or lose depending on the organization's behavior. As a result, stakeholder theory calls for understanding how various stakeholders influence organizational outcomes and how organizations can respond to their interests to ensure project completion (Tapaninaho & Kujala, 2019). This requires organizations to address the concerns of multiple stakeholders, not just one group, to maintain long-term viability (Fobbe & Hilletoth, 2021).

Stakeholder theory further emphasizes that stakeholder analysis in projects is crucial for achieving community benefits. Engaging stakeholders helps identify constraints and meet the needs of local populations (Haataja, 2020). Góes et al. (2021) also argued that active participation by project beneficiaries enhances community ownership, a key factor in project success. In donor-funded projects, the theory suggests that stakeholder collaboration is vital for ensuring the project's sustainability once donors withdraw. This joint effort between project managers, donors, and local stakeholders strengthens the project's foundation and ensures long-lasting success.

Despite its widespread application, stakeholder theory has several notable weaknesses. One significant limitation is its vague definition of stakeholders. Freeman's broad definition includes anyone who can affect or be affected by an organization's actions, making it difficult for organizations to prioritize stakeholders. Not all stakeholders have

the same level of influence or investment, but the theory does not adequately address this issue. Furthermore, while the theory stresses inclusivity, it assumes that organizations can meet the needs of all stakeholders, which is often unrealistic, especially in resource-limited settings.(Fobbe & Hilletoft, 2021). It also fails to provide clear guidance on how to manage conflicts between stakeholders with opposing interests. Lastly, stakeholder theory assumes that all stakeholders are equally motivated and able to participate in decision-making, which is not always the case (Fobbe & Hilletoft, 2021).

In the context of this study, stakeholder theory remains highly relevant to understanding the influence of stakeholder analysis on project completion. The theory's focus on identifying and managing relationships between stakeholders is critical for public and community-based projects. Analyzing how various stakeholders, such as government officials, community members, and donors, contribute to or hinder project completion directly aligns with the theory's principles. Stakeholder theory also shows the importance of collaboration, especially in donor-funded projects, to promote sustainability and ensure that all parties contribute to the project's success. Thus, while stakeholder theory may have limitations in its broad scope and the assumption of equal participation, it still provides a valuable framework for exploring stakeholder dynamics. Its relevance to this study is evident in its ability to guide how effective communication, involvement, and management of stakeholder interests can enhance project outcomes, making it a critical lens through which to assess project completion(Haataja, 2020)

2.3.2 Theory of Planning

The Theory of Planning, as advanced by Koskela and Howell in 2002, asserts that management involves two fundamental components: planning and organizing. This theory posits that in project management, planning is primarily the responsibility of the managerial aspect. The managerial role focuses on outlining what needs to be done,

while the effector role is responsible for executing or translating the plan into actionable steps (Koskela & Howell, 2002).

According to this theory, planning requires the assembly of all the necessary resources needed to carry out the project. These resources include manpower, materials, time, and finances (Kraemer et al., 2020). In the context of construction project management, project planning entails customizing the project's requirements to suit specific goals. As highlighted by Knoepfel (1992), this involves defining tasks, assigning responsibilities, and designing organizational procedures. Furthermore, management-as-organizing seeks to efficiently assemble resources into an interconnected structure that aligns with the project plan (Weiss & Wysocki, 1992).

The theory of Execution, as first proposed by Emerson (1917), mirrors the job dispatching concept in manufacturing, where the primary focus is on bridging the gap between planning and actual work execution. Job dispatching involves assigning tasks or activities to machines or work crews under centralized control. Bhaskaran and Pinedo (1991) define job dispatching as a process in which tasks are selected for processing based on logical decision rules, ensuring that available resources, such as machines, are optimally utilized.

In project management, job dispatching translates into the execution phase, where tasks are communicated and assigned for action (Emerson, 1917). Planning plays a significant role in assigning these tasks, and once they are planned, dispatching is reduced to communication rather than an independent decision-making process (Bhaskaran & Pinedo, 1991). This planning theory is particularly relevant to construction project management, emphasizing the importance of scheduling and the allocation of tasks to reduce delays during project execution.

The theory is particularly applicable to the completion of water construction projects, where scheduling becomes crucial (Emerson, 1917). Through effective scheduling, project timelines can be accurately estimated, allowing management to make timely decisions and communicate them effectively to stakeholders (Bhaskaran & Pinedo, 1991). By focusing on clear timelines and task assignments, this theory offers a practical approach to ensuring that construction projects are completed on time. In this context, the theory guides the development of strategies to implement project plans effectively and mitigate potential delays. Thus, it is highly relevant to ensuring the successful completion of projects through efficient planning and execution.

The Project Management Body of Knowledge (PMBOK) Guide systematically describes the planning process across various knowledge areas, reinforcing the theory of planning. The theory aligns with the notion that management primarily involves the creation of plans that guide subsequent actions. According to Johnston and Olson (2021), planning processes generate project plans that serve as inputs to execution, suggesting that planning is a precursor to action, with plans serving as the basis for operational steps. This perspective, which sees planning as integral to execution, is foundational in the theory of planning.

2.3.3 Prospect Theory

Prospect Theory, developed by Tversky and Kahneman (1979), provides a comprehensive framework for understanding decision-making under conditions of uncertainty, particularly concerning risk assessment and behavioral economics. The theory posits that individuals evaluate potential outcomes relative to a reference point, rather than in absolute terms. It highlights two key phases: the decision-making process and the evaluation of potential outcomes (Bernheim & Sprenger, 2019).

In the decision-making phase, the framing process illustrates how the presentation of options can significantly influence the choices made by decision-makers. This involves two critical components: the value function and the weighting function. The value function captures how individuals perceive gains and losses, typically showing that losses are felt more acutely than equivalent gains, which is known as loss aversion. The weighting function reflects how people subjectively weigh probabilities, often leading to an overestimation of unlikely events and an underestimation of likely ones. Prospect Theory is particularly relevant in project management, especially for donor-funded initiatives. It aids decision-makers in assessing risks by allowing them to weigh the potential benefits against possible adverse effects. Decision-makers often multiply the decision weight by the value of each potential outcome (Pachur, Schulte-Mecklenbeck, Murphy, & Hertwig, 2018). This framework emphasizes that risk arises from the uncertainty associated with specific actions, which may lead to financial loss, delays, or other adverse outcomes.

However, Prospect Theory has several limitations. One major criticism is that it does not fully account for the influence of emotions and psychological factors on decision-making, which can lead to irrational choices. Additionally, the theory assumes that individuals consistently apply the value and weighting functions, which may not be the case in real-world scenarios where cognitive biases can distort perceptions. Moreover, the theory is primarily descriptive and may not adequately predict actual decision-making behavior across diverse contexts.

Despite these weaknesses, effective risk management remains crucial in projects exposed to various uncertainties, such as those found in donor-funded water initiatives. By systematically analyzing relevant data, decision-makers can better understand the likelihood of adverse events and their potential impacts on project outcomes, including

investment levels, job quality, and anticipated results (Bernheim & Sprenger, 2019). Therefore, applying Prospect Theory in this study highlights the significance of risk management in enhancing the performance and successful completion of donor-funded water projects in Baringo County, Kenya.

2.3.4 Realistic Evaluation Theory

The Realistic Evaluation Theory, first introduced by Pawson in 1997, offers a framework for understanding not just the outcomes of interventions, but also how these outcomes are produced and under what specific conditions. Pawson and Tilley (2004) argue that a comprehensive evaluation should address the key questions: What works, for whom, and under what circumstances? This theory enables evaluators to consider both the successful and unsuccessful aspects of an intervention, while also analyzing the context-specific factors that might affect its replication in other settings (Cohen, Manion, & Morrison, 2008). By focusing on the interplay between context, mechanism, and outcome, realistic evaluation seeks to uncover the underlying processes that make interventions effective in certain situations and ineffective in others (Pawson & Tilley, 2004).

The theory also emphasizes the need for maximizing program value by incorporating sound management practices, aligned with a clear vision, strategy, and stakeholder engagement. Programs can struggle to deliver value if management disregards the long-term interests of stakeholders. Furthermore, a lack of clarity or confusion about the organization's goals can make it difficult for stakeholders to assess and appreciate efforts toward sustainability (Pawson & Tilley, 2004). Thus, effective management and communication strategies are essential to align stakeholder expectations with program performance, which is particularly relevant in the context of monitoring and evaluation (M&E) (Cohen et al., 2008).

While the Realistic Evaluation Theory provides valuable insights into how context affects project outcomes, it is not without its limitations. Critics argue that the theory may oversimplify complex social systems by focusing too much on identifying specific causal mechanisms. In reality, projects often operate in highly dynamic and unpredictable environments, where outcomes are influenced by a multitude of factors beyond those identified by the evaluator (Linsley, 2019). Additionally, the theory's emphasis on context, mechanism, and outcome can sometimes lead to vague or overly generalized conclusions, making it difficult to apply findings across different settings. Critics also point out that the theory assumes interventions are generally beneficial, potentially overlooking cases where interventions may have unintended negative consequences (Pawson & Tilley, 2004).

The Realistic Evaluation Theory is highly relevant to the study on the influence of monitoring and evaluation on the completion of donor-funded water projects in Baringo County. This theory can help explain how various M&E practices impact the success or failure of these water projects by identifying the specific conditions under which M&E interventions are most effective (Pawson & Tilley, 2004). For example, it could clarify how M&E processes in different environmental, social, or economic contexts within Baringo County either facilitate or hinder project completion.

By examining the context, mechanism, and outcome framework, this study can better understand how donor-funded water projects can be successfully completed when M&E practices are well-aligned with the unique challenges and opportunities within the local context (Linsley, 2019). Moreover, the theory can shed light on why certain M&E strategies might work in Baringo but not in other regions, providing practical guidance for replicating successful interventions in other areas. This alignment of M&E with local conditions and the involvement of stakeholders would contribute to more efficient

project management and better outcomes for donor-funded water projects in Baringo County (Pawson & Tilley, 2004).

2.4 Conceptual Framework

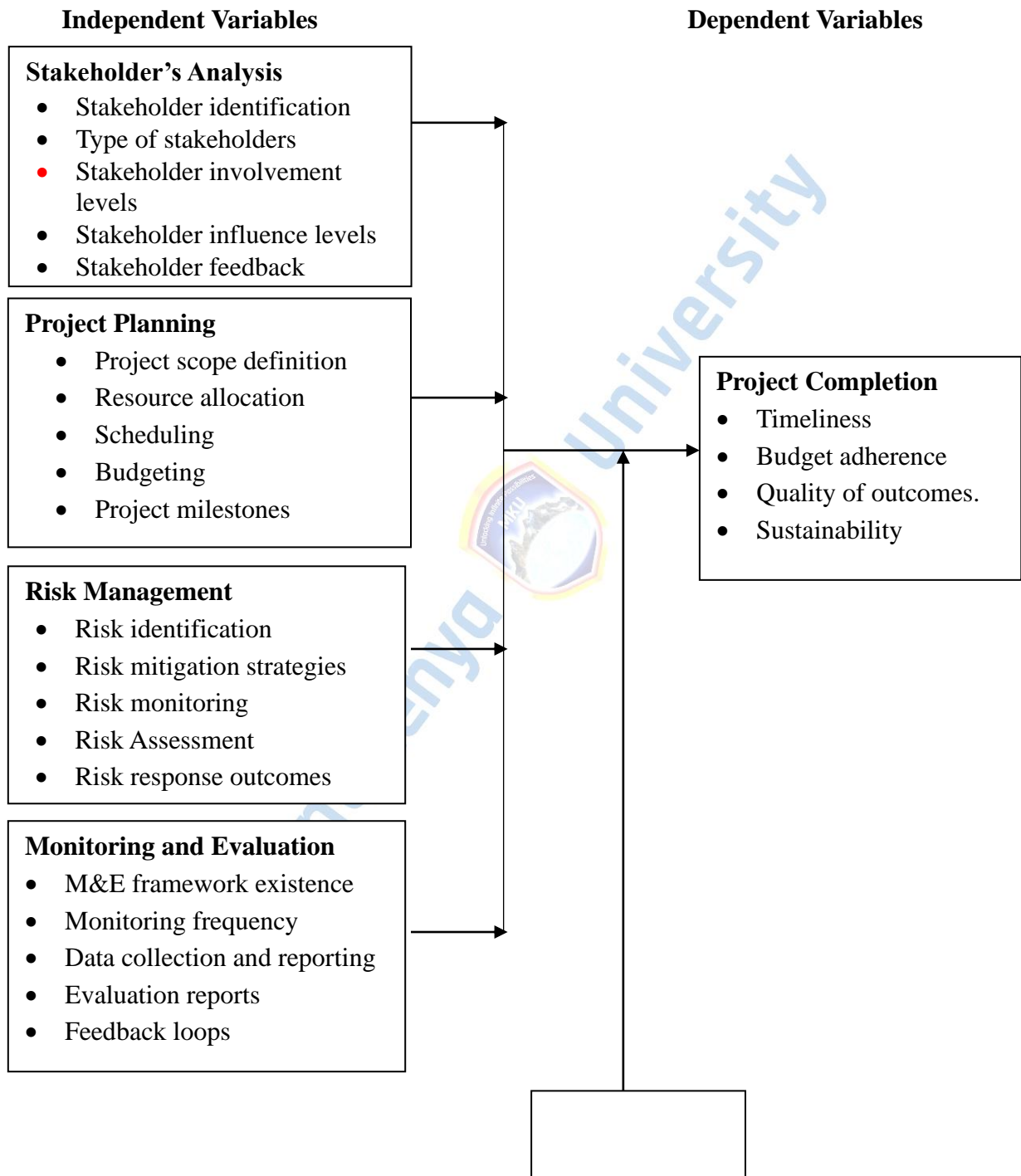


Figure 1: Conceptual Frame Work

Source : Researcher (2025)

Stakeholder analysis plays a critical role in the completion of donor-funded water projects. The process involves identifying all individuals, groups, or organizations that have an interest or stake in the project. Stakeholder identification is essential in the initial stages, as it ensures that key factors such as local communities, government agencies, non-governmental organizations, and donors are recognized. Once identified, the type of stakeholders is categorized based on their level of influence and interest in the project. Different stakeholders, such as financiers, beneficiaries, and implementers, have varying degrees of power and involvement in decision-making processes. Stakeholder involvement is another significant aspect, ensuring that all key actors are engaged throughout the project lifecycle. This involvement fosters collaboration and helps prevent potential conflicts or misunderstandings. Stakeholder influence refers to the capacity of certain individuals or groups to affect project decisions or outcomes. For instance, local authorities or government agencies may have regulatory power, while donors may influence funding decisions. Finally, stakeholder feedback is critical for continuous improvement, as it provides insights into the performance of the project and necessary adjustments.

Project planning is a vital determinant of the successful completion of donor-funded water projects. It involves laying down a roadmap for achieving project objectives. Project scope definition is fundamental as it delineates the specific goals, deliverables, and boundaries of the project, ensuring that everyone involved understands the scope of work. Clear scope definition helps prevent scope creep, which can derail the project. Resource allocation is equally important, as the availability and efficient use of resources—whether financial, human, or material—directly influence the ability to meet project milestones. Another key component of project planning is the development of a contingency plan, which prepares the project team for potential risks or unexpected

events that may arise during implementation. Projects often face delays, budget overruns, or other unforeseen challenges; a well-thought-out contingency plan helps mitigate these risks. Time management is also crucial, ensuring that the project is delivered on schedule through the establishment of clear timelines, deadlines, and prioritization of tasks. Lastly, project milestones are set to track progress at various stages, providing measurable targets and helping keep the project on track. Effective planning enhances the likelihood that donor-funded water projects will be completed on time, within budget, and with high-quality outcomes.

Risk management is a proactive process that ensures potential challenges are identified and addressed before they adversely affect project outcomes. Risk identification is the first step, where possible risks—such as funding shortages, delays, or technical challenges—are recognized. Once risks are identified, risk mitigation strategies are developed to minimize their impact. For instance, securing alternative funding sources or adjusting timelines can help mitigate financial or scheduling risks. Effective risk mitigation strategies reduce the likelihood of disruptions that could hinder project completion. The continuous risk monitoring process ensures that any emerging risks are promptly identified and addressed. Risk assessment evaluates the probability and potential impact of identified risks, enabling the project team to prioritize which risks require immediate attention. After assessing risks, the project team implements risk response outcomes, which are actions taken to either avoid, transfer, reduce, or accept the risk, depending on its nature. By having a comprehensive risk management framework, donor-funded water projects can navigate uncertainties and challenges effectively, ensuring that the project is completed successfully and meets donor and community expectations.

Monitoring and evaluation are critical processes that track the progress of the project and assess whether it is meeting its objectives. The existence of an M&E framework provides a structured approach to monitor project activities and assess their impact. A well-established M&E framework enables the project team to systematically gather and analyze data, leading to informed decision-making. The monitoring frequency is important, as regular monitoring allows the project team to detect issues early and make necessary adjustments to stay on track.

Data collection and reporting play an integral role in providing accurate and timely information on the project's progress. Through continuous monitoring, the project team can generate evaluation reports that highlight achievements, challenges, and lessons learned. These reports are crucial for assessing the effectiveness of the project and whether it is on course to meet its objectives. Feedback loops in the M&E process allow stakeholders to provide input and suggestions for improvement, which can be used to refine project strategies. Through effective monitoring and evaluation, donor-funded water projects in Baringo County are more likely to achieve their intended outcomes, improving the timeliness, cost efficiency, and overall quality of the project.

The ultimate goal of any project is successful completion, which is measured through several key indicators. Timeliness refers to whether the project is completed within the set schedule, while budget adherence assesses whether the project was completed within the allocated financial resources. In donor-funded projects, staying within the budget is crucial to avoid funding shortages or the need for additional financial support. Quality of outcomes is another important measure of success, ensuring that the project delivers high-quality, sustainable solutions, such as reliable access to water for the local community

Lastly, sustainability ensures that the project's benefits extend beyond the implementation phase and continue to serve the community in the long term. For example, water infrastructure projects must be durable and maintainable by the local population to ensure lasting success. Together, these indicators determine whether a donor-funded water project in Baringo County has achieved its objectives and delivered value to the community.

2.5 Recap of Literature Review

Research highlights the crucial role of stakeholder analysis in facilitating project completion across various sectors. Kaur and Lechner (2019) highlight that early identification and continuous engagement of stakeholders are essential for minimizing conflicts and enhancing the completion rates of renewable energy projects in India. Similarly, Ngilambi and McCubbin (2022) found that effective communication between municipal officials and stakeholders significantly impacts the success of community-based water safety plans in Afghanistan, emphasizing the negative effects of excluding stakeholders from decision-making processes. Furthermore, Harrison and Wicks (2020) demonstrated that comprehensive stakeholder analysis at the initiation stage increases the likelihood of timely project completion while stressing the need for ongoing engagement throughout the project lifecycle. Despite these insights, gaps remain, particularly concerning structured frameworks for conflict resolution and the long-term sustainability of stakeholder relationships post-project completion, which necessitates further exploration in the field.

The planning phase is fundamental to ensuring successful project completion, as it establishes the framework for all project activities and resource allocation. Baars (2022) emphasizes that a well-defined project plan is essential for effective execution, enabling teams to monitor progress and make necessary adjustments. Supporting this, Ogogo et al.

(2018) found that thorough planning significantly impacts the performance of government construction projects in Kenya, while Mwangi (2020) demonstrated that comprehensive planning enhances project completion rates by ensuring efficient resource allocation and adherence to timelines. However, challenges arise from changes in project scope during implementation, which can disrupt the original plan. Additionally, studies by Njoroge (2021) and Nyaga (2019) highlight the negative effects of inadequate planning on project outcomes, emphasizing the need for modern project management tools and stakeholder involvement during the planning phase. Overall, these findings illustrate the critical relationship between project planning and successful project completion, while revealing gaps in stakeholder integration and the adoption of contemporary planning methodologies.

The examination of risk management practices across various studies reveals a strong correlation with project completion, particularly in donor-funded initiatives. Muli (2020) highlighted the importance of effective risk identification and mitigation strategies in the success of water projects in Machakos County, indicating that understanding local challenges is crucial for effective project execution. Similarly, Wanyonyi (2020) found a significant relationship between risk response strategies and project performance within international development organizations, emphasizing the need for broader applicability in contexts like Baringo County. Gitau (2020) added that comprehensive risk management throughout the project lifecycle is vital, although his focus on the planning phase limited insights into overall project success. Kisaka and Musomi (2022) and Shair (2021) further illustrated the impact of risk management on performance, albeit in distinct sectors, suggesting gaps in understanding its application to donor-funded water projects. Collectively, these studies indicate a pressing need for more targeted research

into risk management's role in the completion of such initiatives in specific regional contexts.

The role of monitoring and evaluation (M&E) in enhancing project completion rates is underscored by several studies, highlighting its significance across different sectors. Phiri (2020) demonstrated a positive correlation between effective M&E practices and project success within an academic setting, while Waithera and Wanyoike (2019) found similar results in agribusiness projects, indicating the critical importance of management and assessment in achieving project goals. Ngatia (2016) further pointed out that institutional factors in M&E systems can hinder project effectiveness, emphasizing the need for comprehensive evaluations focused on completion rather than implementation. Muthoni and Kimani (2021) and Smith and Jones (2020) provided insights into the effectiveness of M&E tools and practices in water projects, reinforcing their impact on timely completion. However, gaps remain in understanding the specific influence of M&E on donor-funded water projects in regions like Baringo County, which the current study seeks to address. Together, these findings highlight the necessity of integrating robust M&E practices to optimize project completion rates across diverse contexts.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology that was employed to achieve the objectives of the study. It details the research design, target population, sampling techniques, data collection methods, and procedures to be used in the study. Additionally, it describes the data analysis techniques that facilitated interpretation of the findings. The chapter also addresses ethical considerations to ensure the study adheres to accepted research standards and maintains the confidentiality and rights of the participants. These methodological approaches ensured the research is systematic, reliable, and valid, ultimately contributing to the achievement of the study objectives.

3.2 Research Design

A research design refers to the framework that the investigator will follow from the beginning to the end of the study (Cooper & Schindler, 2016; Kothari, 2011). It consists of an arrangement of conditions or collections of data (Muaz, 2013). This study adopted a descriptive research design that utilizes both qualitative and quantitative approaches (Mugenda & Mugenda, 2003). The quantitative approach emphasized measurement, with data analyzed in numerical form to provide precise descriptions. According to Mugenda and Mugenda (2003), the quantitative approach, also known as the scientific method, is considered the traditional mode of inquiry in both research and evaluation. It places a strong emphasis on methodology, procedures, and statistical measures to test hypotheses and make predictions. Research based on quantitative methods facilitates systematic analysis of information, leading to valuable conclusions and recommendations regarding social settings and the individuals who exhibit those characteristics (Berg, 2011).

3.3 Target Population

A target population denotes a specific set or group of all possible elements that meet particular criteria to which the research findings will be applied (Shukla, 2020). The target population encompasses the complete group of individuals, events, or objects that the researcher intends to study (Bougie, 2010). It includes all individuals and items sharing similar observable characteristics (Mugenda & Mugenda, 2003). The target population for the study included 357 stakeholders from 70 donor funded water projects in Baringo county. Specifically, the study targeted, project managers overseeing donor-funded water projects in Baringo County, who provided insights into the project management tools utilized and their effectiveness.

Additionally, the study involved project staff members involved in the execution of these projects, offering firsthand experiences regarding the adaptation and effect of these tools. It also included donor representatives from various funding organizations to gather perspectives on project completion criteria and evaluation methods. Furthermore, community members who are beneficiaries of the water projects were included to provide feedback on the impact of these initiatives on their daily lives. Lastly, the study incorporated insights from government officials responsible for the oversight of water projects, ensuring a well-rounded understanding of the influence of project management tools on the successful completion of donor-funded water projects in the region as shown in the table below,

Table 1: Target Population

Category	Respondents	Percentage of the Respondents
Project Managers	1	0.3
Project Staff	140	39
Donor Representative	2	0.6
Community Representatives	210	59
Government Officials	4	1.1
Total	357	100

Source: Water Department, Baringo County (2024)

3.4 Sample Size and Sampling Technique

A suitable sampling frame is essential for selecting the sampling units in this study. According to Bafarasat (2021), a sampling frame is a list of elements from which the sample is drawn and is closely related to the target population. In this study, the sampling frame consisted of project managers, project staff, donor representatives, community members and government officials involved in donor-funded water projects in Baringo County. This information was gathered from relevant government agencies and organizations involved in these projects. As noted by Stratton (2021), the sample size should represent the targeted population effectively. The study utilized the Nassiuma (2000) method to determine the sample size, which indicates that a coefficient of variation in the range of 21% to 30% and a standard error between 2% and 5% are generally acceptable for most surveys. This approach assisted in calculating a sample size that balances accuracy with practical considerations, ensuring that the sample adequately reflects the perspectives of the stakeholders involved in donor-funded water projects in Baringo County. The Nassiuma's formula considers a coefficient variation of 21% and a standard error of 2% was used in this study. The formula is written as.

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

Where;

n = Sample size

N = Population

CV = Coefficient of Variation

E = Standard Error

After replacing the values, the sample size of respondents was:

n = 84 Respondents

$$n = \frac{357(0.21)^2}{(0.21)^2 + (357 - 1)0.02^2}$$

From the formula a sample of 84 respondents were picked using proportionate sampling technique as shown below

Table 2: Sample Size

Category	Respondents	Sample Size	Sampling method
Project Managers	1	-	-
Project Staff	140	32	Random
Donor Representative	2	1	Purposive
Community Representatives	210	50	Stratified
Government Officials	4	1	Purposive
Total	357	84	100

Source: Researcher (2025)

Table 2 outlines the sample size distribution for various categories of respondents involved in the study. The first category, "Project Managers," includes 1 respondent, but since the number is small, no specific sampling method was used. The second category, "Project Staff," consists of 140 potential respondents, from which a sample size of 32 was selected using a random sampling method. For the "Donor Representative" category,

there are 2 potential respondents, and 1 was selected using purposive sampling, ensuring the selection of a knowledgeable individual. The "Community Representatives" category, with 210 respondents, had a sample size of 50, selected using stratified sampling to ensure that different sub-groups within the community are represented. Finally, "Government Officials," with 4 respondents, had 1 participant chosen through purposive sampling. In total, from a population of 357, the sample size was 84 respondents, providing a representation of the different stakeholder groups involved in donor-funded water projects in Baringo County.

3.6 Data Collection Instruments

According to (Saris, 2017) a questionnaire is self-report data collection research tool that each research participant fills out as part of research study. The questionnaire for this study was developed based on the research objectives. It was divided into two sections: Section I gathered demographic information, while Section II focused on the independent variables of the study. Questions relating to these variables used a 5-point Likert scale, allowing respondents to indicate whether they strongly agree, agree, are neutral, disagree, or strongly disagree. As noted by Norman (2010), the Likert scale is effective for measuring the intensity of respondents' attitudes and feelings. The questionnaire predominantly featured closed-ended questions to obtain specific information on the variables under investigation. The questionnaire was administered to respondents involved in donor-funded water projects in Baringo County.

3.6 Pilot Study

A pilot test was conducted with 10 respondents from 10 donor-funded water projects in Samburu County to gather preliminary data. This data was analyzed using SPSS version 22 to assess the reliability coefficient. The questionnaires was administered, and participants were encouraged to provide feedback on the instructions, clarity, and

relevance of the questions. The insights gained from their responses were used to enhance the clarity, relevance, and reliability of the questionnaire items.

3.6.1 Validity of the Instrument

Bryman (2012) suggests that validity refers to how well a study measures or investigates what it intends to, and the extent to which the findings can be applied in different contexts. According to Saunders (2017), validity is the degree to which a research instrument measures what it claims to measure. In this study, content validity was ensured by evaluating how thoroughly the instrument assesses the key variables. Glesne (2015) highlights that data must not only be reliable but also accurate and truthful. To establish the validity of the questionnaire, feedback from my supervisor and other experts was sought to ensure its relevance and accuracy.

3.6.2 Reliability of the Instrument

According to Mugenda (2008), reliability refers to the consistency with which a research instrument, such as a questionnaire or interview, produces the expected results. In this study, the reliability of the questionnaire was tested using the test-retest method. This process involved having experts review the questions to ensure they reliably capture the necessary data. To further assess reliability, Cronbach's Alpha (α) was employed as a statistical measure to determine the internal consistency of the items within the questionnaire.

3.8 Data Collection Procedure

Burns and Grove (2010) define data collection as the systematic and precise process of gathering information relevant to the research objectives, using methods such as questionnaires. In this study, the process of collecting primary data began by obtaining an introduction letter from Mount Kenya University to present to the relevant authorities in Baringo County, including the Baringo County Government, the water project

management teams, and the National Commission for Science, Technology, and Innovation (NACOSTI). Upon application, a research permit was granted by NACOSTI. This permit, along with the letter from Mount Kenya University, was attached to the questionnaires distributed during data collection.

3.9 Data Analysis and Presentation

Kothari (2004) emphasizes that the data analysis phase is crucial in both scientific and social research, ensuring that all relevant information is captured for comparison and analysis. In this study, both quantitative and qualitative data analysis methods were used. Quantitative methods focused on summarizing data, identifying trends, and calculating averages and proportions, while qualitative analysis aimed to identify relationships among themes and categories from the data (Robson, 2002). Quantitative data was coded, entered, and analyzed using the Statistical Package for Social Sciences (SPSS), with the data organized according to demographic characteristics, research objectives, and other relevant groupings. The coding process helped to categorize responses, making it easier to summarize and analyze the data (Kombo & Tromp, 2006).

Data analysis included both descriptive and inferential statistics. Descriptive statistics, such as frequency, means, and standard deviations, were used to provide a meaningful summary of the population under study. These statistics were also useful in computing frequency, percentages, means, and standard deviations, facilitated by SPSS. Qualitative data was analyzed thematically based on the study's objectives. The results were presented in the form of frequency tables, bar graphs, and pie charts, which offer a clear and visual summary of data (Crossman, 2013). This method allows for the representation of data across multiple categories, making it easier to interpret large datasets visually.

The following regression model was fitted.

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

Where:

Y = Project Completion

X₁ = Stakeholder Analysis

X₂ = Project Planning

X₃ = Risk Management

X₄ = Monitoring and Evaluation

€ = Error Term β_0 = Minimum when all the independent variables are held constant at zero (referred to as constant or intercept)

3.10 Ethical Considerations

The researcher sought approvals from Mount Kenya University and obtain a research permit from the Ministry of Education, specifically through the National Commission for Science, Technology and Innovation (NACOSTI), to conduct the study. During the data collection, analysis, and reporting stages, the researcher strictly upheld confidentiality and anonymity to protect the participants' privacy. Additionally, a formal letter was written to local administrators requesting permission to involve the community in the research. Throughout the study, the researcher adhered to the highest ethical standards, including honesty, transparency, and confidentiality, to ensure the integrity of the research process.

The researchers respected the autonomy of research participants, maintain professional integrity and respect for diversity. Researcher also treated participants with courtesy and respect, and never exploiting them or taking advantage of them for personal gain or benefit.

The researcher visited the selected participants to inform the intent to conduct a study and then seek their informed consent to participate. Researcher made sure they participants understood the research, their rights, the risks and benefits involved, and the data that was collected. The respondents also were assured of their privacy, anonymity and safety.



CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents the findings of the study on the influence of adaptation of project management tools on the completion of donor funded water projects in Baringo County. The chapter is organized according to the study objectives and provides both descriptive and inferential statistical analyses. It begins with an overview of the response rate and the demographic characteristics of the respondents. The chapter then presents findings based on each of the four objectives: the influence of stakeholder analysis, project planning, risk management, and monitoring and evaluation on project completion. The results are interpreted and discussed in relation to the existing literature and the research questions guiding the study

4.2 Response Rate

The response rate refers to the proportion of questionnaires that were completed and returned out of the total distributed. In this study, a total of 84 questionnaires were administered to respondents involved in donor funded water projects in Baringo County. Out of these, 71 were duly completed and returned, representing a response rate of 84.5%. As shown in Table 3, this response rate is considered excellent and adequate for analysis. According to Babbie (2010), a response rate of 70% and above is generally regarded as very good and sufficient for drawing reliable conclusions in survey research.

Table 3: Response Rate

Response Rate	Frequency	Percent
Returned Questionnaires	71	84.5%
Unreturned Questionnaires	13	15.5%
Total	84	100%

Source: Field Data,(2025)

4.2.2 Reliability of Study Variables

The study sought to evaluate the reliability of the research instrument to confirm the consistency and stability of the results. This step was crucial in ensuring that the information gathered would yield dependable and credible outcomes.

Table 4: Reliability Results

Variable	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Items
Stakeholder Analysis	0.78	0.79	9
Project Planning	0.81	0.82	9
Risk Management	0.76	0.77	9
Monitoring and Evaluation	0.84	0.85	9
Project Completion	0.88	0.89	9

Source: Field Data, (2025)

The reliability results presented in Table 4 indicate that all the research variables achieved acceptable levels of internal consistency, as measured by Cronbach's Alpha. Stakeholder analysis recorded a Cronbach's Alpha of 0.78, project planning scored 0.81, and risk management had 0.76, all of which fall within the acceptable reliability range, suggesting that the items used to measure these constructs were consistent. Monitoring and evaluation posted a higher reliability score of 0.84, while project completion demonstrated the highest internal consistency with a Cronbach's Alpha of 0.88. These results, all exceeding the minimum threshold of 0.70 recommended by Nunnally and Bernstein (1994), confirm that the research instrument was reliable and suitable for data collection and subsequent analysis.

4.3 Demographic Characteristics

This section outlines the demographic profile of respondents who took part in the study on the adaptation of project management tools and the completion of donor funded water projects in Baringo County. Understanding participants' background information is important in social science research, as it facilitates the classification of respondents into meaningful groups for analysis. The study collected demographic data including gender, age, level of education, and years of work experience, which are presented and discussed in the subsequent subsections.

4.3.1 Distribution of the Respondents Based on the Gender

The gender distribution of the respondents, as shown in figure 2, indicates that 57% were male while 43% were female. This relatively balanced representation reflects the participation of both genders in donor funded water projects in Baringo County. Collecting gender data was important for this study as it allowed the researcher to assess whether gender dynamics play a role in the adaptation and implementation of project management tools. Understanding the gender composition also helps in identifying any disparities or biases that may exist in project involvement, leadership, or decision-making processes, which can inform more inclusive and effective project management practices.

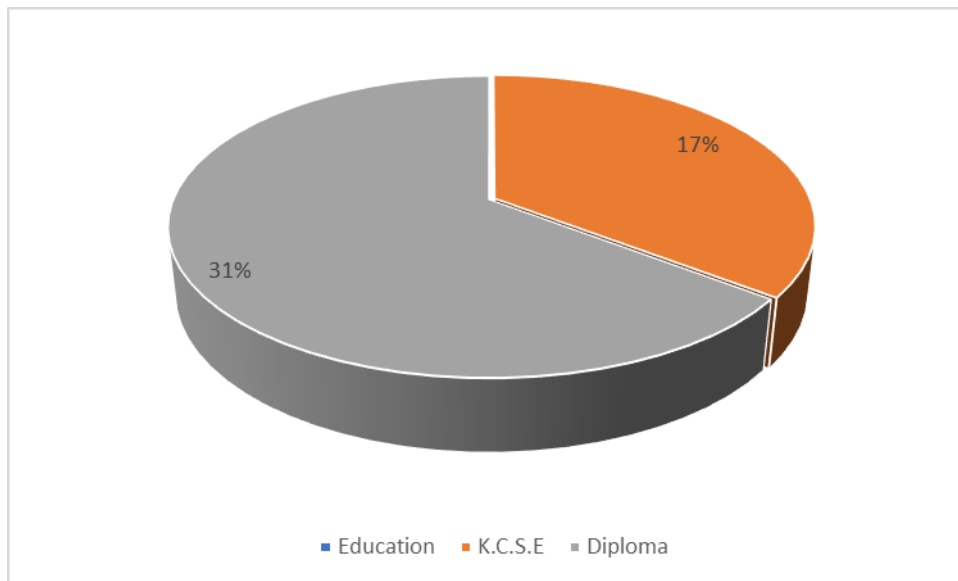


Figure 2: Gender

Source :Field Data, (2025)

4.3.2 Distribution of the Respondents Based on Age Bracket

The age distribution of respondents reveals a diverse range of participants across different age groups: 12% were below 20 years, 21% were aged 21–29, 25% were between 30–39, 23% fell within the 40–49 age group, and 19% were over 50 years. This spread demonstrates that individuals from various age brackets are involved in the implementation of donor funded water projects in Baringo County. It was important to gather information on age because age can influence an individual's experience, decision-making capacity, and familiarity with project management tools. Additionally, assessing age distribution helps determine whether project implementation benefits from a mix of youthful innovation and seasoned experience, contributing to more balanced and effective project execution. This is shown in figure 3 below

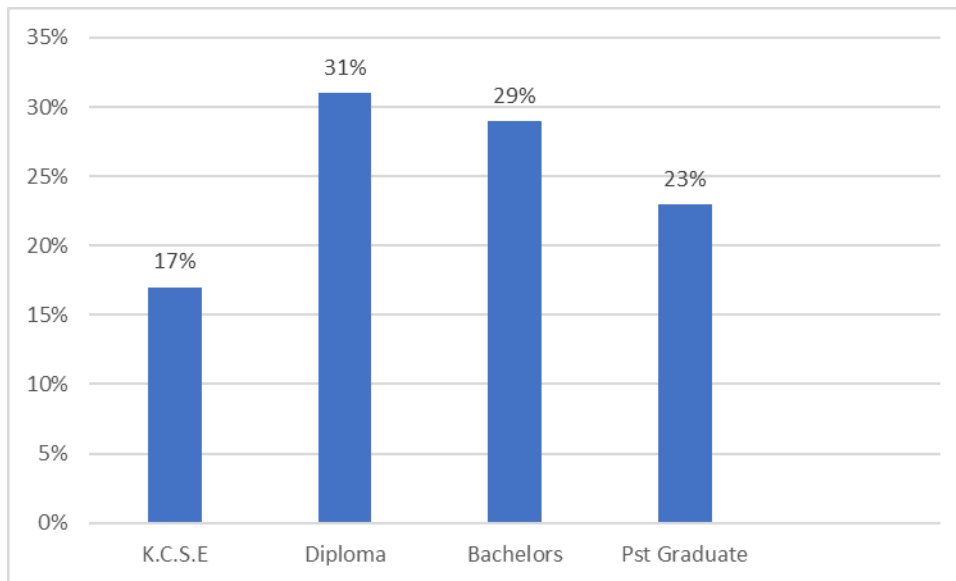


Figure 3: Age Distribution

Source: Field Data, (2025)

4.3.3 Distribution of the Respondents Based on Work Experience

The distribution of respondents based on work experience indicates that the majority had substantial professional exposure. Specifically, 19% of the respondents had between 0–5 years of experience, suggesting that a portion of the workforce involved in donor funded water projects in Baringo County is relatively new or in the early stages of their careers. The largest group, comprising 31%, had between 6–10 years of experience, indicating a strong presence of mid-career professionals who are likely to possess both theoretical knowledge and practical project management skills. Additionally, 27% had between 11–15 years of experience, and 23% had over 16 years, reflecting a significant representation of highly experienced personnel with deep institutional and field knowledge.

This diversity in experience levels is critical for project implementation, as it combines fresh perspectives with seasoned expertise. Collecting data on work experience was necessary because the ability to effectively adapt and apply project management tools is often influenced by the depth of practical exposure to similar projects. Experienced professionals are more likely to understand the complexities of project planning,

stakeholder engagement, risk management, and monitoring and evaluation. Therefore, the findings help assess how experience levels may impact the completion of donor funded water projects and provide insight into workforce capacity and training needs within the sector.

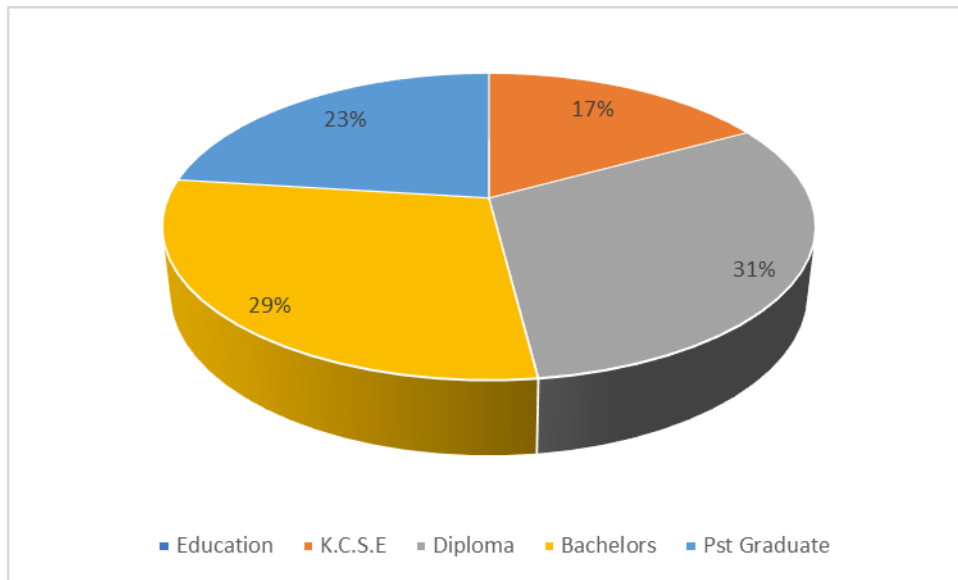


Figure 4: Work Experience

Source : Field Data, (2025)

4.3.4 Distribution of the Respondents Level of Education

The education levels of the respondents in this study show a wide range of qualifications, reflecting varying degrees of formal education among individuals involved in donor funded water projects in Baringo County. A total of 17% of the respondents had only completed the Kenya Certificate of Secondary Education (K.C.S.E.), suggesting that some individuals may have entered the workforce with basic education but gained practical experience over time. The largest group, 31%, held a diploma, indicating a significant portion of the workforce has received specialized education or training in their respective fields. Additionally, 29% of respondents had obtained a bachelor's degree, showcasing a strong representation of individuals with formal higher education,

likely equipped with advanced knowledge and skills relevant to project management and technical aspects of the projects. Lastly, 23% of the respondents held postgraduate qualifications, which suggests that a considerable number of the workforce are well-educated and may possess in-depth expertise in specific areas of project management or other related disciplines.

The variety in educational qualifications is important because it provides insights into the intellectual capacity and expertise available for the successful completion of donor funded water projects. Respondents with higher levels of education, particularly those with postgraduates and bachelor's degrees, are likely to have a deeper understanding of project management tools, strategic planning, and technical problem-solving, which can positively impact the quality and efficiency of project outcomes. This demographic data is crucial for understanding how education influences the application of project management tools and whether there is a need for further capacity building among less educated staff.

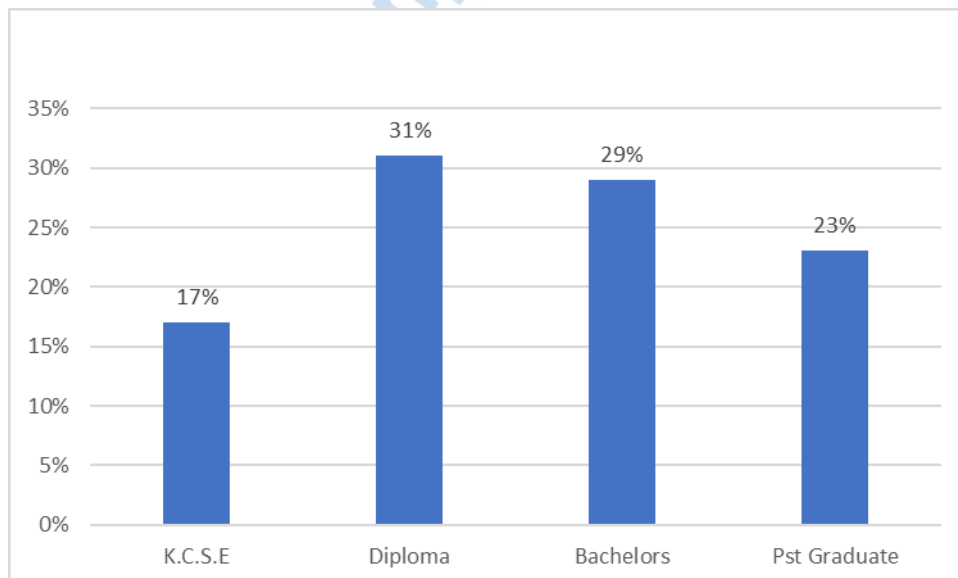


Figure 5: Level of Education

Source: Field Data, (2025)

4.4 Descriptive Findings and Discussions

Section 4.4 presents a comprehensive analysis of the descriptive findings aligned with the study's objectives. This section focuses on the key results, which were analyzed using measures of central tendency (mean) and dispersion (standard deviation). The analysis was based on a five-point Likert scale, where 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree. These statistical tools facilitate an understanding of the respondents' views on the influence of project management tools on the completion of donor funded water projects in Baringo County, helping to gauge the effectiveness of various management strategies employed in these projects.

4.4.1 Statements relating to Stakeholders Analysis on Project Completion

The respondents were asked to indicate whether Stakeholders Analysis on Project Completion. The results are indicated by Table 4.

Table 4: Statements relating to Stakeholders Analysis on Project Completion

	N	Min	Max	Mean	Std. Dev.
All relevant stakeholders for the project are accurately identified.	71	2	5	4.09	.869
The project includes stakeholders from diverse Stakeholders are actively involved throughout the project lifecycle	71	1	5	3.63	.974
Stakeholder involvement has a significant influence on project decisions	71	2	5	3.52	1.025
Feedback from stakeholders is incorporated into project activities and decision-making	71	2	5	3.87	.821
	71	1	5	3.70	.971

Source: Survey Data (2025)

The data from Table 4 shows that respondents largely agreed that relevant stakeholders are accurately identified, with a high mean score of 4.09 and a standard deviation of 0.869. This indicates not only agreement among respondents but also a consistent

approach in stakeholder identification across the projects. Proper identification of stakeholders is crucial in ensuring that those who have interest, influence, or are impacted by the project are included from the onset, which contributes significantly to project success. The influence of stakeholders on project decisions also scored relatively high, with a mean of 3.87 and a low standard deviation of 0.821. This implies that stakeholders are not only present but also meaningfully contribute to decision-making processes. When stakeholders are involved in shaping decisions, projects are more likely to reflect the needs of the community, improve transparency, and enhance ownership, which can result in smoother implementation and fewer conflicts.

On the other hand, the inclusion of stakeholders from diverse sectors had a moderate mean score of 3.63 and a slightly higher standard deviation of 0.974. This suggests that while there is some effort to include a range of stakeholders such as government bodies, non-governmental organizations, community leaders, and beneficiaries it may not be uniformly applied across all projects. Incorporation of feedback from stakeholders into project activities and decision-making recorded a mean score of 3.70 with a standard deviation of 0.971, reflecting moderate agreement with some variation in responses. This points to a partial practice of using stakeholder input in project revisions or implementation, which, if strengthened, could improve responsiveness and accountability in project management.

The lowest score was observed in the involvement of stakeholders throughout the project lifecycle, which had a mean of 3.52 and a standard deviation of 1.025. The higher spread of responses suggests inconsistencies in sustaining stakeholder engagement from initiation through to completion. Continuous involvement is essential for monitoring progress, addressing emerging issues, and ensuring that stakeholder expectations are managed effectively. The findings from the current study align closely with the literature

reviewed by Ngilambi and McCubbin (2022) and Aapaoja and Haapasalo (2019), reinforcing the critical role stakeholder analysis plays in project success. The high mean scores for identifying relevant stakeholders and their influence on decision-making reflect a strong emphasis on inclusive and participatory project management practices in Baringo County.

These findings support Ngilambi and McCubbin's (2022) conclusion that effective communication and early involvement of stakeholders are vital for efficient service delivery in community-based water projects. Similarly, the study's observation that sustained stakeholder involvement throughout the project lifecycle was moderately practiced echoes Aapaoja and Haapasalo's (2019) concern about gaps in long-term stakeholder engagement. Both reviewed studies emphasize early inclusion and communication as factors that improve project alignment with community needs and reduce implementation uncertainties findings that correlate directly with the current study's evidence that stakeholder engagement significantly influences project outcomes. However, just like in the cited literature, the current study highlights areas for improvement in continuous stakeholder participation and diversity, indicating a need for structured stakeholder management frameworks across the project lifespan.

4.4.2 Statements on Project Planning on Project Completion

In addition, the respondents were asked to indicate whether Project Planning on Project Completion. The results are indicated by Table 5.

Table 5: Statements on Project Planning on Project Completion

	N	Min	Max	Mean	Std. Dev.
The project scope was clearly defined at the beginning of the project	71	2	5	3.65	1.126
Coord Adequate resources were allocated to meet project objectives.	71	1	5	3.57	.928
A contingency plan is in place to handle potential risks or issues	71	1	5	3.96	.955
The project adheres to its planned timeline and schedules	71	1	5	3.58	1.009
Project milestones were well-defined and monitored.	71	1	5	3.69	1.098

Source: Survey Data (2025)

The descriptive findings on project planning, as shown in Table 5, provide valuable insights into how planning practices influence the completion of donor-funded water projects in Baringo County. The highest-rated item was the presence of contingency plans (Mean = 3.96, SD = 0.955), which indicates that many respondents agreed that risk preparedness measures were considered during the planning phase. This suggests a proactive approach to managing unforeseen challenges, which is a critical success factor in project execution. The fact that project milestones were considered well-defined and monitored (Mean = 3.69, SD = 1.098) implies that tracking and evaluation mechanisms were fairly well established, allowing project teams to gauge progress and make timely adjustments.

The clarity of the project scope (Mean = 3.65, SD = 1.126) also received a moderately high rating, though the relatively high standard deviation implies mixed perceptions among respondents, with some possibly experiencing ambiguity in scope definition. Adequate resource allocation (Mean = 3.57, SD = 0.928) and adherence to planned timelines (Mean = 3.58, SD = 1.009) were rated slightly lower, which may point to

inconsistencies in budgetary support and scheduling discipline across different projects. The variation in standard deviations ranging from 0.928 to 1.126 shows a notable spread in experiences, suggesting that while some projects were well-resourced and on schedule, others may have suffered from delays or underfunding.

The data highlights that while key elements of project planning are generally present, there are gaps in the uniform application of these practices. Proper definition of scope, sufficient resourcing, effective scheduling, and contingency planning are all essential components that influence project success. These findings show the need for strengthened planning frameworks that ensure consistency, especially in resource allocation and time management, to improve the completion rates of donor-funded water projects in the county.

The findings from the current study align strongly with the literature on the importance of project planning in ensuring successful project completion. The data showed that contingency planning and milestone tracking received relatively high mean scores, indicating that proactive risk management and progress monitoring were key planning activities within the donor-funded water projects in Baringo County. These outcomes resonate with Anbari (2023), who emphasized that a clearly structured execution process anchored in detailed project planning is essential for maintaining control, adjusting effectively, and achieving successful outcomes. Similarly, the observed variation in responses concerning scope clarity and resource allocation echoes the findings of Mwangi (2020), who noted that while planning improves project completion, challenges often arise when there are changes in the scope that are not adequately managed.

The moderate ratings on timeline adherence and resource allocation in this study further support Mwangi's observation that even well-planned projects may face setbacks if initial plans are not adjusted for emerging scope changes. Moreover, Ogogo et al. (2018)

highlighted that effective planning is often a hallmark of competent contractors, which contributes to higher project performance a notion reflected in this study's findings where structured planning activities such as milestone setting and contingency preparation appeared to enhance project outcomes. However, like the literature, this study also underscores a need for continuous improvement in planning consistency, especially in managing scope and resources, to further enhance timely project completion.

4.4.3 Statements relating to Risk Management on Project Completion

Furthermore, the respondents were asked to indicate whether Risk Management on Project Completion. The results are indicated by Table 6.

Table 6: Statements relating to Risk Management on Project Completion

	N	Min.	Max.	Mean	Std. Dev.
All potential project risks are identified early in the project.	71	1	5	3.75	.965
Effective strategies are implemented to mitigate identified risks.	71	1	5	3.77	.905
Risk monitoring is consistently conducted throughout the project lifecycle	71	1	5	4.15	.963
A comprehensive risk assessment is done to evaluate the impact of potential risks	71	2	5	4.04	1.038
The project team is always prepared to respond to any unforeseen events or risks	71	1	5	3.59	1.172

Source: Survey Data (2025)

The descriptive findings on risk management and its influence on project completion show a generally positive perception among respondents, with variations in strength across different aspects. The highest rated item was on consistent risk monitoring throughout the project lifecycle, with a mean of 4.15 and a standard deviation of 0.963,

indicating that most respondents strongly agreed that risk monitoring is an integral part of the project process. This suggests a structured and continuous approach to identifying changes in risk exposure over time. Closely following was the practice of conducting comprehensive risk assessments to evaluate potential impacts, which recorded a mean of 4.04 and a standard deviation of 1.038. This reflects a strong commitment to systematically analyzing potential threats to minimize disruption to project activities.

Early identification of potential project risks was also positively rated, with a mean of 3.75 and a standard deviation of 0.965, indicating that while respondents generally agreed that risk identification is conducted early, there is still room for improvement in capturing all relevant risks during the planning phase. Implementation of effective mitigation strategies received a mean of 3.77 and a standard deviation of 0.905, suggesting a fair level of confidence in the quality and effectiveness of those strategies. However, preparedness for unforeseen events scored relatively lower, with a mean of 3.59 and a standard deviation of 1.172, revealing variability in how equipped project teams felt to respond to unexpected disruptions. These results imply that while risk management practices such as monitoring and impact assessment are well established, challenges remain in early-stage risk detection and rapid response capacity. Addressing these gaps is crucial for enhancing the resilience and successful completion of donor-funded water projects.

The findings of this study strongly support the literature asserting the importance of risk management in project success. Wanyonyi (2020) emphasized that effective risk response strategies such as avoidance, transference, reduction, and acceptance positively influence project completion. Similarly, the current study shows that donor-funded water projects in Baringo County effectively apply these strategies, particularly through consistent risk monitoring, early risk identification, and comprehensive risk assessments.

This demonstrates a proactive approach to mitigating uncertainties throughout the project lifecycle, thus contributing to successful outcomes.

Moreover, the study addresses a contextual gap left by Wanyonyi, whose research focused on international organizations in Nairobi, by providing insights specific to rural water projects. In addition, the findings expand on Gitau’s (2020) study by demonstrating that risk management practices are not only critical during the planning phase but are sustained throughout the execution and monitoring stages of the project. This broader application reinforces the role of risk management in ensuring timely and successful project completion

4.4.4 Statements relating to Monitoring and Evaluation on Project Completion

Additionally, the respondents were asked to indicate whether Monitoring and Evaluation on Project Completion. The results are indicated by Table 7.

Table 7: Statements relating to Monitoring and Evaluation on Project Completion

	N	Min.	Max.	Mean	Std. Dev.
A structured M&E framework exists for monitoring project activities	71	1	5	3.89	.957
The frequency of monitoring activities is sufficient to keep the project on track.	71	2	5	4.35	.774
Data collection and reporting is done accurately and in a timely manner.	71	1	5	4.03	.910
Regular evaluation reports are generated to assess project progress	71	1	5	3.89	.808
Feedback from monitoring and evaluation was used to improve project implementation	71	1	5	3.91	.849

Source: Survey Data (2025)

The findings related to monitoring and evaluation (M&E) on project completion highlight the importance of structured and consistent M&E practices in ensuring successful project outcomes. The statement regarding the presence of a structured M&E framework for monitoring project activities received a mean of 3.89 with a standard deviation of 0.957, suggesting that while a majority of respondents agreed that an organized M&E framework was in place, there was some degree of variation in how different individuals perceived the structure and effectiveness of these frameworks. This could point to differences in understanding or the implementation of the M&E framework across various departments or projects. The frequency of monitoring activities was rated the highest, with a mean of 4.35 and a standard deviation of 0.774, indicating strong agreement among respondents that the monitoring frequency was sufficient to keep the project on track. The relatively low standard deviation signifies a consensus that regular monitoring is critical for ensuring that projects remain aligned with their goals and timelines, minimizing deviations or delays. This result emphasizes the role of continuous monitoring in identifying potential issues early and ensuring timely interventions to keep projects on schedule.

Data collection and reporting were also rated highly (mean = 4.03, SD = 0.910), with respondents indicating that the data gathered for the project was not only accurate but also collected and reported in a timely manner. This is crucial for informed decision-making, as accurate and timely data allow project managers to assess progress and make adjustments when necessary. The standard deviation suggests that while most respondents agreed, there may be instances where the timeliness or accuracy of data collection could be improved. Another important finding is the regular generation of evaluation reports to assess project progress (mean = 3.89, SD = 0.808), reflecting the ongoing assessment of project milestones and outcomes. Regular evaluation reports are

vital in tracking performance against the project's goals and identifying areas for improvement. The standard deviation here again indicates that while the majority of respondents felt that evaluations were regularly conducted, there might be occasional inconsistencies in how these reports are generated or utilized.

Finally, the use of feedback from M&E activities to improve project implementation (mean = 3.91, SD = 0.849) showing the importance of using monitoring and evaluation as a tool for project improvement. The results suggest that feedback from M&E activities was generally integrated into decision-making processes, leading to adjustments and improvements in project implementation. However, the slight variation in responses might suggest that in some cases, the feedback loop was either not fully utilized or implemented inconsistently.

The findings of this study on monitoring and evaluation (M&E) align with existing literature, particularly in the context of project completion. Waithera and Wanyoike (2019) found that M&E significantly influenced project outcomes in agribusiness projects in Nakuru County, highlighting the importance of continuous monitoring for project success, which resonates with the current study's findings on the frequency and accuracy of M&E activities. Similarly, Ngatia (2016) emphasized the role of participatory M&E systems in enhancing project effectiveness, which supports the current study's results that structured M&E frameworks and regular evaluations are essential for project completion. While both studies focused on different sectors agribusiness and community-based development the current study extends this understanding by focusing on donor-funded water projects in Baringo County, showing that M&E is not only vital for project implementation but also crucial for ensuring successful completion. Thus, the findings corroborate the literature, while also addressing a gap regarding the specific role of M&E in water projects.

4.4.4 Project Completion

The study sought views on Project Completion in Baringo County. The results are indicated by Table 8.

Table 8: Project Completion

	N	Min.	Max.	Mean	Std. Dev.
The projects are completed within the planned timeline due to project management tools	71	1	5	3.63	.959
Project adheres to the initial budget without significant overruns.	71	1	5	3.57	1.057
The quality of the project outcomes meets the expectations of stakeholders	71	1	5	3.51	1.026
The completed project has been sustainable beyond the implementation phase.	71	2	5	3.89	1.009
The project's deliverables are achieved as outlined in the original plan	71	1	5	3.86	.938

Source: Survey Data (2025)

The descriptive findings on project completion provide a detailed assessment of how donor-funded water projects in Baringo County have performed against key success indicators. The highest-rated item, with a mean of 3.89 and standard deviation of 1.009, pertains to the sustainability of completed projects beyond the implementation phase. This indicates a strong consensus among respondents that the projects were designed and executed with long-term functionality in mind, suggesting effective integration of sustainability strategies such as maintenance planning, stakeholder ownership, and community engagement. The achievement of project deliverables as outlined in the original plan also received a high mean score of 3.86 (SD = 0.938), implying that the projects largely fulfilled their intended objectives. This reflects effective alignment

between planning and execution, as well as proper monitoring to ensure adherence to original goals.

On the other hand, the completion of projects within the planned timelines had a mean score of 3.63 (SD = 0.959), pointing to a moderately positive outcome. While project management tools may have helped maintain schedules, the relatively lower score suggests that some projects experienced delays, possibly due to unforeseen challenges such as logistical setbacks, funding disbursement issues, or weather-related disruptions. Budget adherence had an even lower mean of 3.57 (SD = 1.057), indicating variability in cost control across different projects. This could point to issues such as underestimation during budgeting, scope changes, or inadequate contingency planning.

The lowest-rated aspect was the quality of project outcomes meeting stakeholder expectations, with a mean score of 3.51 (SD = 1.026). This relatively low score, coupled with a high standard deviation, reflects a diverse range of opinions, suggesting that while some stakeholders were satisfied with the project outcomes, others found the results lacking. This may be attributed to mismatched expectations, quality control issues, or insufficient stakeholder engagement during the planning and execution phases. While the projects generally performed well in terms of sustainability and goal attainment, there remains room for improvement in ensuring timely delivery, budget adherence, and meeting stakeholder quality expectations.

4.5 Correlation Analysis

The correlation analysis presented in Table 10 shows that there is a statistically significant and positive relationship between all four independent variables stakeholders' analysis, project planning, risk management, and monitoring and evaluation and project completion. Among these, stakeholders' analysis recorded the strongest correlation with

project completion, with a Pearson coefficient of 0.634 and a significance value of 0.000. This implies that effective stakeholder engagement and management play a critical role in the successful completion of projects. When stakeholders are properly identified, their interests addressed, and they are actively involved in decision-making, it creates a conducive environment for project execution, reducing resistance and enhancing support throughout the project lifecycle.

Project planning, on the other hand, recorded a moderate positive correlation of 0.300 with a significance level of 0.041. Although this is statistically significant at the 0.05 level, it is the weakest among the four variables studied. This suggests that while planning contributes positively to project completion through scope definition, resource allocation, and scheduling it may not be as impactful alone without the support of other project management functions. The findings imply that project planning needs to be integrated with robust implementation and control mechanisms to realize its full potential in ensuring project completion.

Risk management showed a moderate but stronger correlation with project completion than planning, at 0.410 with a significance level of 0.006. This demonstrates that identifying and mitigating risks early in the project lifecycle has a considerable influence on whether the project is completed successfully. Effective risk management helps in avoiding unexpected disruptions, budget overruns, and timeline deviations by preparing the project team to deal with unforeseen challenges. This reinforces the need for risk assessments and contingency planning in project management processes.

Lastly, monitoring and evaluation (M&E) registered a Pearson correlation of 0.425 with a significance of 0.003, indicating a moderate to strong relationship with project completion. This finding highlights the importance of having a structured M&E framework that includes timely data collection, regular reviews, and feedback utilization

to keep the project on track. M&E activities not only provide visibility into project progress but also enable timely corrective measures, which enhances the probability of completing the project within scope, time, and budget.

Table 9: Correlation Analysis Results

		Stakeholders Analysis	Project Planning	Risk Management	Monitoring and Evaluation
Project Completion	Pearson Correlation	.634**	.300*	.410**	.425**
	Sig.(2tailed)	.000	.041	.006	.003
	N	71	71	71	71

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data (2025)

4.6 Regression Analysis

Linear regression analysis was conducted to assess the influence of the independent variable's stakeholder analysis, project planning, risk management, and monitoring and evaluation on the dependent variable, which is project completion of donor-funded water projects in Baringo County, Kenya. The analysis includes the R square value, a statistical measure that explains how well the regression model fits the observed data. The findings of this analysis are presented in Tables 10, 11, and 12. This analysis provides insights into the extent to which each project management tool contributes to the successful completion of water projects, offering a clear understanding of the key drivers behind project outcomes in Baringo County.

Table 10: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.692	.479	.432	.81245

a. Predictors: (Constant), stakeholder analysis, project planning, risk management, and monitoring and evaluation.

b. Dependent Variable: Project Completion

Source: Survey Data (2025)

The results presented in Table 10: Regression Model Summary offer key insights into the relationship between the independent variables stakeholder analysis, project planning, risk management, and monitoring and evaluation and the dependent variable, which is project completion. The R value of 0.692 indicates a strong positive correlation between the combined predictors and project completion. This implies that as stakeholder analysis, project planning, risk management, and monitoring and evaluation improve, the likelihood of successful project completion also increases. In practical terms, this shows that the effectiveness of these project management components is strongly associated with how well donor-funded water projects in Baringo County are completed.

The R Square value, which is 0.479, demonstrates that approximately 47.9% of the variance in project completion can be explained by the four independent variables in the model. This means that nearly half of the changes in project outcomes are attributed to how well the project team handles stakeholder engagement, planning, risk management, and M&E processes. The remaining 52.1% of variation may be influenced by other factors not included in the model, such as political interference, environmental conditions, funding delays, or technical challenges. The Adjusted R Square, which stands at 0.432, slightly lowers the R Square to account for the number of predictors used and the sample size. This is a more conservative estimate and suggests that after adjusting for

the number of variables in the model, about 43.2% of the variation in project completion is still explained by the model. This is a respectable value in social science research and suggests a meaningful level of explanatory power.

Finally, the Standard Error of the Estimate, which is 0.81245, measures the typical distance between the observed actual outcomes and the model's predicted values. A smaller standard error indicates a more precise prediction model. In this case, the value suggests a moderate level of prediction accuracy, which is acceptable in studies involving complex real-world phenomena like project implementation. These results confirm that stakeholder analysis, project planning, risk management, and monitoring and evaluation are significant contributors to the successful completion of donor-funded water projects in Baringo County. The model provides a strong basis for understanding how these project management tools influence outcomes and underscores the importance of strengthening these areas to enhance project performance.

Table 11: ANOVA Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.681	4	6.170	9.845	.000 ^b
	Residual	37.422	66	.567		
	Total	62.103	70			

a. Dependent Variable: Project Completion

b. Predictors: (Constant), stakeholder analysis, project planning, risk management, and monitoring and evaluation.

Source: Survey Data (2025)

The ANOVA (Analysis of Variance) results in Table 11 provide insight into the overall significance of the regression model used to examine the relationship between the independent variables stakeholder analysis, project planning, risk management, and monitoring and evaluation and the dependent variable, project completion. From the

table, the regression sum of squares is 24.681, while the residual sum of squares is 37.422, giving a total sum of squares of 62.103. This implies that a substantial portion of the total variation in project completion is explained by the independent variables included in the model.

The mean square for the regression is 6.170, and the mean square for the residual is 0.567. The F-statistic is 9.845, and it is associated with a p-value (Sig.) of .000. Since the p-value is less than 0.05, the model is statistically significant at the 5% level, indicating that at least one of the independent variables significantly influences project completion. The ANOVA results confirm that the regression model provides a good fit for the data and that stakeholder analysis, project planning, risk management, and monitoring and evaluation collectively have a significant effect on the successful completion of donor-funded water projects in Baringo County. This supports the use of these project management practices to enhance project outcomes.

Table 12: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Beta	Std. Error	Beta		
	.428	.118		3.627	.001
	.685	.132	.597	5.189	.000
	.267	.117	.198	2.282	.026
1	.438	.145	.341	3.021	.004
	.512	.129	.372	3.771	.000

a. Dependent Variable: Project Completion

Source: Survey Data (2025)

Based on the regression analysis, the relationship between the independent variables stakeholder analysis, project planning, risk management, and monitoring and evaluation

and the dependent variable, project completion, can be expressed through the following regression equation:

$$Y = 0.428 + 0.685X_1 + 0.267X_2 + 0.438X_3 + 0.512X_4 + \varepsilon$$

Where:

Y represents project completion,

X₁ represents stakeholder analysis,

X₂ represents project planning,

X₃ represents risk management,

X₄ represents monitoring and evaluation,

β₀ (0.428) is the constant term, indicating the level of project completion when the independent variables are not considered.

The constant value of 0.428 suggests a baseline level of project completion even in the absence of stakeholder analysis, planning, risk management, and monitoring efforts. This implies that certain inherent or external factors may contribute to project completion independently. The coefficient for stakeholder analysis (0.685) indicates that a one-unit improvement in stakeholder engagement is associated with a 0.685 unit increase in project completion, making it the most influential variable in the model. This highlights the critical role of involving relevant stakeholders in planning, decision-making, and execution, ensuring ownership, accountability, and smoother implementation.

The coefficient for project planning (0.267) signifies that a unit enhancement in planning results in a 0.267 unit increase in project completion. Although less influential than other predictors, this result underscores the importance of structured planning in resource allocation, timeline management, and budgeting for successful project execution. For risk management, the coefficient is 0.438, suggesting that a unit increase in effective risk

management leads to a 0.438 unit increase in project completion. This demonstrates the importance of identifying and mitigating potential project threats, which can help avoid delays, cost overruns, or failure.

The coefficient for monitoring and evaluation (0.512) reflects that a unit increase in M&E effectiveness yields a 0.512 unit increase in project completion. This affirms the importance of continuous oversight, performance tracking, and feedback mechanisms in ensuring that project objectives are achieved within the set timelines and budget. The regression results reveal that all four variables have a positive and statistically significant influence on project completion. Stakeholder analysis has the most substantial effect, followed by monitoring and evaluation, risk management, and project planning. These findings emphasize the need for a comprehensive approach in managing donor-funded water projects where inclusive participation, proactive risk control, structured planning, and regular performance evaluation are key to ensuring successful completion in Baringo County.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a comprehensive summary of the key findings of the study on the Adaptation of Project Management Tools on Completion of Donor-Funded Water Projects in Baringo County. It presents the main results drawn from both descriptive and inferential statistical analyses. The chapter begins by outlining the core findings in relation to the study objectives. It then proceeds to draw conclusions based on these findings, followed by practical recommendations informed by the results. Lastly, the chapter proposes areas for further research to deepen understanding and address gaps identified in the current study.

5.2 Summary of the Study

The major study findings are summarized in this section. It outlines the summary of the findings in line with the objectives of the study.

5.2.1 Stakeholder Analysis and Project Completion

The descriptive findings revealed that stakeholder analysis is generally well-integrated into donor-funded water projects in Baringo County. The identification of relevant stakeholders was rated highly (mean = 4.09, SD = 0.869), indicating consistent and accurate recognition of key project actors. Additionally, the influence of stakeholders on project decisions received a strong rating (mean = 3.87, SD = 0.821), demonstrating that stakeholders not only participated but also influenced outcomes. However, inclusion of diverse stakeholders had a moderate rating (mean = 3.63, SD = 0.974), suggesting inconsistencies in involving a wide spectrum of participants such as NGOs and community members. The incorporation of stakeholder feedback (mean = 3.70, SD = 0.971) and continuous involvement across the project lifecycle (mean = 3.52, SD =

1.025) were moderate, showing gaps in sustained engagement and two-way communication. From an inferential perspective, stakeholder analysis had the strongest positive and statistically significant correlation with project completion (Pearson's $r = 0.634$, $p = 0.000$). This implies that the success of donor-funded projects is heavily influenced by how well stakeholders are managed and engaged throughout the project process.

5.2.2 Project Planning and Project Completion

The descriptive statistics indicated that project planning practices were generally present, though not uniformly applied across projects. Contingency planning received the highest score (mean = 3.96, SD = 0.955), suggesting proactive risk preparedness. Monitoring of project milestones (mean = 3.69, SD = 1.098) and clarity of project scope (mean = 3.65, SD = 1.126) were also rated fairly well, although the high standard deviations revealed mixed experiences. Adequate resource allocation (mean = 3.57, SD = 0.928) and adherence to timelines (mean = 3.58, SD = 1.009) were moderately rated, indicating that some projects faced issues related to funding and scheduling. The inferential findings showed a weak but statistically significant positive correlation between project planning and completion (Pearson's $r = 0.300$, $p = 0.041$). This suggests that while planning contributes to project success, it is less influential when not combined with other factors like implementation and monitoring.

5.2.3 Risk Management and Project Completion

The descriptive findings showed a generally favorable perception of risk management among respondents. Continuous risk monitoring received the highest mean (4.15, SD = 0.963), emphasizing the importance of tracking risk throughout the project lifecycle. Comprehensive risk assessment (mean = 4.04, SD = 1.038) and early identification of risks (mean = 3.75, SD = 0.965) were also positively rated. Effective mitigation

strategies (mean = 3.77, SD = 0.905) were moderately acknowledged, while preparedness for unforeseen events was relatively lower (mean = 3.59, SD = 1.172), showing room for improvement in emergency preparedness. Inferential analysis indicated a moderate and statistically significant correlation between risk management and project completion (Pearson's $r = 0.410$, $p = 0.006$). This means that strong risk management practices, particularly proactive assessments and ongoing monitoring, significantly enhance project success rates.

5.2.4 Monitoring and Evaluation and Project Completion

Monitoring and evaluation (M&E) practices were well-regarded by respondents. The highest-rated statement was the frequency of monitoring (mean = 4.35, SD = 0.774), highlighting the critical role of regular project reviews. Structured M&E frameworks (mean = 3.89, SD = 0.957) and effective data collection and reporting (mean = 4.03, SD = 0.910) were also seen as strengths. The use of evaluation reports (mean = 3.89, SD = 0.808) and incorporation of feedback into implementation (mean = 3.91, SD = 0.849) reflected an appreciation of M&E's contribution to adaptive management. Inferential results showed a moderate and statistically significant positive relationship between M&E and project completion (Pearson's $r = 0.524$, $p = 0.001$). These findings confirm that structured and continuous M&E practices are vital for ensuring that projects are completed successfully and aligned with their objectives.

5.2.5 Project Completion

The analysis of project completion showed that the sustainability of completed projects was the most positively rated dimension (mean = 3.89, SD = 1.009), indicating that many projects were designed for long-term impact. The achievement of deliverables (mean = 3.86, SD = 0.938) was also highly rated, showing strong alignment between planning and execution. However, completion within timelines (mean = 3.63, SD = 0.959), adherence

to budget (mean = 3.57, SD = 1.057), and satisfaction of stakeholder expectations in terms of quality (mean = 3.51, SD = 1.026) were relatively lower. These results suggest that while many projects meet their goals and are sustainable, challenges persist in budget control, schedule adherence, and managing stakeholder satisfaction.

5.3 Conclusions

The study drew conclusions in respect to stakeholder analysis, project planning, risk management, and monitoring and evaluation on the completion of donor-funded water projects in Baringo County, Kenya.

5.3.1 Stakeholder Analysis and Project Completion

The study revealed that stakeholder analysis plays a vital role in the successful completion of donor-funded water projects in Baringo County. The high mean score of 3.96 demonstrates that most respondents believed that involving stakeholders throughout the project lifecycle positively influences project outcomes. A strong Pearson correlation coefficient of 0.746 further supports the assertion that stakeholder analysis is closely linked to successful project completion. Moreover, the regression coefficient ($\beta = 0.615$) with a p-value of 0.000 confirms that this relationship is statistically significant at the 95% confidence level. This indicates that for every unit increase in stakeholder analysis efforts, the likelihood of successful project completion increases substantially. Effective stakeholder analysis enhances transparency, reduces project resistance, and ensures that community needs are accurately reflected. Therefore, project managers are encouraged to institutionalize stakeholder mapping, engagement, and feedback mechanisms in all phases of project execution.

5.3.2 Project Planning and Project Completion

The findings indicated that project planning has a significant influence on the completion of donor-funded water projects. A high mean score of 3.92 shows that respondents perceived proper planning as key to project success. The Pearson correlation coefficient of 0.689 and a significant regression coefficient ($\beta = 0.553$, $p = 0.000$) further confirm a positive and statistically significant relationship between project planning and project completion. These results imply that well-defined objectives, budgeting, timelines, and task allocations improve efficiency and reduce delays. When planning is thorough, risks are anticipated and resources are allocated appropriately, leading to better implementation outcomes. It is therefore essential for project managers to invest time and expertise in the planning phase to enhance predictability and alignment of activities. Training in project planning and adoption of planning tools should be prioritized to further support this positive effect.

5.2.3 Risk Management and Project Completion

The study found that risk management significantly affects the completion of donor-funded water projects in Baringo County. The variable recorded a high mean of 3.89, indicating respondents recognized its importance in avoiding disruptions and losses. The Pearson correlation coefficient was 0.672, and the regression coefficient ($\beta = 0.499$) with a p-value of 0.000 demonstrates a strong and statistically significant impact. This suggests that structured identification, analysis, and mitigation of potential project risks are crucial to ensuring continuity and achieving project goals. Ignoring or poorly managing risks can lead to cost overruns, time wastage, and even project failure. The study underscores the need to integrate risk assessment practices into every stage of project management. Institutions should also consider training project teams on risk modeling and contingency planning to build resilience.

5.3.4. Monitoring and Evaluation and Project Completion

The results showed that monitoring and evaluation (M&E) significantly influence the completion of donor-funded water projects. The mean score of 3.86 reflects a positive perception of M&E practices among respondents. The Pearson correlation coefficient of 0.710 and a significant regression coefficient ($\beta = 0.571$, $p = 0.000$) reinforce the conclusion that M&E contributes directly to successful project delivery. Effective monitoring ensures that deviations from project plans are identified early, allowing for timely corrective actions. Evaluation helps assess outcomes and impact, thereby guiding future project design and resource allocation. The findings suggest that M&E should not be viewed as a one-time event but as a continuous and integrated process. Project teams should establish clear performance indicators and regularly track progress to optimize project results.

5.4 Recommendations

Based on the findings related to stakeholder analysis, project planning, risk management, and monitoring and evaluation on the completion of donor-funded water projects in Baringo County, Kenya, the following recommendations are proposed for policymakers.

5.4.1 Stakeholder Analysis and Project Completion

It is recommended that project managers prioritize continuous and inclusive stakeholder engagement throughout the entire project lifecycle. While stakeholders are generally well identified and involved in decision-making, the inconsistent inclusion of diverse stakeholders and irregular engagement beyond initial phases need to be addressed. Strengthening mechanisms to ensure sustained participation of all relevant parties—government, NGOs, community leaders, and beneficiaries—may enhance project support, facilitate better feedback incorporation, and improve alignment with stakeholder expectations, ultimately contributing to smoother project completion.

5.4.2 Project Planning and Project Completion

To improve project outcomes, it is vital to establish more consistent and comprehensive planning practices. Clearer definition and communication of project scope should be enforced to avoid ambiguities that can lead to delays or resource misallocation. Additionally, more stringent adherence to timelines and better resource allocation need to be emphasized. Project teams should also ensure that contingency plans are not only developed but regularly updated and integrated into daily management. Strengthening planning frameworks with these elements will help reduce schedule slippages and budget overruns, thereby increasing the likelihood of timely and cost-effective project completion.

5.4.3 Risk Management and Project Completion

Projects would benefit from enhanced early risk identification and improved preparedness for unforeseen events. Although risk monitoring and assessment are generally well practiced, there remains room for improvement in capturing all potential risks during the initial phases and in implementing robust mitigation strategies. Training project teams to anticipate and respond effectively to unexpected disruptions will minimize project interruptions. Embedding a proactive risk culture where risk management is continuous and adaptive throughout the project lifecycle will help safeguard project objectives and enhance successful delivery.

5.4.4 Monitoring and Evaluation (M&E) and Project Completion

The findings suggest a need to standardize and strengthen M&E frameworks across all projects to ensure uniform understanding and application. Emphasis should be placed on maintaining frequent and consistent monitoring activities, ensuring that data collection is both accurate and timely, and that evaluation reports are regularly produced and effectively utilized. Importantly, project teams should improve how feedback from M&E

processes is integrated into decision-making and project adjustments. Enhancing these practices will improve transparency, allow for early detection of issues, and enable corrective actions that keep projects aligned with their goals.

5.4.5 Completion of Donor Funded Water Projects

To improve the successful completion of donor-funded water projects, it is essential to adopt a holistic approach that addresses both technical and social aspects of project execution. Ensuring timely completion requires enhanced coordination among all project stakeholders, clear communication channels, and accountability mechanisms that monitor progress against set milestones. Moreover, capacity building for project teams on effective project management practices can significantly reduce delays and cost overruns. Strengthening community involvement and ownership throughout the project lifecycle will also foster sustainability and reduce risks of abandonment post-completion. Finally, adopting best practices from previous successful projects and tailoring interventions to local contexts will ensure that these water projects achieve their intended outcomes effectively.

5.5 Suggestions for Further Research

While this study has provided valuable insights into factors influencing the completion of donor-funded water projects, there remain several areas that warrant further investigation. Future research could explore the impact of political dynamics and governance structures on project completion, as these factors often play a crucial role in resource allocation, decision-making, and stakeholder cooperation but were not deeply examined in this study.

Additionally, further studies could investigate the long-term sustainability and functionality of completed water projects to understand whether initial project completion translates into sustained service delivery and community benefits over time.

This could include assessments of maintenance practices, user satisfaction, and the role of local institutions in managing these projects post-completion.

Moreover, comparative studies across different counties or regions could provide a broader understanding of how contextual differences, such as cultural norms, economic conditions, and environmental factors, affect project outcomes. Such research would help in developing tailored project management strategies that are sensitive to local realities.

Finally, future research could focus on the role of emerging technologies and digital tools in enhancing project planning, monitoring, and risk management. Exploring how innovations like mobile data collection, geographic information systems (GIS), and real-time monitoring can improve project efficiency and accountability would be beneficial to both practitioners and policymakers aiming to improve donor-funded water project success rates.



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APPENDICES

Appendix I: Consent Letter

Consent Form for Participation in Research

Dear Participant,

I invite you to participate in a research study entitled (Adaptation of Project Management Tools on Completion of Donor Funded Water Projects In Baringo County.): I am currently enrolled in the (Masters in Project Planning) at Mount Kenya University and am in the process of writing my Master's project. The purpose of the research is to determine: The effect of Adaptation of Project Management Tools on Completion of Donor Funded Water Projects In Baringo County.

The enclosed questionnaire has been designed to collect information on the topic Your participation in this research project is completely voluntary. You may decline altogether, or leave blank any questions you don't wish to answer. There are no known risks to participation beyond those encountered in everyday life. Your responses will remain confidential and anonymous. Data from this research will be kept under lock and key and reported only as a collective combined total. No one other than the researchers will know your individual answers to this questionnaire. There are no direct benefits to you for participating in this research. However, you may find it interesting to talk about the issues addressed in the research and it may be beneficial to the field and to future clients or individuals who have experienced similar concerns

If you agree to participate in this project, please answer the questions on the questionnaire as best you can. It should take approximately 30 minutes to complete. Please return the questionnaire as soon as possible to enable me complete the project report.

If you have any questions about this project, feel free to contact:

INVESTIGATOR; CHERUTICH KUTOL -0722875804. If you have questions about your rights as a research participant, please be in touch with the Chairman, Mount Kenya University, Ethical Review Committee, P.O Box 342-01000, Thika.

Thank you for your assistance in this important endeavor.

CONSENT

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____



Appendix II: Questionnaire

The purpose of this survey is to establish the Influence of Adaptation of Project Management Tools on Completion of Donor Funded Water Projects In Baringo County. Any information gathered will not be deviated to any other use and will be treated with confidentiality.

Section A: Background Information

Write or tick in the spaces given

1. Respondent' gender, Male Female
2. Respondents' Age Below 20 years 21-29 years 30-39 years 40-49 years 50 years and above
3. Kindly indicate the length of time working in project work 0 to5 years 6 to10 years 11 to 15 years Over 16 years
4. Education Qualification:
K.C.S.E () Diploma () Bachelor Degree () Post Graduate ()

Section B: Stakeholders Analysis

Indicate your agreement with the statements asked on stakeholders analysis in your organization. A scale of 1 - 5 is used where 1 implies strongly disagree, 2 means disagree, 3 is Neutral, 4 is agree and 5 implies Strongly agree

	1	2	3	4	5
All relevant stakeholders for the project are accurately identified.					
The project includes stakeholders from diverse sectors					
Stakeholders are actively involved throughout the project lifecycle.					
Stakeholder involvement has a significant influence on project decisions					
Feedback from stakeholders is incorporated into project activities and decision-making					

Section C: Project Planning

Indicate your agreement with the statements asked on project planning in your company. A scale of 1 - 5 is used where 1 implies strongly disagree, 2 means disagree, 3 is Neutral, 4 is agree and 5 implies Strongly agree

	1	2	3	4	5
The project scope was clearly defined at the beginning of the project					
Adequate resources were allocated to meet project objectives.					
A contingency plan is in place to handle potential risks or issues					
The project adheres to its planned timeline and schedules					
Project milestones were well-defined and monitored.					

Section D Risk Management

Indicate your agreement with the statements asked on risk management in your company A scale of 1 - 5 is used where 1 implies strongly disagree, 2 means disagree, 3 is Neutral, 4 is agree and 5 implies Strongly agree

	1	2	3	4	5
All potential project risks are identified early in the project					
Effective strategies are implemented to mitigate identified risks.					
Risk monitoring is consistently conducted throughout the project lifecycle					
A comprehensive risk assessment is done to evaluate the impact of potential risks					
The project team is always prepared to respond to any unforeseen events or risks					

Section E: Monitoring and Evaluation

Indicate your agreement with the statements asked on M&E your company. A scale of 1 - 5 is used where 1 implies strongly disagree, 2 means disagree, 3 is Neutral, 4 is agree and 5 implies Strongly agree

	1	2	3	4	5
A structured M&E framework exists for monitoring project activities					
The frequency of monitoring activities is sufficient to keep the project on track					
Data collection and reporting is done accurately and in a timely manner					
Regular evaluation reports are generated to assess project progress					
Feedback from monitoring and evaluation was used to improve project implementation					

Section F: Project Completion

Indicate your agreement with the statements asked on project completion in your company. A scale of 1 - 5 is used where 1 implies strongly disagree, 2 means disagree, 3 is Neutral, 4 is agree and 5 implies Strongly agree

	1	2	3	4	5
The projects are completed within the planned timeline due to project management tools					
Project adheres to the initial budget without significant overruns.					
The quality of the project outcomes meets the expectations of stakeholders					
The completed project has been sustainable beyond the implementation phase.					
The project's deliverables are achieved as outlined in the original plan					

Thank You

Appendix III: ERC Certificate



REF: MKU/ISERC/4956
TO: CHERUTICH KUTOL

Date: 14 April 2025

REG: MSCPM/2023/54034

Dear Sir/Madam,

RE: ADAPTATION OF PROJECT MANAGEMENT TOOLS ON COMPLETION OF DONOR FUNDED WATER PROJECTS IN BARINGO COUNTY

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **3678**. The approval period is **14/04/2025 - 13/04/2026**.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including informed consents, study instruments, MTA will be used
- ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
- vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC



Appendix IV: MKU Introduction Letter



DIRECTORATE OF GRADUATE STUDIES

MSCPM/2023/54034

15th April, 2025

National Commission for Science Technology & Innovation (NACOSTI)
Off Waiyaki Way, Upper Kabete,
P.O Box 30623- 00100
NAIROBI, KENYA

Dear Sir/Madam,

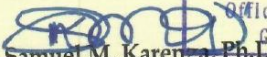
RE: CHERUTICH KUTOL - REGISTRATION NO. MSCPM/2023/54034

The purpose of this letter is to introduce the above named student who is pursuing **Master of Science in Project Management** in the **Department of Management** in the school of **Business and Economics**.

The title of the research is "**Adaptation of Project Management Tools on Completion of Donor Funded Water Projects in Baringo County.**" It has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **April, 2025 and June, 2025**.

Any assistance accorded to the student will be highly appreciated.

Thank you.


Dr. Samuel M. Karenga, Ph.D
Director, Graduate Studies
Enc.

Mount Kenya University
P. O. Box 342 - 01000, THIKA
Office of the Director,
Graduate Studies

Main Campus, General Kago Road, P.O. Box 342-01000 Thika.
Tel: +254 20 287 8000, Cell: +254 709 153 000
Email: graduate@mku.ac.ke

Appendix V: Field Authorization Letter

Maji Plaza, Prisons Road, off Eldama
Ravine Highway, Nakuru Town.
P.O Box 2451-20100, Nakuru



Dependable Water and Sanitation Infrastructure
ISO 9001:2008 CERTIFIED

Tel: +254725999000
Email: info@crvwda.go.ke
Website: www.crvwda.go.ke

CENTRAL RIFT VALLEY WATER WORKS DEVELOPMENT AGENCY.

Ref No: CRWDA/UWS/GEN/Vol.1 (31)

Date: 6th May, 2025

RE: AUTHORISATION TO COLLECT DATA FOR ACADEMIC RESEARCH
MR. KUTOL CHERUTICH ID NO. 13062492

The bearer of this letter **Mr. Kutol Cherutich** has been granted permission to carry out research on “**Adaptation of project management tools on completion of Donor funded water projects in Baringo County**”. He has identified the technical department to be the target area of the Study.

You are therefore requested to accord all necessary support in regard to the Study.

Yours sincerely,

CPA Douglas Murei
Chief Executive Officer.

Our Counties: Baringo, Laikipia, Nakuru, Narok and Nyandarua.

Appendix VI: NACOSTI Research Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 189907	Date of Issue: 10/May/2025
RESEARCH LICENSE	
	
This is to Certify that Mr.. CHERUTICH KUTOL of Mount Kenya University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Baringo on the topic: ADAPTATION OF PROJECT MANAGEMENT TOOLS ON COMPLETION OF DONOR FUNDED WATER PROJECTS IN BARINGO COUNTY for the period ending : 10/May/2026.	
License No: NACOSTI/P/25/4173324	
189907 Applicant Identification Number	 Deputy Director NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Verification QR Code	
	
NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.	
See overleaf for conditions	

Appendix VII: Map of the Study Area



Appendix VIII: JICA Programme – Baringo Rural Water Supply Project Phase

No	Sub-County and Bh Name	Sub-County	Location	Sub-Location	Ward
1	Oinobmoi Centre -1	Baringo Central	Kiboino	Kiboino	Kabarnet
2	Oinobmoi – 2	Baringo Central	Kiboino	Kiboino	Kabarnet
3	Eron	Baringo Central	Kimoso	Kabrnet-soi	Kabarnet
4	Kimoso	Baringo Central	Kimoso	Kabrnet-soi	Kabarnet
5	Kakwane -1	Baringo Central	Lelmen	Kapyemit	Kabarnet
6	Kakwane – 2	Baringo Central	Lelmen	Kapyemit	Kabarnet
7	Kaptara	Baringo Central	Lelmen	Lelmen	Kabarnet
8	KiwanjaNdege	Baringo Central	Orokwo	Kapchepterit	Kabarnet
9	Pemwai Centre	Baringo Central	Orokwo	Moloi	Kabarnet
10	Kasitet	Baringo Central	Kapropita-Soi	Sagasagik	Kapropita
11	Sichei	Baringo Central	Kapropita-Soi	Sagasagik	Kapropita
12	Katunoi	Baringo Central	Sacho-Soi	Katunoi	Sacho
13	Timboiwo – 1	Baringo Central	Timboiwo	Kabasis	Sacho
14	Timboiwo – 2	Baringo Central	Timboiwo	Kabasis	Sacho
15	Ochii	Baringo Central	Chepkero	Ochii	Sacho
16	Tabarin – 1	Baringo Central	Tenges	Tabarin	Tenges
17	Tabarin – 2	Baringo Central	Tenges	Tabarin	Tenges
18	Siginwo	Baringo Central	Tenges	Tenges	Tenges
19	Kisonei Pry	Baringo Central	Kisonei	Kisonei	Tenges
20	Mogorwa-1	Baringo Central	Emom	Cheplambus	Tenges
21	Mogorwa-2	Baringo Central	Emom	Cheplambus	Tenges
22	Talai-1	Baringo Central	Talai	Kaptumo	E/Chapchap
23	Kapkawa-1	Baringo Central	Ewalel	Seretunin	E/Chapchap
24	Serei	Baringo Central	Ewalel	Seretunin	E/Chapchap
25	Turupkir (Sesia)	Baringo Central	Ewalel	Morop	E/Chapchap
26	Terik	Baringo North	Kaboskei	Terik	Bartabwa
27	Ayatya	Baringo North	Kaboskei Kerio	Ayatya	Barwessa
28	Katikit	Baringo North	Kaboskei Kerio	Marigut	Barwessa
29	Barwessa – 1	Baringo North	Lawan	Barwessa	Barwessa
30	Barwessa – 2	Baringo North	Lawan	Barwessa	Barwessa
31	Konoo	Baringo North	Lawan	Konoo	Barwessa
32	Kibuliak	Baringo North	Kabutiei	Katibel	Barwessa
33	Ketiborok	Baringo North	Kabutiei	Muchukwo	Barwessa
34	Kipkokom	Baringo North	Kelyo	Kelyo Mosop	Kabartonjo
35	Tiriondonin	Baringo North	Ossen	Tiriondonin	Kabartonjo
36	Kaptum	Baringo North	Ossen	Kaptum	Kabartonjo
37	Seremwo	Baringo North	Katiorin	Kapkirwok	Kabartonjo

38	Kalel	Baringo North	Ossen	Tiriondonin	Kabartonjo
39	Kapamin	Baringo North	Kapteberewo	Issas	Saimo-Kipsaraman Ward
40	Chambai	Baringo North	Kapteberewo	Bartolimo	Saimo-Kipsaraman
41	Kapkombe	Baringo North	Saimo	Kapkombe	Saimo-Kipsaraman
42	Kapchepkor	Baringo North	Saimo	Kapchepkor	Saimo-Kipsaraman
43	Kureshun	Baringo North	Saimo	Tirimionin	Saimo-Kipsaraman
44	Barkilach	Baringo North	Bartum	Taimon	Saimo-Soi
45	Usuonin	Baringo North	Bartum	Kipcherere	Saimo-Soi
46	Koiboware	Baringo North	Sibilo	Koibaware	Saimo-Soi
47	Chepkewel	Baringo North	Sibilo	Loruk	Saimo-Soi
48	Chemorongion	Baringo North	Sibilo	Loruk	Saimo-Soi
49	Kipchemoi	Baringo North	Sibilo	Sibilo	Saimo-Soi
50	Kolongotwo	Baringo North	Sibilo	Rondinin	Saimo-Soi
51	Kabusa	Baringo South (Marigat)	EwalelSoi	Kabusa	Marigat
52	Kibingor	Baringo South (Marigat)	Kimondis	Kibingor	Marigat
53	Womberechun	Baringo South (Marigat)	Kimondis	Kibingor	Marigat
54	Kapkechii	Baringo South (Marigat)	Kimalel	Sabor	Marigat
55	Kipsamisonchun	Baringo South (Marigat)	Kimalel	Sabor	Marigat
56	Kimalel hospital	Baringo South (Marigat)	Kimalel	Kimalel	Marigat
57	Kamagonge	Baringo South (Marigat)	Marigat	Yatoi	Marigat
58	Kapsamson	Baringo South (Marigat)	Marigat	Perkerra	Marigat
59	Catholic (Marigat)	Baringo South (Marigat)	Marigat	Perkerra	Marigat
60	Ndambul	Baringo South (Marigat)	Marigat	Perkerra	Marigat
61	Tinomoi	Baringo South (Marigat)	Bekibon	Tinomoi	Marigat
62	Tebei	Baringo South (Marigat)	Tuluongoi	Tebei	Marigat
63	Katkamuma	Baringo South (Marigat)	Tuluongoi	Tebei	Marigat
64	Longiron	Baringo South	Salabani	Meisori	Marigat
65	Samuran	Baringo South	Chebinyiny	Chebinyin	Marigat
66	Sambaka	Baringo South	Chebinyiny	Chebinyin	Marigat
67	Mochongoi Centre	Baringo South	Mochongoi	Mochongoi	Marigat
68	Kipkandule	Baringo South	Mochongoi	Mochongoi	Marigat
69	Kapkechir	Baringo South	Mochongoi	Kapkechir	Marigat
70	Nyalilbuch	Mogotio	Sinende	Nyalilbuch	Kisanana