

STAKEHOLDER MANAGEMENT PRACTICES AND PERFORMANCE OF WATER PROJECTS IN NORTHERN COUNTIES, KENYA

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ABSTRACT

Water projects in Northern Kenya continue to experience challenges related to cost overruns, schedule delays, and inadequate service delivery despite substantial public investment. Effective stakeholder management has been identified as a critical factor in improving project performance. This study examined the influence of stakeholder identification and stakeholder monitoring on the performance of water projects in Northern Counties, Kenya. The study was guided by Resource Dependence Theory and Realistic Evaluation Theory and adopted a descriptive research design. The unit of analysis comprised 28 completed water projects, while the unit of observation consisted of 182 respondents selected using stratified random sampling based on Yamane's formula. Primary data were collected using structured questionnaires, complemented by secondary data on project performance. Instrument validity was established through content and construct validity, while reliability was confirmed using Cronbach's alpha. Data were analyzed using SPSS Version 28 through descriptive statistics, Pearson correlation, and multiple regression analysis. The findings revealed that stakeholder identification had a significant positive relationship with project performance ($r = .560, p < .001$) and significantly predicted project performance ($\beta = 0.633, p < .001$). Stakeholder monitoring also exhibited a strong positive relationship with project performance ($r = .792, p < .001$) and emerged as the strongest predictor of project performance ($\beta = 0.639, p < .001$). The regression model explained 80.0% of the variation in project performance ($R^2 = .800$), indicating that stakeholder management practices substantially influence the success of water projects. The study concludes that systematic stakeholder identification and continuous stakeholder monitoring significantly enhance the performance of water projects. It recommends that project managers adopt structured stakeholder identification frameworks, institutionalize continuous stakeholder monitoring, strengthen stakeholder feedback mechanisms, and utilize monitoring results to support project decision-making and improve project outcomes.

Keywords: Stakeholder identification, stakeholder monitoring, project performance, water projects, stakeholder management, Northern Kenya.

INTRODUCTION

Projects are very sensitive to decisions and actions taken by any stakeholder. Almost all the projects operate in a context where its respective stakeholders play a primary role in the accomplishments of tasks (Hammad, 2023). Stakeholder support is critical for the success of any project. Project stakeholders may be within or outside the organization. A project stakeholder may be an entity that have sponsored the project, have an influence in the project completion or have an interest in the completion of that particular project. Stakeholders of a particular project varies during the life cycle of the project in terms of needs, numbers and influence. The interests, perception as well as the motivation of all the project stakeholders that have an influence on the success of the project should not be ignored. Stakeholder review and identification should be conducted throughout the project lifecycle (Njogu, 2022).

Project stakeholders are individuals and organizations actively involved in the project, or whose interest may be affected as a result of the project execution or completion. Participation is a process that empowers people and communities through acquiring skills, knowledge and experience, leading to greater self-reliance and self-management (Oleanders & Landin, 2021). Project stakeholder management is defined as the systematic identification, analysis and planning of actions to communicate with and influence stakeholders (PMI, 2004). To manage project stakeholders effectively project managers should be competent in all areas of stakeholder management. Proper stakeholder management enables an organization achieve its strategic objectives through support from stakeholders and understanding the external environment (Braintrust, 2020).

Due to the interest of stakeholders on the project, they may exert influence on the project's objective and outcomes. To ensure a successful project, the project team must identify and engage all stakeholders, determine their requirements and expectation and manage their influence in relation to their requirements (Irvin, 2022). Stakeholder participation can take place in different places of the project cycle and at different levels of society, and take many different forms (O'holloran, 2024). These can range along a continuum from contribution of inputs to predetermined projects and programmes, to information sharing, consultation, decision making, partnership and empowerment. Participation is both a means and an end. As a means, it is a process in which people and communities cooperate and collaborate in development projects and programmes (Irvin & John, 2021). A project is said to be successfully completed when it has met the stakeholders' interests and expectations. Even if it meets time, budget and scope criterion, it is not deemed successful if the needs of the stakeholders and their expectations are not met.

Stakeholder management can be in all or some phases in a project's life cycle, at numerous levels of society, and in all forms. Incorporating stakeholders' views in project decisions enhances organizational performance and commitment (Bahadorestani, Naderpajouh, & Sadiq, 2020). Stakeholder management helps to maintain stakeholders' interests and achievement of the success of the project. They also have a right to know the progress of the project, corrective action to be impacted, and the lessons that can be learned from the monitoring and evaluation reports. By being involved, the stakeholder can participate directly in assessing the relevance, performance, and success of the project. Organizations must put in mind individual matters and groups that may influence their activities when making decisions and attaining the goals of the organization (Klaus-Rosinka & Iwko, 2021).

Statement of the Problem

The County and national government has allocated funds in a number of water development projects. However, 70% of these projects are not completed on time. This happens where there is

change of regime in political leadership whereby the incoming leaders are not willing to complete projects initiated by their predecessors (Owino, 2023). The performance of water and sanitation projects in North Eastern Kenya is generally considered below the national average, with significantly lower access to safe water and improved sanitation compared to other regions. Marsabit water supply project that was initiated in Marsabit township in Saku Constituency commenced on 1st November 2018 but by 31st January, 2023 it was substantially complete. Masalani-Gababa Pipeline Extension & Ancillary Works Project was not able to provide sufficient water to the targeted 17,600 residents of Gababa center and its environs. The Commencement Date for Mandera Water Supply and Sanitation Infrastructure (Sewerage Component) was 01 November 2018 was to be completed by December 2023 but was actually completed on 7th July, 2024 (NWWDA, 2024).

According to WASREB (2024), only 45% of households have access to safe water. Northern Kenya Counties have the least coverage of clean water whereby, Mandera 5%, Turkana 4%, and Wajir 2%. Many water projects in Northern Kenya suffer from poor infrastructure and lack of maintenance whereby the average rates of non-functionality of water points were 28% in West Pokot, 32% in Kyuso, and 20% in Mbeere North. This indicates a significant portion of water facilities are non-operational due to maintenance issues. In addition, 24% of the water projects had a budget overrun of more than 35% (Kenya Ministry of Water and Irrigation, 2021).

There are various studies on stakeholder management; Bundi (2024); Gichimu (2022); Mageto, Kitheka, and Ogolla (2021). However, these studies create several research gaps. The studies have been conducted in fairly stable and well-resourced regions with limited focus on arid and semi-arid areas such as Northern Kenya hence a contextual gap. The studies further create empirical gap since there is limited empirical evidence that links stakeholder management practices to measurable performance outcomes. Therefore, this study sought to address these gaps by examining the relationship between stakeholder management practices and performance of water projects in Northern Counties in Kenya providing context-specific based insights.

Objectives of the Study

This study's general objective was to examine relationship between stakeholder management practices and performance of water projects in Northern Counties in Kenya.

Specific Objectives of the Study

- i. To examine the effect of stakeholder identification on performance of water projects in Northern Counties in Kenya.
- ii. To determine the effect of stakeholder monitoring on performance of water projects in Northern Counties in Kenya.

LITERATURE REVIEW

Theoretical Review

Resource Dependence Theory

Resource Dependence Theory (RDT), developed by Pfeffer and Salancik (1978), states that organizations rely on external stakeholders for critical resources, which creates dependencies and influences decision-making. One important assumption of the RDT is that firms cannot be fully self-sufficient with regards to strategically critical resources for survival. They need to depend on resources from outside parties to compete (Heide, 1994) and carefully manage this dependency with other firms to strive for sustainable development (Ulrich & Barney, 1984). Projects, like

organizations, require resources such as funding, materials, expertise, and political support. RDT helps in identifying and prioritizing stakeholders based on their control over these essential resources. The key resource providers may include financial stakeholders, material suppliers, or regulatory bodies (Pfeffer & Salancik, 2003).

RDT also suggests that organizations should reduce risks associated with heavy reliance on a single stakeholder. The strategies include diversifying resource suppliers, building alliances and partnerships, and negotiating favorable agreements. Stakeholders can be categorized based on their resource control: primary stakeholders (high power, high dependence), influential stakeholders (high power, low dependence), and supportive stakeholders (low power, high dependence) (Choudhury & Khanna, 2014). RDT emphasizes flexibility in stakeholder engagement, as dependencies shift over time. Project managers must monitor stakeholder influence regularly and adjust engagement strategies, build long-term relationships with key resource providers to ensure sustainability, and anticipate risks such as funding cuts or material shortages and develop contingency plans (Ntim & Soobaroyen, 2013b).

Resource Dependence Theory (RDT) provides a structured approach to project stakeholder identification by analyzing resource flow and stakeholder influence. By identifying stakeholders based on their contribution to the project, the project managers are able to prioritize their engagement, manage dependencies, and mitigate potential risks arising from resource limitations or conflicting interests. This approach enables the managers to develop a balanced resource strategy that improves project performance through ensuring that key stakeholders are effectively involved and their expectations aligned with project goals.

Realistic Evaluation Theory

Realistic evaluation theory was published by Pawson and Tilley (1997). The realistic evaluation theory offers a model that focuses on determining the results that emanate from project interventions, the process of producing such outcomes, and the significance of different conditions in which such interventions occur (Pawson & Tilley, 2004). The theory focuses on what works for certain organizations or individuals, how they work, in what respects, and in what circumstances (Pawson & Tilley, 2004). Realistic evaluation theory therefore helps a project manager to understand what makes an intervention ineffective or successful, and the context that makes it successful in other areas (Cohen, Manion, & Morison, 2008).

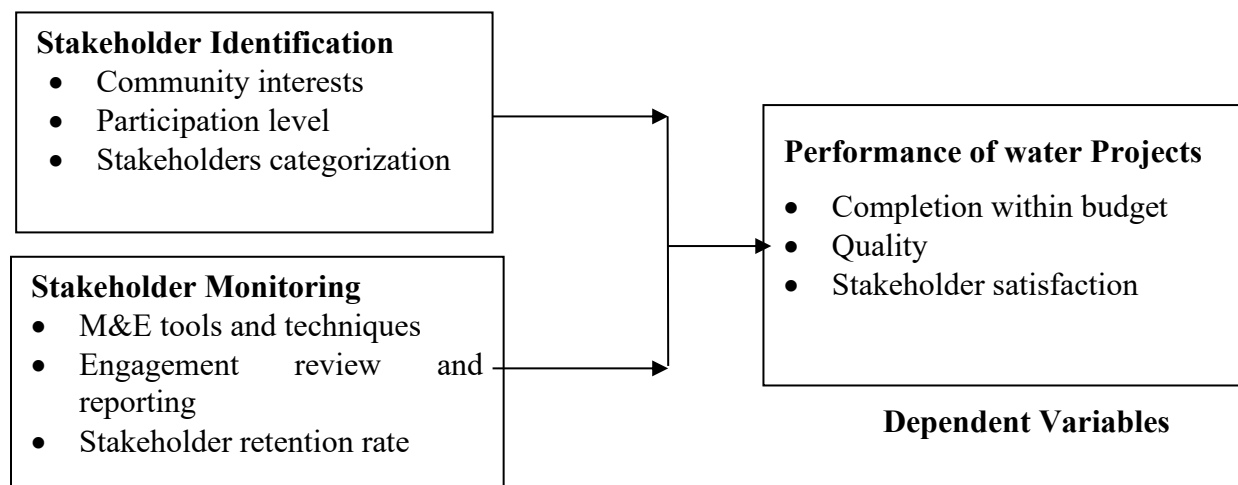
A key strength of the realistic evaluation model is its ability to integrate lessons learned from a given evaluation and ensure it is successfully applied in different contexts. Realistic assessment looks for the context under which an intervention can be successful, thus learning lessons about the output production process (Fukuda-Parr, Lopes, & Malik, 2002). According to Robert (2010), an assessment should provide evidence-based data that is proven to be credible, reliable and helpful, and should also allow for the timely inclusion of results, suggestions and lessons in the decision-making process. In the course of the assessment, key stakeholders should be engaged in a number of ways to improve the usefulness of the results along with suggestions (Clarke, 2011). Realistic evaluation theory supports the variable on stakeholder monitoring. It is particularly useful for monitoring stakeholders in programs and projects, as it helps evaluate the interactions between context, mechanisms, and outcomes. Stakeholders monitoring may help to establish if the stakeholders are still actively involved in the projects.

Applying Realistic Evaluation Theory in stakeholder monitoring helps uncover the complex relationships between stakeholder engagement strategies, stakeholder behaviors, and project outcomes. The theory posits that monitoring improves performance by producing specific responses, including accountability, corrective action, transparency and better use of resources by

stakeholders. Conversely, where monitoring systems are weak, poorly coordinated or lack stakeholder involvement, monitoring is not effective and results in continued project inefficiencies, cost overruns and/or infrastructure collapses.

Conceptual Framework

Conceptual framework graphically illustrates the relationship exists between the independent and dependent variable (Boeckmann et al., 2011). It provides a structured way of understanding how different variables interact to influence the outcome of interest. In this study, the independent variables are identification, analysis, while the dependent variable is performance of water projects. Figure 2.1 presents the study variables.



Independent variables

Figure 2. 1: Conceptual Framework

Stakeholder Identification

Stakeholder identification is the process of looking for the key persons, group of persons or organizations that are likely to be affected in any way with the project (Muluka et al., 2021). Stakeholder identification focuses on identifying who to engage based on the identified goals and objectives. It involves analysing the interest and influence of stakeholders to determine who to include or exclude (Hambrick & Wowak, 2021). The process of identifying stakeholders involves identifying everyone directly related with the project (individuals, groups, or organizations) that could impact or be impacted by a project's decision, activity, or outcome. Identifying all stakeholders in the first phase of the project helps in better manageable projects as it helps in factoring all stakeholder's interests at the planning stage itself (Gupta, Crilly, & Greckhamer, 2020).

According to Hampel, Tracey and Weber (2020), before any plan regarding the stakeholders is carried out, they should be identified and documented, thus determining the extent to which each stakeholder can be engaged in the project. When identifying affected stakeholders, it is argued that a systematic approach many times works well, beginning with delineating the project's geographic sphere of influence. It remains a project manager's job to identify stakeholders and understand their impact in the project (Olatunde, Awodele, & Odeyinka, 2021).

Stakeholder Monitoring

Stakeholder monitoring entails assessing the status of stakeholder relationships, as well as adapting and changing the stakeholder engagement strategies and plans as needed. The key benefit of this process is that it maintains or increases the efficiency and effectiveness of stakeholder engagement activities as the project evolves and its environment changes (Sachs & Kujala, 2021b). Stakeholder needs are dynamic and demand regular updating of all associated documentation. According to Rogers (2019), monitoring is instrumental in keeping management and primary stakeholders of a development intervention abreast of their progress towards the attainment of objectives and allocation of resources. Monitoring provides critical data for analysis.

The key benefit of this stakeholder monitoring is that it maintains or increases the efficiency and effectiveness of stakeholder engagement activities as the project evolves and its environment changes. This process is performed throughout the project. Monitoring stakeholder engagement is not a one-time activity, but a continuous process of learning and improvement. A project manager should regularly review and update objectives, methods, data, and actions based on changing context and stakeholder needs and expectations (Diers-Lawson et al., 2021).

The monitoring of stakeholder engagement is essential for all projects to make sure they move forward, all stakeholders remain supportive, and sponsors and financiers are held to account. This monitoring process should start immediately at the project's inception and carry on until it is finalized. Frequent tracking of stakeholders and their involvement in the project facilitates the progression of the project, motivate stakeholders to remain involved, and make sure sponsors and payers remain reliable. Project managers must ensure that stakeholders remain actively engaged to help garner a successful project outcome (Okazaki, Plangger, & Menendez, 2021). According to Bahadorestani, Naderpajouh, and Sadiq (2020) there are many methods and tools to monitor stakeholder, depending on the project objectives, resources, and preferences. Some of the most common methods include surveys, interviews, focus groups, workshops, observation, feedback forms, social media analytics, and stakeholder analysis.

Empirical Review

Stakeholder Identification and Project Performance

Saad, Zahid, and Muhammad (2022) studied effect of stakeholder identification on project performance in Southwest, China. This study used a comparative research approach. The researchers compared projects that had fully identified stakeholders and those that did not identify the stakeholders. Results showed that stakeholder identification is an important process in project management that it ensures that project team are aware of the stakeholders they are dealing with and how they are engaged.

Nailantei and Iloka (2024) studied influence of stakeholder identification on performance of healthcare projects in Machakos County, Kenya. The study adopted a descriptive research design. The target was 341 healthcare projects in Machakos County. Data was collected using questionnaires. Findings showed that stakeholder identification was poorly done in majority of the healthcare projects. The project managers rarely recognized project stakeholders and very their involvement in the projects was not documented.

Wanjala and Nyaberi (2023) studied effect of stakeholder identification on performance of donor funded projects in Nakuru County. The study adopted a descriptive research design. The target was 50 donor funded projects in Nakuru County. Questionnaire was used to collect data. The study showed that stakeholder identification significantly affected performance of projects in

Nakuru county. The project managers effectively identified stakeholders, collected, analyzed and submitted data or stakeholder information to create a stakeholder registry.

Wango, Ngatia, and Lango (2024) investigate the influence of stakeholder identification on the performance of World Bank funded projects in Kenya. The study adopted a cross-sectional survey design. The target was 62 World Bank funded projects. The target was 310 comprising of project managers, coordinators, supervisors, monitoring and evaluation officials, and representatives from the National Treasury. Data was collected using a questionnaire. The findings revealed that stakeholder identification significantly influences the performance of World Bank funded projects in Kenya.

Stakeholder Monitoring and Project Performance

Amin and Scheepers (2022) studied effect of stakeholder monitoring on project outcomes. The study adopted a qualitative research approach. Data was collected using interview guides. The study respondents were project stakeholders including project donors, implementing partners, and steering committee members. Results showed that stakeholder monitoring was conducted through use of various tools which included questionnaires and observation check lists. Monitoring activities strengthened the relationship between stakeholders by involving multiple stakeholders at different stages of projects to identify community needs and to demonstrate the positive community impact.

Matyoko(2019) examined the effectiveness of Monitoring and Evaluation Systems on project sustainability in Tanzania. The study used a descriptive research design. The study showed that there is a positive relationship between stakeholder participation in monitoring and evaluation and sustainability of NGO projects. It was also noted that a positive correlation exists between stakeholder's monitoring and the sustainability of NGOs project.

Ahmed and Mutundu (2023) studied role of M&E systems on performance of public school infrastructure development in Wajir County, Kenya. The project stakeholders were motivated to attend workshops and training sessions centered around infrastructure projects techniques. Stakeholder monitoring improved their understanding of the project implementation phases while giving stakeholders the ability to make more significant and effective contributions to project implementation..

Awino and Mungai (2024) examined the effect of stakeholder management on performance of irrigation schemes in Kisumu County, Kenya. The study employed a descriptive research design. The study targeted 5 irrigation schemes in Kisumu County. The unit of observation was 62 project committee members, 15 block leaders, and 15 counties' ministry of water, sanitation and irrigation officials. The sample size was determined using census since the study population is less than 200. This study used primary data which was collected using questionnaires. Findings showed that there was a moderate significant relationship between monitor stakeholder engagement and project performance. Project managers prepared periodic progress reports for the stakeholders, stakeholders participated in assessing whether the projects were bringing the intended benefits, the stakeholders participated in the development of project monitoring and evaluation framework, and the agricultural officers provided feedback on the progress of the projects. The right monitoring tools were not used to monitor stakeholder engagement and there was no committee constituted by the farm owners to monitor irrigation projects.

RESEARCH METHODOLOGY

The study adopted a descriptive research design to examine the relationship between stakeholder management practices and the performance of water projects in Northern Kenya. The design was

appropriate because it provides a systematic framework for describing study variables and examining relationships among them using descriptive and inferential statistics (Mugenda & Mugenda, 2008; Mugenda, 2013).

The unit of analysis comprised 28 completed water projects implemented in Northern Kenya within the previous five years, while the unit of observation consisted of 336 respondents, including project managers, project supervisors, project steering committee members, and internal stakeholder representatives. Completed projects were selected because they provide measurable performance outcomes, while the five-year period ensured that the findings reflected recent stakeholder management practices (Kerzner, 2017; PMI, 2017; Saunders et al., 2019).

A sample of 182 respondents was determined using the Yamane (1967) formula. The study employed stratified sampling to ensure proportional representation of the different stakeholder groups, followed by simple random sampling to select respondents within each stratum, thereby improving representativeness and reducing sampling bias (Saunders et al., 2019).

Primary data were collected using a structured questionnaire comprising Likert-scale and open-ended questions, while secondary data on project performance were obtained through data collection sheets. Prior to the main survey, a pilot study involving 18 respondents was conducted to refine the research instrument. Instrument validity was established through content and construct validity, while reliability was assessed using Cronbach's alpha, with a minimum acceptable threshold of 0.70 (Orodho, 2010; Zikmund et al., 2013).

The collected data were coded and analyzed using SPSS Version 28. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the data, while Pearson correlation and multiple linear regression were employed to examine the relationships between stakeholder identification, stakeholder analysis, , and project performance at a 95% confidence level.

RESEARCH FINDINGS AND DISCUSSION

The questionnaires were administered to 164 stakeholders in water projects and 146 questionnaires were answered successfully. Table 4.3 shows that the response rate was 88.5%. The response rate was adequate as recommended by research scholars. Wu, Zhao, and Fils-Aime (2022) stated that a response rate which is more than 50% is considered adequate while excellent response rate is usually above 70%.

Descriptive Statistics

Stakeholder Identification

The first objective sought to examine the effect of stakeholder identification on performance of water projects in Northern Counties in Kenya. Respondents were asked to the extent to which they agree with listed statements on stakeholder identification. Results show that majority of the respondents strongly agreed that; concerns of stakeholders are carefully considered (M=4.52, Std. 0.99), the projects developed are based on the needs and expectations (M=4.45, Std. 0.92), stakeholder are identified based on their level of interests in the project (M=4.32, Std. 1.05), and selected stakeholders have an impact on the project's resources (M=4.29, Std. 1.14). The respondents also agreed that; all identified stakeholders are registered (M=4.20, Std. 1.16), need analysis is conducted prior to stakeholder selection (M=4.13, Std. 4.14), and stakeholders are identified based on the skills and capabilities in project implementation (M=4.12, Std. 1.09). The respondents however disagreed that people selected as stakeholders have skills or capabilities the project(s) will require (M=1.75, Std. 1.26).

The results show that the stakeholder identification practices are generally well established in water projects in Northern Kenya with an average score of 3.97. This implies that project teams highly emphasize on the systematic identification of project stakeholders in a manner that is congruent to project objectives and implementation requirements. Stakeholder identification is determined primarily by their relevance to the project's success which includes their interests, ability to influence the project, and how they can contribute to the project outcomes. Therefore, stakeholder needs and expectations are also considered for the design of the project, resulting in a participatory approach to the project, thus improving project acceptance and sustainability. In addition, the project managers partake stakeholder registration and need analysis, which indicate that there are organized processes within the stakeholder management. However, the results show a significant discrepancy in the degree to which stakeholders are selected based on their technical skills and capabilities. Although stakeholder identification seems to be systematic in theory, in reality not all stakeholders identified are competent enough to implement the project successfully. This implies that non-technical factors like social, political or community representation may sometimes influence the selection of the stakeholders. These discrepancies can undermine the success of stakeholder engagement and restrict the input of stakeholders towards project success.

The focus on the stakeholders based on their interests, influence, and impact on the project resources is consistent with the main assumption of the Resource Dependency Theory according to which organizations aim to cope with the dependency by involving actors capable of contributing the necessary inputs. Equally, the fact that the needs and concerns of stakeholders are taken into account can be viewed as an effort to gain legitimacy and further support of the key actors, which is essential to the sustainability of the project. The difference in the choice of stakeholders on the basis of skills and capabilities, however, points to a difference in the expectations of the Resource Dependency Theory. Failure to select the stakeholders based on their ability to bring significant resources to the project means that projects face the risk of undermining its resource base, thus resulting in inefficiencies and less performance. This indicates that although the principals of the theory are applied to some extent, their implementation is not practically fully optimized. Findings are in agreement with Saad, Zahid, and Muhammad (2022) that stakeholder identification is an important process in project management since it ensures that project team are aware of the stakeholders they are dealing with and how they are engaged. Similarly, Nailantei and Iloka (2024) showed that stakeholder identification was poorly done in majority of the healthcare projects.

Table 1: Stakeholder Identification

Statements	SD %	D %	NS %	A %	SA %	M	Std.
Stakeholder are identified based on their level of interests in the project	2.7	7.5	5.5	24.0	60.3	4.32	1.05
All identified stakeholders are registered	8.2	1.4	5.5	32.2	52.7	4.20	1.16
Stakeholders are identified based on the skills and capabilities in project implementation	5.5	4.1	3.4	29.5	57.5	4.12	1.09
Selected stakeholders have an impact on the project's resources	7.5	3.4	3.4	40.4	45.2	4.29	1.14
Need analysis is conducted prior to stakeholder selection	6.2	5.5	5.5	34.9	47.9	4.13	1.14
Concerns of stakeholders are carefully considered.	3.4	3.4	5.5	13.0	74.7	4.52	0.99
The projects developed are based on the needs and expectations	4.1	1.4	1.4	32.2	61.0	4.45	0.92
People selected as stakeholders have skills or capabilities the project(s) will require	65.1	16.4	5.5	4.8	8.2	1.75	1.26
Average						3.97	1.01

N=146**Stakeholder Monitoring**

The second objective sought to determine the effect of stakeholder monitoring on performance of water projects in Northern Counties in Kenya. Respondents were asked to the extent to which they agree with listed statements on stakeholder monitoring. Results show that majority of the stakeholders strongly agreed that; project managers frequently review stakeholder management plan (M=4.60, Std. 0.81), stakeholder contributions are acknowledged and documented (M=4.45, Std. 0.99), project managers frequently evaluate stakeholders interests with the project (M=4.42, Std. 1.01), stakeholders participate in assessing whether the water project are bringing the intended benefits to the users (M=4.42, Std. 1.21), and project managers share the evaluation reports with stakeholder (M=4.32, Std. 1.16). They also agreed that stakeholder monitoring and evaluation helps to improve stakeholder management (M=3.95, Std. 0.95). However, the stakeholders disagreed that the tools and techniques for stakeholder monitoring and evaluation are suitable (M=1.82, Std. 1.30).

The results show that the stakeholder monitoring practices in water projects in Northern Kenya are moderate as the average score is 3.99. This implies that project teams tend to accept the relevance of ongoing monitoring of stakeholder engagement and its role in the project results. The findings indicate that project managers regularly check stakeholder management plans, evaluate stakeholder interests, and record stakeholder contributions. It is also evidenced that stakeholders are engaged in the determination of whether projects present intended benefits and that the evaluation findings are disseminated. These practices indicate to an organized method of control that helps to facilitate accountability, learning, and alignment between the expectations of the stakeholders and the objectives of the projects. Nevertheless, the weakness appears in the applicability of tools and methods applied in monitoring and evaluation of stakeholders. This means that even though the activities of monitoring are present, there can be a lack of rigor and effectiveness of the tools used. Consequently, the quality of the generated insights of the

monitoring processes can be restrained. Also, monitoring is provided, however, its task of enhancing the management of the stakeholders is rated rather in the middle, which means that the results are not always efficiently transformed into the practical changes.

These results are in line with Realist Evaluation Theory that focuses on what works, who works, conditions and why. The theory is concerned with the interplay of context, mechanisms and outcomes in measuring the effectiveness of a program. The reviewed stakeholder plans, evaluation of stakeholder interests and the engagement of stakeholders in the analysis of the project benefits are observed practices that can be associated with the focus of the theory of the context-sensitive evaluation and continuous learning. Through stakeholders involvement in the evaluation process, projects are in a better position to know how various actors affect the outcomes and to respond to them. Nevertheless, the detected weakness of monitoring tools and techniques is a drawback of the scope of considering the underlying mechanisms which contribute to the stakeholder engagement and successful project implementation. The Realist Evaluation Theory emphasizes that there should be a proper methodology to reveal causal explanations and not superficial observations. In cases where the right tools are not used, the capability to create insightful information and make decisions is undermined. This implies that although there are monitoring structures, they are limited in their ability to explain and enhance the stakeholder dynamics. Findings are in support of Amin and Scheepers (2022) that stakeholder monitoring was conducted through use of various tools which included questionnaires and observation check lists. In addition, Ahmed and Mutundu (2023) that stakeholder monitoring improve project stakeholders understanding of the project implementation phases while giving stakeholders the ability to make more significant and effective contributions to project implementation.

Table 2: Stakeholder Monitoring

Statements	SD %	D %	NS %	A %	SA %	M	Std.
Project managers frequently evaluate stakeholders interests with the project	4.8	2.7	1.4	28.1	63.0	4.42	1.01
Stakeholder contributions are acknowledged and documented	2.7	5.5	4.1	19.9	67.8	4.45	0.99
Project managers frequently review stakeholder management plan	1.4	2.7	4.1	18.5	73.3	4.60	0.81
The tools and techniques for stakeholder monitoring and evaluation are suitable	63.0	16.4	2.7	11.0	6.8	1.82	1.30
Project Manager share the evaluation reports with stakeholder	6.2	4.8	4.8	19.2	65.1	4.32	1.16
Stakeholders participate in assessing whether the water project are bringing the intended benefits to the users	6.2	6.8	2.7	6.8	77.4	4.42	1.21
Stakeholder monitoring and evaluation helps to improve stakeholder management	6.2	2.7	2.1	67.8	21.2	3.95	0.95
Average						3.99	1.06

Project Performance

Respondents were asked to the extent to which they agree with listed statements on performance of water projects in Northern Counties in Kenya. Results show that majority of the respondents strongly agreed that the project requirements, scope and objectives were clearly developed and understood by the stakeholders (M=4.47, Std. 1.14) while others agreed that the project meet

intended objectives/scope (M=4.16, Std. 1.50). The respondents however disagreed that the project was implemented according to budgeted cost (M=1.60, Std. 1.09) and that the project was implemented to the committed deadline (M=2.13, Std. 1.37).

The results reveal that moderate performance of water projects performance in Northern Kenya since it has an average score of 3.09. This implies that, though a certain degree of performance of the project is met, there are significant issues that hinder overall success. The findings indicate that the projects achieve the desired purposes and clearly defined scope and requirements. This means that there is a reasonably good project planning and conceptualization, and the stakeholders are aware of the intended purpose of the projects. However, major weaknesses can be observed in the cost and time performance. Projects mostly do not meet the budgeted costs, and expected schedules, reflecting inefficiencies in implementing projects. Such challenges can be explained by the lack of resource planning, decision-making delay, logistics or poor coordination between stakeholders. The difference between robust planning (clear objectives) and ineffective execution (cost and time overruns) implies inconsistency between project design and implementation. This trend is an indication of a scenario whereby projects have solid ideas, but are operationally limited, which ultimately influences their overall efficacy and sustenance. The findings indicate that it is not enough to attain the project objectives alone to ensure the overall project success. Performance should also be measured in terms of efficiency (cost and time) which is also a great challenge in implementation of water projects in Northern Kenya. Findings support the Kenya Ministry of Water and Irrigation (2021) findings that many water projects in Northern Kenya suffer from poor infrastructure and lack of maintenance whereby the average rates of non-functionality of water points were 28% in West Pokot, 32% in Kyuso, and 20% in Mbeere North.

Table 3: Project Performance

Statements	SD %	D %	NS %	A %	SA %	M	Std.
The project meet intended objectives/scope	16.4	1.4	3.4	7.5	71.2	4.16	1.50
The project was implemented according to budgeted cost	75.3	7.5	5.5	5.5	6.2	1.60	1.19
The project was implemented to the committed deadline	41.1	37.7	2.1	5.5	13.7	2.13	1.37
The project requirements, scope and objectives were clearly developed and understood by the stakeholders	5.5	5.5	2.7	8.9	77.4	4.47	1.14
Average						3.09	1.30

The findings on project time performance revealed notable delays across the 28 water projects in Northern Kenya. The average planned duration for the projects was 18.6 months, while the actual duration averaged 24.4 months, resulting in a mean time overrun of 5.8 months. Only 25% of the projects (7 out of 28) were completed within the planned schedule or ahead of time, with smaller borehole initiatives recording minimal delays. In contrast, larger and more complex projects experienced significant time overruns ranging from 4 to 7 months. Overall, 50% of the projects faced moderate delays, while 25% remained ongoing beyond their expected completion dates as of early 2026.

The results on the costs of implementing water projects has shown that the majority of the projects experienced budget overruns. The total average overrun across the 28 projects was 28%, with a significant difference between project expenditures and budgets at completion. While some smaller scale borehole projects were only slightly over budget (0% to 5%), most of the other

projects experienced cost overruns of between 12% and 38%. The largest and most expensive 'mega' projects show the largest development cost overrun patterns, with cost overruns of 29% to 38%. The primary and secondary data confirms that even though stakeholders generally acknowledged that projects achieved their main objectives and that also understood the project scope, there was clear agreement on poor performance in terms of adherence to budgeted costs and scheduled timelines. This mixed performance shows that although water projects in Northern Kenya mainly delivered on projected outcomes, they suffered from implementation inefficiencies in time and cost control.

Table 4: Distribution of Projects by Time and Cost Overrun

Indicator	Frequency	Percentage
Time Overrun		
0 months	2	7.2%
1-2 months	10	35.7%
3-4 months	9	32.1%
More than 5 months	7	25.0%
Total	28	100.0%
Cost Overrun		
0-10%	2	7.2%
11-20%	9	32.1%
21-30%	9	32.1%
31-40%	8	28.6%
Total	28	100.0%

Correlation Analysis

The study used Pearson Correlation to measure the strength and the relationship between stakeholder management practices and performance of water projects in Northern Counties in Kenya. According to Evans (1996), correlation coefficient (r) 00-0.19 shows a very weak correlation, 0.20-0.39 as weak, 0.40-0.59 as moderate, 0.60-0.79 as strong, and 0.80-1.0 as very strong correlation. Significance is less than $p = 0.05$. Correlation findings are presented in Table 5.

Results show that there is a strong positive relationship between stakeholder identification and performance of water projects in Northern Counties in Kenya ($r = .560, p = .000$). This implies that projects that identify relevant stakeholders correctly are more likely to have success in meeting goals, addressing stakeholder needs, and increasing long-term sustainability. This ensures that critical actors are identified early and that there are less conflict between stakeholder groups and better alignment of resources when implementing project plans. The results support the value of systematic stakeholder mapping as an essential component of success in project implementation. Findings concur with Wanjala and Nyaberi (2023) that stakeholder identification significantly affected performance of projects.

There is a strong significant relationship between stakeholder monitoring and performance of water projects in Northern Counties in Kenya ($r = .792, p = .000$). The findings suggest that stakeholder monitoring have the greatest impact on project success. Continual monitoring of stakeholder engagement, evaluation of their input to the project, and adaptive management practices are the most key drivers of project success. Continuous monitoring allows project managers to identify and respond quickly to new issues (emerging issues) and ensure that stakeholder expectations are aligned with program objectives. Findings are in support of

Matyoko(2019) that there is a positive relationship between stakeholder participation in monitoring and evaluation and sustainability of NGO projects.

Table 5: Coefficient of Correlation

Variables		Project Performance	Identification	Monitoring
Project Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	146		
Identification	Pearson Correlation	.560**	1	
	Sig. (2-tailed)	.000		
	N	146	146	
Monitoring	Pearson Correlation	.792**	.402	1
	Sig. (2-tailed)	.000	.000	
	N	146	146	146

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

Regression Analysis

Multiple regression analysis was conducted to examine the effect of stakeholder identification and stakeholder monitoring on the performance of water projects in Northern Counties, Kenya. The overall regression model demonstrated a strong positive relationship between stakeholder management practices and project performance ($R = 0.895$). The model explained 80.0% of the variation in project performance ($R^2 = 0.800$), while the adjusted coefficient of determination (Adjusted $R^2 = 0.794$) indicated that the model provided a good fit for the data. These findings suggest that stakeholder management practices are important predictors of project performance, consistent with Kipyegon, Marube, and Wamaitha (2023), who reported that stakeholder management practices positively influence public project success.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.895	0.800	0.794	0.683

Predictors: (Constant), Stakeholder Identification, Stakeholder Monitoring

The significance of the regression model was further confirmed using ANOVA. The results indicate that stakeholder management practices significantly predict the performance of water projects in Northern Counties, Kenya ($F = 141.133$, $p < 0.001$), implying that the regression model provides a good fit to the observed data. The findings support Gichimu and Mutuku (2022), who established a significant relationship between stakeholder management and the performance of county government-funded projects.

Table 7: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	263.551	4	65.888	141.133	0.000
Residual	65.826	141	0.467		
Total	329.377	145			

Dependent Variable: Project Performance

The regression coefficients revealed that stakeholder identification had a positive and statistically significant effect on project performance ($B = 0.718$, $p < 0.001$). The standardized coefficient ($\beta = 0.633$) indicates that stakeholder identification was among the strongest predictors of project performance. This suggests that timely identification and categorization of stakeholders enhance project coordination, resource alignment, and achievement of project objectives. The finding agrees with Wango, Ngatia, and Lango (2024), who found that stakeholder identification significantly improves the performance of development projects.

Similarly, stakeholder monitoring exhibited the strongest positive and statistically significant influence on project performance ($B = 0.838$, $p < 0.001$), with the highest standardized coefficient ($\beta = 0.639$). This indicates that continuous monitoring of stakeholder participation, evaluation of stakeholder contributions, and regular adjustment of engagement strategies significantly improve project performance. The finding concurs with Awino and Mungai (2024), who reported that stakeholder monitoring enhances accountability, stakeholder commitment, and overall project success.

The regression model can therefore be expressed as:

$$\text{Project Performance} = 4.747 + 0.718(\text{Stakeholder Identification}) + 0.838(\text{Stakeholder Monitoring})$$

Table 8: Regression Coefficients

Variable	Unstandardized Coefficient (B)	Std. Error	Standardized Beta (β)	t	Sig.
Constant	4.747	0.354	—	13.401	0.000
Stakeholder Identification	0.718	0.047	0.633	10.127	0.000
Stakeholder Monitoring	0.838	0.083	0.639	15.198	0.000

Dependent Variable: Project Performance

Conclusions

Stakeholder identification has a significant positive relationship with performance of water projects. Identifying stakeholders help in categorizing them according to their interest in the projects. This is based on the roles of the stakeholders in the projects. The stakeholder's needs and expectations are also put into consideration to ensure that the programs meet stakeholders' needs and expectations which leads to stakeholders' satisfaction with project outcome. Identifying stakeholders based on their interest, level of influence in the project, and relevance enhances project performance. Assessing and categorizing stakeholders helps to ensure that project objectives are as closely aligned with stakeholder expectations as possible. However, if there are inconsistencies in ensuring sufficient competencies exist for all stakeholders, it may hinder the overall effectiveness of the stakeholder identification process.

Stakeholder monitoring has a positive significant relationship with project performance. Continuous evaluation of stakeholder engagement contributes significantly to improved accountability and project success. Monitoring the stakeholder management plan helps to check on stakeholder management practices and if stakeholder management is on track. Majority of the project managers do not use the right tools for monitoring stakeholders.

Recommendations

Project managers should adopt a more structured and skills based stakeholder identification framework. The identification should emphasize on the technical skills and knowledge in project implementation. The managers should develop standardized stakeholder mapping tools to ensure that all key actors are identified early and engaged appropriately. Project managers should ensure that the interest of every stakeholder in the projects is recorded to enable the project managers to establish the interest of the stakeholders and their effect on the projects.

Stakeholder participation in the projects should be monitored frequently to determine their level of involvement in the projects. The project managers should adopt modern and standardized monitoring tools to improve the accuracy and usefulness of stakeholder feedback. The managers should also document the stakeholder evaluation results and use them to inform decision-making and project changes. The project managers should as well be trained on monitoring and evaluation method to improve their knowledge on stakeholder monitoring.

REFERENCES

- Ahmed, A., & Mutundu, K. (2023). Role of M&E systems on performance of public school infrastructure development in Wajir County, Kenya. *African Journal of Development Studies*, 8(3), 145–159.
- Bahadorestani, A., Naderpajouh, N., & Sadiq, R. (2020). Planning for sustainable stakeholder engagement based on the assessment of conflicting interests in projects. *Journal of Cleaner Production*, 242, 118402.
- Braintrust. (2020). Stakeholder management and organizational strategic performance. *Braintrust Research Series*, 5(2), 33–47.
- Bundi, S. (2024). *Project stakeholder management and successful implementation of National Health Insurance Fund projects in Kenya* (Unpublished master's thesis). Jomo Kenyatta University of Agriculture and Technology.
- Choudhury, P., & Khanna, T. (2014). Managing resource dependence through stakeholder partnerships. *Journal of Strategic Management*, 35(4), 521–538.
- Clarke, A. (2011). Project evaluation and stakeholder engagement in development programmes. *International Journal of Project Evaluation*, 6(2), 81–95.
- Cohen, L., Manion, L., & Morrison, K. (2008). *Research methods in education* (6th ed.). Routledge.
- Diers-Lawson, A., et al. (2021). Monitoring stakeholder engagement in dynamic project environments. *International Journal of Project Organisation and Management*, 13(3), 201–220.
- Evans, J. D. (1996). *Straightforward statistics for the behavioral sciences*. Brooks/Cole.
- Fukuda-Parr, S., Lopes, C., & Malik, K. (2002). *Capacity for development: New solutions to old problems*. United Nations Development Programme.
- Gichimu, E. M., & Mutuku, M. (2022). Stakeholder management and performance of county government funded projects in Nyeri County, Kenya. *The Strategic Journal of Business & Change Management*, 9(4), 761–774.
- Gupta, K., Crilly, D., & Greckhamer, T. (2020). Stakeholder engagement strategies, national institutions, and firm performance: A configurational perspective. *Strategic Management Journal*, 41(10), 1869–1900.
- Hambrick, D. C., & Wowak, A. J. (2021). CEO sociopolitical activism: A stakeholder alignment model. *Academy of Management Review*, 46(1), 33–59.
- Hammad, A. (2023) Stakeholder management practices and project success in infrastructure development. *International Journal of Project Leadership*, 15(1), 45–61

- Heide, J. B. (1994). Interorganizational governance in marketing channels. *Journal of Marketing*, 58(1), 71–85.
- Hampel, C. E., Tracey, P., & Weber, K. (2020). Stakeholder identification and organizational legitimacy in project environments. *Academy of Management Perspectives*, 34(2), 185–204.
- Irvin, R. A. (2022). Stakeholder engagement and project implementation success. *Project Management Review*, 11(2), 66–82.
- Irvin, R. A., & John, P. (2021). Community participation in development projects: Theory and practice. *Development Policy Review*, 39(5), 721–739.
- Kenya Ministry of Water and Irrigation. (2021). *Annual water project report*. Government Printer.
- Klaus-Rosińska, A., & Iwko, J. (2021). Stakeholder management—One of the clues of sustainable project management as an underestimated factor of project success in small construction companies. *Sustainability*, 13(17), 9877.
- Mageto, J., Kithika, S., & Ogolla, P. (2021). Effect of project stakeholder management on performance of road construction projects in Mombasa County, Kenya. *International Journal of Advanced Research and Review*, 6(5), 10–24.
- Matyoko, P. A. (2019). Effectiveness of monitoring and evaluation systems on project sustainability in Tanzania: A case of NGOs in Shinyanga Municipal. *International Journal of Development Research*, 7(12), 455–468.
- Muluka, K. O., Mukanzi, C. M., & Paul, S. N. (2021). Influence of stakeholder management on success of digital literacy programme in Western Kenya. *International Journal of Project Management*, 2(3).
- Nailantei, T., & Iloka, K. (2024). Influence of stakeholder identification on the performance of healthcare projects in Machakos County, Kenya. *International Journal of Social Science and Humanities Research*, 12(2), 232–239.
- Njogu, P. (2022). Stakeholder review and identification in project life cycle management. *African Journal of Project Management*, 8(1), 55–71.
- Ntim, C. G., & Soobaroyen, T. (2013). Corporate governance, resource dependence and organizational performance. *Corporate Governance: An International Review*, 21(5), 425–441.
- Northern Water Works Development Agency. (2024). *Annual project performance report*. Government Printer.
- O'Holloran, M. (2024). Stakeholder participation across the project life cycle. *International Journal of Development Practice*, 18(1), 14–29.
- Olatunde, N., Awodele, I., & Odeyinka, H. (2021). Stakeholder identification methods used in private organisations' projects in Nigeria. *Frontiers in Engineering and Built Environment*, 1(2), 217–229.
- Oleanders, P., & Landin, A. (2021). Participation and community empowerment in development projects. *Journal of Community Development*, 56(3), 411–428.
- Orodho, J. A. (2010). *Techniques of writing research proposals and reports in education and social sciences*. Kanazja Publishers.
- Owino, P. (2023). The role of governance in the completion of public infrastructure projects in Kenya. *Kenya Journal of Public Policy and Administration*, 5(1), 89–104.
- Pawson, R., & Tilley, N. (1997). *Realistic evaluation*. Sage.
- Pawson, R., & Tilley, N. (2004). *Realist evaluation*. Cabinet Office.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. Harper & Row.
- Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective* (2nd ed.). Stanford University Press.

- Project Management Institute. (2004). *A guide to the project management body of knowledge (PMBOK® Guide)* (3rd ed.). Project Management Institute.
- Project Management Institute. (2017). *A guide to the project management body of knowledge (PMBOK® Guide)* (6th ed.). Project Management Institute.
- Robert, J. (2010). Evidence-based evaluation for project management. *Evaluation Review*, 34(4), 301–320.
- Rogers, P. (2019). Monitoring and evaluation for development interventions. *Evaluation Journal of Australasia*, 19(1), 22–35.
- Saad, A., Zahid, M., & Muhammad, S. (2022). Stakeholder identification and project performance in Southwest China. *Asian Journal of Project Management*, 9(2), 88–104.
- Sachs, S., & Kujala, J. (2021). Stakeholder engagement in humanizing business. In M. Dion, R. E. Freeman, & S. Dmytriyev (Eds.), *Humanizing business: What humanities can say to business* (pp. 375–384). Springer.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson.
- Ulrich, D., & Barney, J. B. (1984). Perspectives in organizations: Resource dependence, efficiency, and strategy. *Academy of Management Review*, 9(3), 471–481.
- Wango, P., Ngatia, J., & Lango, P. (2024). Influence of stakeholder identification on the performance of World Bank-funded projects in Kenya. *International Journal of Project Planning and Development*, 12(2), 119–137.
- Wanjala, M., & Nyaberi, D. (2023). Effect of stakeholder identification on performance of donor-funded projects in Nakuru County, Kenya. *African Journal of Project Management*, 7(4), 255–272.
- WASREB. (2024). *Annual water sector performance report*. Water Services Regulatory Board.
- Wu, Y., Zhao, X., & Fils-Aime, F. (2022). Survey response rates in organizational research: Implications for empirical studies. *International Journal of Social Research Methods*, 25(6), 733–746.
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods* (9th ed.). Cengage Learning.