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MONITORING AND EVALUATION SYSTEMS AND PROJECT PERFORMANCE IN WESTERN KENYA WATER PROJECT, KENYA

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Abstract

The performance of water projects in Kenya has raised significant concerns due to the substantial benefits for beneficiaries and the large investments involved. Unfortunately, many water projects in Kenya face challenges such as project delays, exceeding budgets, and failing to meet specifications, customer needs, and management objectives. The general objective of this study was to examine the influence of M&E systems and project performance in the Western Kenya Water Project, Kenya. Specifically, the study sought to establish the influence of stakeholder engagement on project performance in Western Kenya Water Project, Kenya and to determine the influence of training on project performance in Western Kenya Water Project, Kenya. The study adopted a descriptive research design. The study focused on various groups of participants who had been involved in the Western Kenya Water project and have a good understanding of the project from its early stages through to its completion. These groups included data officers, monitoring and evaluation specialists, urban and rural water experts, technical leads, ICT specialists, finance specialists, procurement specialists, human resource specialists, project engineers, and project chiefs/deputy chiefs. In this study, all 40 employees of the Western Kenya Water project were surveyed using census sampling due to the limited size of the target population. The study relied on primary data which was collected through the use of a questionnaire. A pilot study was conducted on 10% of the sample to test the validity and reliability of the data collection instrument. The data collection instrument generated both qualitative and quantitative data. The study used both descriptive and inferential statistics for data analysis with the aid of Statistical Package for Social Sciences (SPSS version 25). Descriptive statistics such as mean, standard deviation, frequency, and percentages were used in this study. For inferential statistics, the study used regression and correlation analysis. This was used to establish the relationship between the independent and the dependent variables. Data was then presented in tables. The study concludes that stakeholder engagement has a positive and significant influence on project performance in the Western Kenya Water Project, Kenya. In addition, the study concludes that training has a positive and significant influence on project performance in the Western Kenya Water Project, Kenya. The study recommends that the management of Western Kenya Water Project should foster collaboration, ensuring alignment with community needs, and promoting transparency. In addition, the study recommends that the

management of Western Kenya Water Project should enhance the skills and knowledge of both project staff and local communities. Further, the study recommends that the management of Western Kenya Water Project should prove a clear understanding of the existing conditions, needs, and challenges of the communities it aims to serve. The study also recommends that the management of Western Kenya Water Project should ensure that critical project information is securely stored, easily accessible, and protected from unauthorized access or loss.

Keywords: *M&E systems, Stakeholder Engagement, Training and Project Performance*

INTRODUCTION

According to the School of Oriental and African Studies (2019), a monitoring and evaluation system is a structured set of activities aimed at collecting, analyzing, and reporting data necessary for decision-making. These decisions may pertain to program management, policy options, or evaluation choices. Monitoring and evaluation (M&E) systems are essential for providing strategic information to facilitate informed decision-making at various stages of a project, including formative assessments, partner identification, project initiation, implementation, evaluation, and closure (Mwanga, 2021). An effective M&E system in project implementation enhances team efforts to achieve success and sustainability in project delivery (Tengan *et al*, 2021). It assists the project in defining, selecting, collecting, analyzing, and utilizing information. It serves as the central point where all aspects of the project converge, from formative phases and objective setting to evaluation for outcome assessment (Naidoo, 2019).

The concept of project performance is defined in the literature as the extent to which a project fulfills its intended purpose (Szatmari, Deichmann, Van den Ende, & King, 2021). Project performance encompasses completing the project on time, within budget, meeting product specifications, satisfying customer needs, and achieving management objectives (Minyiri, & Muchelule, 2018). Project performance involves a balance between various measurements and dimensions, emphasizing the actions taken, such as scope and quality, versus the resources utilized, such as time and cost, for project activities (Kabirifar & Mojtahedi, 2019).

In Kenya, the implementation of the Kenya Vision 2030 blueprint has brought Monitoring and Evaluation (M&E) to the forefront in tracking progress towards the vision. The government of Kenya utilizes the National Integrated Monitoring and Evaluation System (NIMES) to monitor development at both the National and County government levels within the current devolved systems of governance (GOK, 2015). To ensure the effective implementation of NIMES, counties are establishing County Integrated Monitoring and Evaluation Systems (CIMES) to facilitate monitoring and evaluation at the county level (CoG, 2016).

A report by the Kenya Institute for Public Policy Research and Analysis (KIPPRA, 2024) emphasizes the importance of M&E systems in promoting accountability, transparency, and learning within the Kenyan context, particularly with the establishment of county governments. The report underscores how well-designed M&E systems can support evidence-based policymaking and program implementation, as well as enhance the successful execution of plans, policies, programs, and projects.

Research by Mokua *et al*, (2019) reveals that while most public-private partnership (PPP) projects in Kenya have operational M&E systems, a significant portion lack the necessary resources to function effectively. This deficiency has had a detrimental impact on the performance of PPPs in Kenya. Furthermore, many county government projects face challenges due to ineffective M&E practices, including the failure to apply best practices and a lack of

coordination between management roles, human resources capacity, funding, and stakeholder engagement, all of which are crucial for successful M&E activities in county projects (Bonareri *et al*, 2020).

Statement of the problem

The performance of water projects in Kenya has raised significant concerns due to the substantial benefits for beneficiaries and the large investments involved. Unfortunately, many water projects in Kenya face challenges such as project delays, exceeding budgets, and failing to meet specifications, customer needs, and management objectives (Waweru et al, 2022). The Kenya National Water Services Strategy (2018 - 2022) reports that only 60% of the Kenyan population has access to sustainable water services. Kenya's renewable water resources have in general been approximated as scarce (WASREB, 2014). According to the ministry of water, sanitation and irrigation (2021), safe and clean water was accessed by 63% of Kenyans.

The Kenya National Bureau of Statistics (2019) highlights that residents in western Kenya counties still struggle with limited access to safe water, often relying on rivers, streams, or the lake for drinking and domestic purposes. Furthermore, the performance of water service providers (WSPs) in western Kenya is notably poor, with none of the providers in these counties ranking among the top 10 in the country (WASREB, 2023). Under Vision 2030 the policy goal is to increase water coverage to 100% (National Water Master Plan, 2030). Similarly, by 2030, the Ministry of water, sanitation, and irrigation in Kenya aims to achieve universal access targets for Water Supply and Sanitation (WSS) services which include ensuring 100% access to water in both urban and rural water supply services.

A robust monitoring and evaluation (M&E) system is essential for the successful planning, execution, and evaluation of water projects. This system provides strategic information that guides decision-making at every stage of the project, from initial assessments to project closeout. It helps in defining project objectives, selecting relevant data, analyzing information, and using insights to improve project outcomes (World Health Organization, 2020).

Active engagement and participation of individuals, groups, or organizations who have a vested interest, influence, or impact on a project contributes to achieving broader project objectives. This ultimately improves project performance in both the short and long term (Sahal & Bett, 2022). Training on the other hand is essential for professionals to stay current with the latest trends, technologies, and methodologies in the field of monitoring and evaluation (M&E). This ensures that their technical skills remain relevant and effective (Adewale & Esther, 2018).

Data storage and security play a crucial role in determining the success of a project, as they directly impact the accessibility, reliability, and confidentiality of project-related data. Effective data management ensures seamless project execution, while robust data security measures protect project assets from risks such as data loss, unauthorized access, and cyber threats (Rumenya & Kisimbi, 2020). Moreover, a baseline study is a crucial component of project management as it serves as a reference point for measuring progress and outcomes. Baseline data empowers managers to make informed decisions by pinpointing areas where adjustments may be needed to keep the project on course. Follow-ups in monitoring and evaluation (M&E) against the baseline involve tracking and resolving issues or recommendations identified during implementation (Tarindwa, 2019). Owing to these issues, the researcher examined the influence of monitoring and evaluation systems and project performance in the Western Kenya water project, Kenya.

General Objectives

The general objective of this study was to examine the influence of M&E systems on project performance in the Western Kenya Water Project, Kenya.

Specific Objectives

The specific objectives of this study were:

i) To establish the influence of stakeholder engagement on project performance in the Western Kenya Water Project, Kenya.
ii) To determine the influence of training on project performance in the Western Kenya Water Project, Kenya.

Research questions

i) How does stakeholder engagement affect project performance in the Western Kenya Water Project in Kenya?
ii) How does training affect project performance in the Western Kenya Water Project in Kenya?

LITERATURE REVIEW

Theoretical Review

A theory is a logical form of abstract reasoning about a phenomenon, or the outcomes of such reasoning (Lucia and Lepsinger, 2019). The process of contemplative and logical thinking is often linked to activities such as observational studies or research. Theories can be scientific, related to a non-scientific field, or completely independent of any discipline. Depending on the context, a theory's assertions may include broad explanations of how the natural world operates (Miles, Huberman, & Saldana, 2013). This study was guided by various theories including stakeholder theory and theory of change.

Stakeholders Theory

Stakeholder Theory, developed by R. Edward Freeman in the 1980s, is a management and organizational theory that emphasizes the importance of considering the interests and concerns of various stakeholders in decision-making processes. The theory is connected to stakeholder engagement as it recognizes that organizations should not only prioritize the interests of shareholders but also take into account the needs and expectations of all individuals and groups (stakeholders) who are directly or indirectly affected by the organization's actions (Freeman, 1984). This study utilized the stakeholder theory to investigate the influence of stakeholder engagement on project performance in WKWP, Kenya.

Theory of Change

The Theory of Change, developed in 1978 by Pfeffer and Salancik, has its roots in program theory and evaluation. This theory builds upon earlier management concepts such as Management by Objectives, emphasizing not only the goals and objectives but also the anticipated impact of achieving those goals. The theory of Change outlines how and why social policies or program activities are expected to lead to specific outcomes and impacts. It is based on a set of assumptions that explain the steps that lead to long-term interests and the connections between program activities and outcomes at each stage (Reeler, 2007). This theory is connected to training as it provides a framework to design, implement, and evaluate training programs effectively. This study utilized the theory of change to investigate the impact of training on project performance in WKWP, Kenya.

Conceptual Framework

A conceptual framework serves as a crucial guide in the research investigation process, outlining the key variables and providing a roadmap for researchers. It lays the groundwork for formulating the specific research question that directs the investigation, stemming from the initial problem statement (Marilla, 2018). The model illustrated below illustrates the relationship between the independent and dependent variables. The independent variables consisted of stakeholder engagement, training, data storage and security, and baseline study, while the dependent variable was project performance.

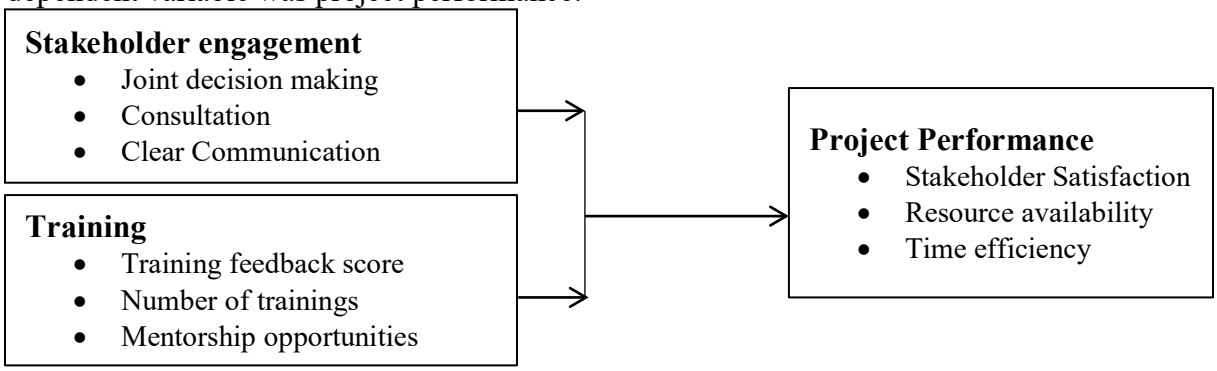

Figure 1: Conceptual framework

Stakeholder engagement

Stakeholder involvement is a critical aspect of effective governance, decision-making, and project management. Stakeholders are individuals, groups, or organizations that have an interest, stake, or influence in a particular project, initiative, or organization. Involving stakeholders in the decision-making process is essential for fostering collaboration, transparency, and ensuring that diverse perspectives are considered. Stakeholder involvement is crucial because it allows for a more comprehensive understanding of the complexities surrounding a project or decision (Otieno, 2018).

Engaging stakeholders provides access to valuable insights, expertise, and diverse viewpoints, which can contribute to better-informed and more robust outcomes. Involving stakeholders also promotes a sense of ownership and commitment, increasing the likelihood of successful implementation and sustainability. Stakeholder involvement can occur at various levels, ranging from information sharing to collaboration and empowerment. Informing stakeholders about decisions or developments is the most basic level, while collaboration involves active engagement and joint decision-making (Otieno, 2018).

Empowering stakeholders means giving them the authority to influence decisions and take an active role in the project or initiative. There are numerous methods for engaging stakeholders, including surveys, focus groups, town hall meetings, workshops, and collaborative decision-making forums. The choice of method depends on the nature of the project, the diversity of stakeholders, and the desired level of involvement. Effective communication is fundamental to successful stakeholder involvement, ensuring that information is shared transparently, and feedback is received and considered (Sahal & Bett, 2022).

Training

Monitoring and Evaluation (M&E) training is essential for individuals or teams to effectively carry out M&E activities. The level of training is a fundamental aspect of M&E's technical capacity. Individuals with advanced training, especially in fields like statistics, research methods, or program evaluation, typically have a strong theoretical foundation for conducting M&E

activities. Training provides professionals with the analytical skills and critical thinking necessary to design robust monitoring systems, analyze data accurately, and draw meaningful conclusions. However, practical experience and the application of theoretical knowledge are also vital in developing a well-rounded M&E capacity (Ochunga, 2016).

Experience is a critical factor in M&E technical capacity. Exposure to various projects, contexts, and challenges helps individuals adapt M&E methodologies to different scenarios. Experienced M&E professionals often develop an intuitive understanding of data collection, analysis, and interpretation nuances. By working on different projects, they gain insights into common pitfalls and best practices, contributing to the enhancement of their M&E skills. However, the experience must be coupled with a commitment to continuous learning to keep up with evolving M&E methodologies and tools (Chepkoech & Waiganjo, 2015).

Specialized training plays a significant role in improving M&E technical capacity. Training programs, workshops, and certifications in areas such as data collection techniques, statistical analysis, and M&E software usage equip individuals with practical skills and knowledge. These training opportunities bridge the gap between theoretical knowledge and real-world application. Furthermore, continuous training is essential for professionals to stay current with the latest trends, technologies, and methodologies in the field of monitoring and evaluation (M&E). This ensures that their technical skills remain relevant and effective (Adewale & Esther, 2018).

Empirical Review

Stakeholder engagement and project performance

A recent study conducted by Odhiambo, *et al*, (2020) explored the impact of stakeholder engagement, including long-term effects and social responsibility, on the success of mariculture projects in Kenya's coastal region. The research revealed a significant positive correlation between investments in social responsibility and long-term positive outcomes. Additionally, the study found strong connections between stakeholder engagement by project managers and overall project performance.

In a separate study by Tanko., *et al*, (2017), the influence of stakeholder engagement on the quality of construction projects was investigated. The research emphasized the importance of project managers guiding sustainable goals and metrics, particularly through effective leadership styles, to enhance project quality and promote positive inter-functional relationships. The study focused on quantity surveyors, builders, and architects serving as project managers in Nigeria.

Furthermore, Ssendagi., *et al*, (2024) conducted a study to assess the impact of stakeholder engagement on the performance of universal secondary education in Kinyamaseke Town Council, Kasese District, Uganda. The research utilized a descriptive survey incorporating both qualitative and quantitative methods among all staff responsible for monitoring and evaluation in Kinyamaseke Town Council. The results indicated a strong linear relationship between various dimensions of stakeholder engagement and the performance of universal secondary education in Uganda.

A review of a study conducted by Tahlil (2019) on the impact of stakeholder engagement on organizational performance revealed that sustainable M&E plans are crucial in establishing a solid foundation based on the project's goals and the expected connections between operations, outputs, and outcomes. The study emphasized that stakeholder engagement encompasses all necessary elements to detect project performance issues early on. It concluded that a stakeholder engagement requires significant resources, including financial and time commitments.

In a separate study, Makokha e*t al*, (2020) investigated the influence of stakeholder engagement on the performance of construction projects in Kenya. The research utilized a mixed research

design incorporating descriptive surveys, censuses, and correlations. The study targeted 1761 respondents, with a sample size of 313 individuals, including managers from various sectors. The findings of this study are valuable for policymakers, county governments, and academics. The research revealed that involvement of project stakeholders had a negative and significant impact on the performance of construction projects. Additionally, the study highlighted that effective planning provides a clear direction for project activities, ensuring timely execution and minimizing errors.

Kiiza and Muiruri (2022) conducted a study to investigate the impact of stakeholder engagement on the performance of the Food Sustainable Initiative Project in Rwanda. The main objective of the study was to analyze how stakeholder engagement affects the performance of the food sustainable initiative project in Rwanda. Specifically, the study aimed to determine how stakeholder engagement influences the performance of the food sustainable initiative project in Rwanda, examine the impact of project execution on performance and assess the influence of the budget on project performance. The research design employed in this study was descriptive, utilizing both quantitative and qualitative approaches. Primary data was collected through structured questionnaires and interviews. The results of the study revealed a consensus on the significant influence of stakeholder engagement on the performance of the Food Sustainable Initiative Project in Rwanda.

Training and Project Performance

A recent study conducted by Georges and Kusek (2020) in Norway explored the impact of Monitoring and Evaluation Systems on the performance of government projects. The study emphasized the importance of involving various stakeholders in the monitoring and evaluation process to ensure that individuals possess the necessary knowledge and skills to effectively implement M&E systems. The findings of this study highlighted that the competency levels in managing evaluation and monitoring systems significantly influence the success of organizational projects.

In a separate qualitative study carried out by Ronath *et al*, (2024) in Uganda, the researchers investigated the influence of monitoring and evaluation on the outcomes of government projects. Guided by the result-based management theory, the study identified that enhancing the capacity of monitoring and evaluation teams provides governments with the essential skills needed for effective project oversight. The research also indicated that by allocating sufficient resources to monitoring and evaluation efforts, programs within the Iganga municipality can successfully achieve their objectives. Furthermore, the study noted that a majority of employees within Iganga municipality are female, prompting a recommendation for the municipality's chief executive officer to prioritize gender balance among staff members. This suggestion aims to promote diversity and inclusivity within the organization, ultimately contributing to a more equitable and effective work environment.

In 2016, Venessa and Gala conducted a study to assess the impact of competency levels on Monitoring and Evaluation (M&E) systems in project management in Ukraine. The study utilized a descriptive research design and employed a stratified sampling technique to select 10 project management organizations. The findings of the study emphasized the importance of enhancing the capacity of human resources involved in the implementation and adoption of M&E systems. It was concluded that staff members in organizations responsible for project execution should be highly skilled and possess the necessary knowledge for effective M&E processes.

In a similar study conducted by Agutu in 2014, the effects of M&E human resources on project achievements in non-governmental organizations in Kenya were monitored. The research revealed the significance of organizations being selective in hiring employees for project execution and M&E system management. Agutu concluded that organizations can enhance project performance by focusing on increasing the skills of their personnel through training programs. Projects are more likely to succeed when M&E personnel have the relevant skills needed for successful project completion.

The study conducted by Nyatichi and Mose (2023) identified the constraints and challenges that hinder the monitoring and evaluation of development projects. By analyzing data from 37 projects, the study revealed that the importance of monitoring and evaluation cannot be underestimated. The results of the study also highlighted the key obstacles that impede effective monitoring and evaluation in development projects, such as a lack of commitment to conducting monitoring and evaluation, failure to utilize and share the results of these activities, as well as a shortage of trained staff and limited training opportunities.

In a separate study, Chieh-Peng (2019) investigated knowledge sharing practices as a means to enhance organizational performance through human capital. The research proposed and examined a model of organizational knowledge sharing that can boost overall performance. It was argued that organizational knowledge sharing practices can promote and facilitate knowledge exchange, leading to improved employee competencies (human capital) and ultimately enhancing organizational performance. The study also suggested that two organizational factors, innovation strategy, and top management knowledge values, play a crucial role in driving the implementation of knowledge-sharing practices within an organization. These hypotheses were tested using data collected from 256 companies in Taiwan.

RESEARCH METHODOLOGY

Research Design

A research design is like a blueprint that helps us understand how to collect and analyze data by looking at the relationship between different factors and the methods used (Mugenda and Mugenda, 2017). This study used a descriptive research design, which is a good choice because it allows for both qualitative and quantitative data collection to study events. Descriptive research design gives us in-depth information about the characteristics of the variables being studied (Oso and Onen, 2019).

Target Population

Population refers to a group of individuals that a researcher is interested in studying for specific information (Sekaran and Bougie, 2019). This study focused on various groups of participants who have been involved in the Western Kenya Water project and have a good understanding of the project from its early stages through to its completion. These groups include data officers, monitoring and evaluation specialists, urban and rural water experts, technical leads, ICT specialists, finance specialists, procurement specialists, human resource specialists, project engineers, and project chiefs/deputy chiefs. These participants have been involved in different aspects of the project implementation.

In this study, all 40 employees of the Western Kenya Water project were surveyed using census sampling due to the limited size of the target population. Census sampling is a method where every unit in a population is selected for a specific purpose based on available evidence (Bryman and Cramer, 2017).

Data Collection Tools

A questionnaire was used as the data collection tool for this study. A questionnaire is a tool used to collect data by asking respondents to answer a series of written questions in a specific order (Saunders *et al*, 2019). They are commonly used to gather data in a structured manner. Questionnaires are simple to use and allow respondents to provide answers based on their perspectives (Kothari, 2016). When researching views, opinions, perceptions, feelings, and attitudes, questionnaires, and interview schedules are the most effective methods (Toulitos and Compton, 2016).

Pilot Study

A pilot study is a small experiment designed to test logistics and gather information before a larger study, to improve the quality and efficiency of the actual research (Kothari & Garg, 2014). A pilot was conducted to determine the validity and reliability of the data collection instrument. According to Mugenda and Mugenda (2017), the pilot sample should be between 1% and 10% depending on the sample size. In this study, the study instruments was piloted among four (4) respondents representing 10% of the total study sample size. The responses from respondents was used to adjust and refine the questionnaire accordingly.

Data Analysis and Presentation

The data collected for this study was coded for statistical analysis using the Statistical Package for Social Scientists (SPSS) version 26. The data was analyzed using quantitative and qualitative techniques. For quantitative analysis, both descriptive and inferential statistics was generated. Descriptive statistics enables researchers to present the data in a more meaningful way, which allows simpler and easier interpretation (Singpurwalla, 2017).

Descriptive statistics involved the generation of percentages, frequencies, and mean/averages while Pearson correlation coefficient and multiple regression analysis were used for the inferential analysis. The inferential statistic is used to make judgments about the probability that an observation is dependable or one that happened by chance in the study. Qualitative attributes was analyzed on a thematic basis and the findings provided in a narrative form. Data was presented in the form of tables.

The study used the multivariate regression model below to establish the degree of relationship between the dependent and independent variables.

$Y= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$

The elements in the equation represent.

Y= Project performance

β_0= Constant

β_1-β_4= Regression coefficients

X_1= Stakeholder engagement,

X_2= Training

RESEARCH FINDINGS AND DISCUSSIONS

Descriptive statistics

Stakeholder Engagement and Project Performance

The first specific objective of the study was to establish the influence of stakeholder engagement on project performance in the Western Kenya Water Project, Kenya. The respondents were requested to indicate their level of agreement on various statements related to stakeholder engagement and project performance in the Western Kenya Water Project, Kenya. The results were as shown Table 1.

From the results, the respondents agreed that stakeholders from the local community actively participated in the planning and implementation of the water project (Mean= 3.981, SD= 0.826). The respondents agreed that the take-back programs contribute significantly to their organization's overall sustainability goals decision-making processes include input from local government officials, ensuring alignment with broader development goals (Mean=3.940, SD=0.805). Further, the respondents agreed that information dissemination mechanisms effectively keep community members informed about the project's progress, fostering transparency and accountability (Mean=3.898, SD=0.755). The respondents agreed that public participation is used as a primary method of stakeholder participation whereby community members are assembled to give their views (Mean=3.854, SD= 0.958). The respondents also agreed that regular feedback loops are established, allowing for continuous collaboration, learning and adaption at different stages of the water project (Mean=3.808, SD=0.741).

Table 1: Stakeholder Engagement and Project Performance

	Mean	**Std. Deviation**
Stakeholders from the local community actively participated in the planning and implementation of the water project	3.981	0.826
Decision-making processes include input from local government officials, ensuring alignment with broader development goals.	3.940	0.805
Information dissemination mechanisms effectively keep community members informed about the project's progress, fostering transparency and accountability.	3.898	0.755
Public participation is used as a primary method of stakeholder participation whereby community members are assembled to give their views	3.854	0.958
Regular feedback loops are established, allowing for continuous collaboration, learning and adaption at different stages of the water project.	3.808	0.741
Aggregate	**3.896**	**0.817**

Training and Project Performance

The second specific objective of the study was to determine the influence of training on project performance in the Western Kenya Water Project, Kenya.The respondents were requested to indicate their level of agreement on various statements related to training and project performance in the Western Kenya Water Project, Kenya. The results were as shown Table 2.

From the results, the respondents agreed that the project has provided adequate training to all staff on the fundamental principles and concepts of monitoring and evaluation (Mean=3.942, SD=0.769). Further, the respondents agreed that the M&E team demonstrates a strong understanding of the fundamental principles and concepts of monitoring and evaluation (Mean=3.875, SD=0.888). In addition, the respondents agreed that individuals responsible for M&E activities possess the necessary technical skills to design and implement robust data collection methodologies (Mean=3.788, SD=0.567). The respondents agreed that adequate technical expertise is available within the organization to conduct rigorous data analysis and interpretation (Mean M=3.633, SD=0.798). Further, the respondents agreed that the project team is provided with adequate mentorship opportunities for monitoring and evaluation (Mean=3.545, SD=0.689).

Table 2: Training and Project Performance

	Mean	Std. Deviation
The project has provided adequate training to all staff on the fundamental principles and concepts of monitoring and evaluation.	3.942	0.764
The M&E team demonstrates a strong understanding of the fundamental principles and concepts of monitoring and evaluation.	3.875	0.658
Individuals responsible for M&E activities possess the necessary technical skills to design and implement robust data collection methodologies.	3.788	0.572
Adequate technical expertise is available within the organization to conduct rigorous data analysis and interpretation.	3.633	0.700
The project team is provided with adequate mentorship opportunities for monitoring and evaluation.	3.545	0.875
Aggregate	**3.757**	**0.714**

Project Performance

The respondents were requested to indicate their level of agreement on various statements related to project performance in the Western Kenya Water Project, Kenya. The results were as shown Table 3. From the results, the respondents agreed that the project activities are completed within the specified period of time (Mean=3.932, SD=0.782). In addition, the respondents agreed that project activities are completed within the set budget (Mean=3.893, SD=0.578). Further, the respondents agreed that the WKWP meets the set goals and the needs of the beneficiaries (Mean=3.862, SD=0.686). The respondents also agreed that quality standards are met during implementation of the project activities (Mean=3.795, SD=0.665). In addition, the respondent agreed that there has been an overall positive review on the impact of the project among different stakeholders (Mean=3.756, SD=0.882). The respondents also agreed that the WKWP implementation has led to improvement on the socio- economical livelihoods of the communities (Mean=3.732, SD=0.808). Further the respondents agreed that the project has adequate data to support performance (Mean=3.721, SD=0.698).

Table 3: Project Performance

	Mean	Std. Deviation
The project activities are completed within the specified period of time	3.932	0.782
Project activities are completed within the set budget	3.893	0.578
The WKWP meets the set goals and the needs of the beneficiaries	3.862	0.686
Quality standards are met during implementation of the project activities	3.795	0.665
There has been an overall positive review on the impact of the project among different stakeholders.	3.756	0.882
The WKWP implementation has led to improvement on the socio-economical livelihoods of the communities	3.732	0.808
The project has adequate data to support performance	3.721	0.698
Aggregate	**3.848**	**0.719**

Inferential Statistics

Inferential statistics such as correlation analysis and regression analysis were used to assess the relationships between the independent variables (stakeholder engagement and training) and the dependent variable (project performance in the Western Kenya Water Project, Kenya).

Correlation Analysis

This research adopted Pearson correlation analysis determine how the dependent variable (project performance in the Western Kenya Water Project, Kenya) relates with the independent variables (stakeholder engagement and training). The findings were as depicted in Table 4.

Table 4: Correlation Coefficients

		Project Performance	Stakeholder Engagement	Training
Project Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	36		
Stakeholder Engagement	Pearson Correlation	.793**	1	
	Sig. (2-tailed)	.001		
	N	36	36	
Training	Pearson Correlation	.803**	.437	1
	Sig. (2-tailed)	.000	.020	
	N	36	36	36

From the results, there was a very strong relationship between stakeholder engagement and project performance in the Western Kenya Water Project, Kenya (r = 0.793, p value =0.001). The relationship was significant since the p value 0.001 was less than 0.05 (significant level). The findings are in line with the findings of Ssendagi *et al,* (2024) who indicated that there is a very strong relationship between stakeholder engagement and project performance.

Moreover, there was a very strong relationship between training and project performance in the Western Kenya Water Project, Kenya (r = 0.803, p value =0.000). The relationship was significant since the p value 0.000 was less than 0.05 (significant level). The findings are in line with the findings of Phiri (2021) who indicated that there is a very strong relationship between training and project performance.

Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables (stakeholder engagement and training) and the dependent variable (project performance in the Western Kenya Water Project, Kenya).

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.874[a]	. 0.764	.765	.10381

a. Predictors: (Constant), stakeholder engagement, training

The model summary was used to explain the variation in the dependent variable that could be explained by the independent variables. The r-squared for the relationship between the independent variables and the dependent variable was 0.764. This implied that 76.4% of the variation in the dependent variable (project performance in the Western Kenya Water Project,

Kenya) could be explained by independent variables (stakeholder engagement, training, baseline study and data storage and security).

Table 6: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	103.037	2	51.52	134.52	.001[b]
	Residual	12.645	33	.383		
	Total	115.682	35			

a. Dependent Variable: project performance in the Western Kenya Water Project, Kenya

b. Predictors: (Constant), stakeholder engagement, training

The ANOVA was used to determine whether the model was a good fit for the data. F calculated was 134.52 while the F critical was 2.679. The p value was 0.001. Since the F-calculated was greater than the F-critical and the p value 0.003 was less than 0.05, the model was considered as a good fit for the data. Therefore, the model can be used to predict the influence of stakeholder engagement, training, baseline study and data storage and security on project performance in the Western Kenya Water Project, Kenya.

Table 7: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.364	0.096		3.792	0.003
Stakeholder Engagement	0.388	0.099	0.389	3.919	0.002
Training	0.395	0.099	0.394	3.990	0.000

The regression model was as follows:

$$\mathbf{Y = 0.364+0.388\ X_1 +0.395X_2 +\varepsilon}$$

According to the results, stakeholder engagement has a significant effect on project performance in the Western Kenya Water Project, Kenya (β_1=0. 0.388, p value= 0.002). The relationship was considered significant since the p value 0.002 was less than the significant level of 0.05. The findings are in line with the findings of Tahlil (2019) who indicated that there is a very strong relationship between stakeholder engagement and project performance.

The results also revealed that training has a significant effect on project performance in the Western Kenya Water Project, Kenya (β1=0.395, p value= 0.000). The relationship was considered significant since the p value 0.001 was less than the significant level of 0.05. The findings are in line with the findings of Kahura (2023) who indicated that there is a very strong relationship between training and project performance.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study concludes that stakeholder engagement has a positive and significant influence on project performance in the Western Kenya Water Project, Kenya. Findings revealed that joint decision making, consultation and clear communication influences project performance in the Western Kenya Water Project, Kenya.

In addition, the study concludes that training has a positive and significant influence on project performance in the Western Kenya Water Project, Kenya. Findings revealed that training feedback score, number of trainings and mentorship opportunities influences project performance in the Western Kenya Water Project, Kenya.

Recommendations

The study recommends that the management of Western Kenya Water Project should foster collaboration, ensuring alignment with community needs, and promoting transparency. Engaging local communities, government bodies, and other stakeholders throughout the project lifecycle creates a sense of shared ownership and responsibility, leading to smoother implementation and stronger support.

In addition, the study recommends that the management of Western Kenya Water Project should enhance the skills and knowledge of both project staff and local communities. Providing targeted training ensures that project personnel are well-equipped to manage and implement the technical aspects of the project effectively, while also fostering a deeper understanding of water management practices among local communities.

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