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PROJECT STAKEHOLDER MANAGEMENT IMPERATIVES AND IMPLEMENTATION OF PROJECTS BY WATER WORKS DEVELOPMENT AGENCIES

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ABSTRACT

Despite the efforts made to improve water access and management in Kenya, many communities in the region still have inadequate access to clean and safe water. Literature has shown that stakeholder engagement and consultation are positively associated with the successful implementation of projects. Therefore, a study focusing on effect of project stakeholder management imperatives on the success of water projects in Kenya would provide valuable insights into the unique challenges and opportunities that exist in this specific geographical and cultural context, and would fill important research gaps in the understanding of the relationship between stakeholder management and the implementation of water projects. This study adopted specific objectives to establish the effect of project stakeholder identification on implementation of water projects in Kenya and to assess the effect of project stakeholder conflict management on implementation of water projects in Kenya. This study is grounded on the Theory of Planned Behavior and Theory of Participation. Cross-sectional design and positivist philosophy were used. The target population was 291 active water projects under water works development agencies in Kenya. The sample frame was 291 project managers drawn from the 291 active projects. The sample for the study of 169 was derived through proportionate random sampling where each development agency was apportioned a sample size depending on the stratum size. Primary data was obtained using structured questionnaire. Seventeen respondents from target population were used to pilot the questionnaire. Descriptive statistics such as frequency, percentages, means, and standard deviation was used to summarize findings the research variables. Pearson correlation coefficient was used for testing strength and direction between the independent and the dependent variables. A multiple regression model was used to test the significance of the influence of the independent variables on the dependent variable. Hierarchical regression was used to test the moderating effect of project manager competency. The findings were presented in Tables and figures accompanied with explanation. The study concludes that project stakeholder identification has a positive and significant effect on implementation of water projects in Kenya. The study also concludes that stakeholder conflict management has a positive and significant effect on implementation of water projects in Kenya. Based on the study findings, this study recommends that water project managers should conduct a thorough stakeholder analysis at the outset of the project to identify all relevant stakeholder groups.

Key Words: Project Stakeholder Management Imperatives, Project Stakeholder Identification, Project Stakeholder Conflict Management

Background of the Study

Water is an essential element of human, animal and plant life and therefore requires constant supply (Behailu, Pietila, & Katko, 2018). Increasing water demand in many parts of the world and the need to improve clean water supply have led to an increased interest in water use. However, the success of these projects often depends on the management of the stakeholders (Project Management Body of Knowledge (PMBOK), 2017). Regulators, donors and local communities must work together to ensure this priority, or the risk of loss of life is an inevitable consequence. Water resources such as boreholes and basins should be increased and natural water resources such as springs, rivers and lakes should be protected/conserved (Peterson, 2017). Since there is no regular rainfall every year in many parts of the world, the concept of artificial water has emerged because some communities do not have access to natural water (Beratan, 2020).

Appropriate planning and stakeholder engagement must be undertaken to effectively manage and support these activities. Stakeholder management is critical to the success of any project and this is especially true for projects in Kenya (Ngigi, 2020). Effective stakeholder management is essential for the fair and sustainable execution of activities and meeting the needs and concerns of all stakeholders (Kipkorir, 2018). This study aims to explore the needs of management stakeholders to implement water projects in Kenya.

In particular, communication, conflict, managing needs and expectations, and stakeholder engagement can have a significant impact on the implementation of activities. It will focus on identifying key stakeholders involved in regional activities and their different roles and responsibilities, as well as the challenges and opportunities they face in water use. The findings of this study will be used to develop recommendations to improve stakeholder management activities in Kenya.

Hong Kong-Zhuhai-Macau Bridge, the project connecting Hong Kong, Zhuhai and Macau faced opposition from local communities and the environment. To address these issues, the working group collaborated with stakeholders through discussions and workshops and established a collaborative relationship with partners to manage communication with local communities and other stakeholders (Hong Kong-Zhuhai-Macau Bridge, 2020). This engagement helps build support for the project among key stakeholders and allay their concerns, which is critical to the project's success.

In Ethiopia, water resources in Addis Ababa are facing biological, social, economic and ecological problems owing to inability of Addis Ababa Water Resources to provide a good solution to the problem. The main problem with water in Addis Ababa is the poor cooperation of stakeholders coupled with vulnerability in all areas of different authorities such as businesses, workplaces, pollution areas and families (Woldesenbet, 2020). According to Woldesenbet and Kebede (2020), is sustainable water is to be realized, diverse stakeholders must work to solve water problems and to overturn the real mistrust between the government and other stakeholders.

Stakeholder Management Imperatives in Kenya is a crucial topic, especially when it comes to water projects as it highlights unique challenges and opportunities that arise when managing stakeholders in this specific context (Global Water Partnership, 2015). According to Maragia, Omboto and Maket (2018) in their review on stakeholder participation in water projects in Kenya, water projects are characterized by a lack of clear guidelines for stakeholder engagement, leading to challenges in successful completion of projects. While acknowledging that effective stakeholder management is essential for the success of water projects as it helps to minimizes delays, conflicts, and negative impacts on local communities, it is evident that there is low stakeholders involvement in water project planning and implementation in Kenya (Kosgei, 2021).

The implementation of Water Supply Projects in Kenya is executed by Water Work Development Agencies (WWDAs). There are 8 water services development agencies namely, Athi Water Works Development Agency, Coast Water Works Development Agency, Lake Victoria North Water Works Development Agency, Lake Victoria South Water Works Development Agency, Northern Water Works Development Agency, Rift Valley Water Works Development Agency, Tanathi Water Works Development Agency and Central Rift Water Works Development Agency. The WWDAs are mandated to develop and maintain water infrastructure in the County, with an aim of ensuring adequate and sustainable supply of clean water. To achieve their mandate, the agencies are expected to work with other government agencies and stakeholders.

Statement of the Problem

Consistent supply of adequate safe water is a necessity to communities, it is associated with better nutrition, improved health and enhanced economic activities. Machado et al. (2019) argues that water is significant determinant of socio-economic welfare of the community. Ayeni, Soneye and Akintuyi (2012) argue that consistent supply of adequate safe water needs collaboration among stakeholders and water resources management team. Stakeholder management imperatives play a key role in ensuring success, optimally and sustainability in water projects as well as ensuring affordability and adequate distribution of water.

Despite water being a precious commodity, Muema and Ngugi (2021) estimates that access to water in Kenya is 32% which is way below. Worryingly, 30% to 60 % of existing water supply systems is not operational due to breakdown (Kariuki, 2015). This is attributed to failure to plan for maintenance of water infrastructure (Nzomo & Gachengo, 2021) and the fact that operation and maintenance of community water projects are given little attention (Kosgei, 2021). According to Maragia et al. (2018), unsustainability in rural water supply projects in Kenya can be blamed on low community participation levels, poor or lack of freshwater management, non-community owned projects, inadequate financial capacity, inadequate systems maintenance skills and poor construction.

Deliberate efforts have been made to improve water access and management in Kenya including enhancing community involvement, technology adoption, enhancing financing among other initiatives (Muigai, 2013). Despite these efforts, many communities still lack access to clean and safe water. Majority of households still rely on surface water sources that is often contaminated (Kosgei, 2021) with up to 60% of households reporting cases of water-related illnesses resulting probably from water contamination (Ochieng & Onyango, 2019). Furthermore, 65% of water projects still face challenges of conflicts between community groups, government agencies, and private sector entities (Nyabera, 2015) while 60% of water projects lack robust monitoring and evaluation systems (Ochieng & Onyango, 2019).

Studies in other context, stakeholder engagement and consultation has been identified as a determinant of successful implementation of projects. For example, Alameri (2022) in rural communities in Abu Dabi, Demirkesen and Reinhardt (2021) in Poland and Woldesenbet (2020) in Ethiopia. These studies were conducted in different project and cultural contexts and their findings cannot be generalized. No study has been conducted in Kenya to provide findings specific to the Kenyan context. A study in Kenya is necessary to provide a cultural-specific understanding of the effect of stakeholder management imperatives on the implementation of water projects. To fill this gap, the current study sought to investigate the effect of stakeholder management imperatives on successful implementation of water projects in Kenya.

Research Objectives

General Objective

The general objective of this study was to investigate the effect of stakeholder management imperatives on implementation of water projects in Kenya.

Specific Objectives

The study was guided by the following specific objectives;

i. To establish the effect of project stakeholder identification on implementation of water projects in Kenya
ii. To assess the effect of project stakeholder conflict management on implementation of water projects in Kenya

Theoretical Review

Theory of Planned Behavior

The Theory of Planned Behavior Theory (TPB) is a theory developed by Icek Ajzen in 1991. It proposes that people's behavior is determined by their attitudes, behavior, and control habits. Attitude refers to a person's evaluation of a behavior, behavior is the social pressure to do or not to do a behavior and behavior control is one's perception of ability to act the behavior (Wynn, Smith, & Killen, 2021). TPB explains that individuals' behaviors are affected by their desire to behave. These emotions are a function of personal behavior, attitude, and behavioral control. According to this theory, the more a person is willing to perform a behavior, the more likely he is to perform that behavior. In project environment, TPB influences stakeholder behavior (Chaudhary, Warner, & Lamm, 2017).

While the theory has been used to understand and predict many behaviors, including water conservation (Gibson, Lamm, Woosman, & Croom, 2021), TPB has received some criticism. Many researchers have criticized Behavior Theory (TPK) for failing to take into account other factors such as personality, past behavior, and the influence of others on behavior. Some examples of these researchers, Sniehotta et al. (2014) argue that TPB does not include behavioral constructs, implying that attitudes can influence behavior itself. Rossmann (2020) argue that TPB does not consider the impact of past behavior on future behavior. They argue that past behavior can influence future behavior regardless of emotions. In addition, Liu et al. (2023) argue that TPB does not take into account the influence of culture. They argue that social influence can independently influence behavior. They criticized TPB for failing to take into account the influence of other factors, such as personality, past behavior, and the influence of others on behavior. In addition, they argued that the theory did not include the influence of emotions and effects on behavior.

Theory of Participation

Theory of Participation (TOP) argues that stakeholder engagement can affect project outcomes by increasing ownership, commitment and understanding (Reed, Vella, Challies, & Vente, 2017). In the context of water project, effective collaborative strategies can be used to increase stakeholder ownership, commitment and understanding, thereby improving project arrangement. TOP suggests that engagement can improve outcomes by increasing stakeholder engagement, commitment and understanding. In the context of activities, effective collaborative strategies can be used to increase stakeholder ownership, commitment and understanding, thereby improving project arrangement.

TOP is widely used in project management and development. Reed et al. (2017) reported that partnerships can positively impact project outcome by increasing ownership, commitment and understanding. Stakeholder engagement can improve outcomes by increasing ownership, commitment, and understanding (Ebekozien et al., 2023). TOP has been criticized by researchers in project management and development on grounds that it does not take into account the impact of energy production and other factors such as cooperation and the level of trust among stakeholders regarding project results (Mubita, Libati, & Mulonda, 2017)

Conceptual Framework

Mugenda and Mugenda (2013) defined the concept of conceptual framework as the hypothetical model for relationship between dependency and independence between variables. The purpose of the conceptual framework is to classify and explain the concepts in the study and to show the relationship between them. Such models help researchers identify themes, map areas of study or themes, make connections between themes, and analyze the gap in the literature (Creswell, 2013). Below is a representation of the variables that were explored in this study.

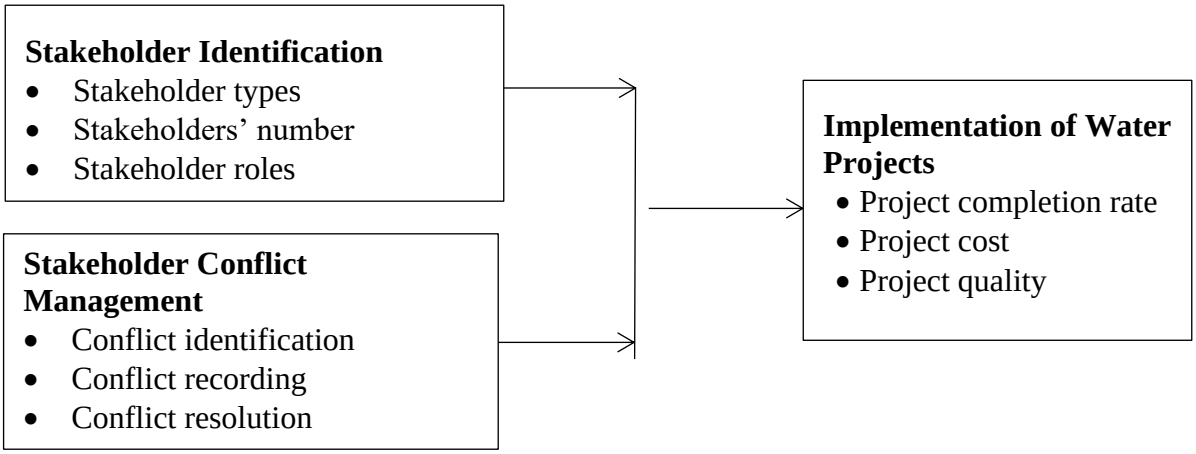

Figure 2. 1: Conceptual Framework

Empirical Literature Review

Stakeholder Identification and Analysis and Successful Implementation of Projects

Smith and Love (2004) examined that effectively identifying and managing the needs and expectations of stakeholders is closely related to the success of construction projects. This study focused on project managers and stakeholders in the construction industry with sample size of 200 obtained using purposive sampling and data collected through surveys and interviews. The reported that identifying and managing the needs and expectations of project stakeholders has a positive outcome on the success of infrastructure projects in terms of project completion, cost effectiveness and project sustainability.

Dwivedi and Dwiwedi (2021) examined the role of identification and analysis of stakeholders' needs and expectations in enhancing success of projects. The study found that identifying and managing the needs and expectations of project stakeholders was positively associated with the success of projects in terms of project completion, project cost, and project sustainability. This is attributed to the fact that correct identification of stakeholder interests and expectations makes it easier to address specific stakeholder needs enhancing project success.

From empirical studies reviewed, it is evident that studies have been done in the US and UK, none focused on Kenya. Studying the region will provide a better understanding of the unique challenges and opportunities that exist in this particular region. A study in Kenya would also provide a culture-specific understanding of the impact of needs and expectations analysis on project implementation. Additionally, previous research has focused on different types of projects, but research focused on activities will provide insight into the specific problems and opportunities that exist in these studies.

Project Stakeholder Conflict Management and Successful Implementation of Projects

Study by Chanya, Prachaak and Ngang, (2014) focused on conflict management and watershed resource utilization. It used a sample of 335 households and collected data through surveys, focus group discussions and community discussions. The study revealed that water conflict arises due to increased water demand and water scarcity. Communities need the principle of water justice for agriculture and consumption. The study recommends meeting, consultation, training, information sharing to discuss issues and conflict resolution, including joint cooperation for the use of rivers.

Study by Muigai (2013) focused on factors leading to conflict in water management. The study focused on the entire management team, including 52 participants from different managers of the four projects. Data were collected through a questionnaire consisting of open-ended and closed-ended questions. Resource allocation was identified as the most important factor in managing conflicts during the water supply project. It was concluded that management style, personality differences and communication style do not have a significant effect on the management of conflicts in water projects. The study suggested that management teams should allocate resources fairly, carefully and responsibly to minimize management conflicts arising from allocation of resources and maximize water efficiency and consequences.

In another study, Dagli (2019) examined the role of stakeholder conflict management on success of projects. The study focused on both internal and external stakeholders, with interest on how conflicts that arise from stakeholder interactions affects project success. The study established that conflicts arise from interaction between stakeholders themselves and interaction between project team and stakeholders. The study recommends that project management should adopt bilateral approach that includes not only the interest of project team but also the specific interest of project stakeholders, both internal and external.

RESEARCH METHODOLOGY

Research Design

The research used cross-sectional research methods. This design is suitable for situations where the relationship between two variables needs to be determined over short time (Cooper & Schindler, 2011). Cross-sectional studies are useful and therefore allow researchers to verify the existence of significant relationships between variables, while allowing more accurate analysis of data. In addition, the design provides researchers with the opportunity to capture population characteristics and test hypotheses quantitatively and qualitatively (Creswell, 2013).

Target Population

In this study, the target population was 291 active projects implemented by water work development agencies. There are 291 active projects under the 8 water works development agencies. According to Cooper and Schindler (2017), a good research must have a unit of analysis and unit of observation. In the current study, unit of analysis is individual active water project while the staff involved in the study constituted the unit of observation.

Sampling Frame

The sample frame for this study composed of 291 project managers drawn from the 291 active projects implemented by the water works development agencies. These personnel are selected on the basis that they are actively involved actions and decisions that relate to stakeholder issues and project success. Similarly, they serve in management level and therefore, they can give research data on project manager competency.

Sample Size

This formula used to calculate the sample size is;

$$n = \frac{N}{1+N(e^2)} \quad \text{…….. (3.1)}$$

Where n is the sample size, N is the population size, and e is the level of precision (0.05).

When this formula is applied, the following equation is obtained;

$$n = \frac{291}{1 + 291(0.05^2)}$$

$$= 168.5$$

Therefore, using Yamane (1967), the sample size for this study would be 169 participants. This represents 58.7% of the study's target audience. According to Mugenda and Mugenda (2014), the sample representing at least 30% of the study population is a suitable sample for the study. Therefore, our sample was appropriate for this study.

Sampling Procedure

Proportionate random sampling is appropriate when the population is heterogeneous and can be studied in sub groups. The population was apportioned in terms of the 8 water services development agencies. Sample size for each stratum was determined using the formula 3.2. The sample size for each stratum was as shown in Table 3.2

Table 3.1: Sample Size

No.	Agency	No. of Projects	Sample Size
1	Lake Victoria South Water Works Development Agency	50	29
2	Lake Victoria North Water Works Development Agency	47	27
3	Tanathi Water Works Development Agency	38	22
4	Athi Water Works Development Agency	58	34
5	Coast Water Works Development Agency	21	12
6	Central Rift Water Works Development Agency	24	14
7	Rift Valley Water Works Development Agency	15	9
8	Tana Water Works Development Agency	38	22
	Total	**291**	**169**

This study selected respondents from each stratum using simple random sampling (Mugenda & Mugenda, 2013). The advantage of random sampling is that it increases the accuracy of the estimation process by providing fewer errors (Cooper & Schindler, 2017).

Data Collection Instruments

Data for this study was collected with close-ended questionnaires. In closed questions, respondents are prohibited from answering directly without further explanation, while in open-ended questions; respondents were asked for their views on the analyzed situation. Likert scale was used to allow respondents to provide their perception.

Pilot Testing

A pilot analysis was used to ensure the validity and reliability of the questionnaire. According to Sekaran (2013), the pilot test is a small study before the actual test focusing on testing and improving a study. According to Cooper and Schindler (2017), pilot testing is done to discover flaws in design and measurement and to provide evidence for selection of possible models. Muus and Baker-Demaray (2017) explain that the test should involve people from the project and follow data collection procedures and methods. For high sensitivity studies, the sample size should be between 1% and 10% (Mugenda & Mugenda, 2014). Therefore, this study tested the data collection tool with 17 participants (10% of the study sample) selected from the target population. The samples used in the test were excluded from the final run.

Data Processing and Analysis

Qualitative data was analyzed using content analysis and presented in text form. Quantitative data was analyzed using the Statistical Standard for Social Sciences (SPSS) version 25 program. Quantitative data was analyzed using descriptive statistics such as frequency, percentage, mean and standard deviation. Descriptive statistics allow researchers to interpret the distribution of measurements and complete data (Sekaran & Bougie, 2016). This work also included statistical analysis of quantitative data, including analysis and regression analysis

Pearson correlation coefficient was used to measure the relationship between independent and dependent variables. The correlation coefficient (r) has two properties: power and direction. Multiple Regression analysis was used in testing the research questions by establishing the influence of each independent variable on the dependent variable. F test helped to determine the significance of the model, while student t-tests helped determine individual variables' significance at a 95% confidence level.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Descriptive Statistics Analysis

Project Stakeholder Identification and Implementation of Water Projects

The first specific objective of the study was to establish the effect of project stakeholder identification on implementation of water projects in Kenya. The respondents were requested to indicate their level of agreement on statements relating to project stakeholder identification and implementation of water projects in Kenya. The results were as presented in Table 4.1.

From the results, the respondents agreed that there is a mechanism to identify the right project stakeholders. This is supported by a mean of 3.943 (std. dv = 0.981). In addition, as shown by a mean of 3.926 (std. dv = 0.850), the respondents agreed that all project stakeholders are categorized based pre-determined approach. Further, the respondents agreed that stakeholder attributes are analyzed and taken care of in project decisions. This is shown by a mean of 3.911 (std. dv = 0.914).

The respondents also agreed that stakeholder roles are analyzed and stakeholders involved in all stages of the project. This is shown by a mean of 3.896 (std. dv = 0.947). With a mean of 3.889 (std. dv = 0.856), the respondents agreed that project stakeholders concerns are analyzed in good

time as they arise. The respondents agreed that stakeholder needs and expectations are identified before the project begins. This is supported by a mean of 3.876 (std. dv = 0.694). In addition, as shown by a mean of 3.764 (std. dv = 0.892), the respondents agreed that project stakeholder needs and expectations formally captured and documented

Table 4. 1: Project Stakeholder Identification

	Mean	Std. Deviation
There is a mechanism to identify the right project stakeholders	3.943	0.981
All project stakeholders are categorized based pre-determined approach	3.926	0.850
Stakeholder attributes are analyzed and taken care of in project decisions	3.911	0.914
Stakeholder roles are analyzed and stakeholders involved in all stages of the project	3.896	0.947
Project stakeholders concerns are analyzed in good time as they arise	3.889	0.856
Stakeholder needs and expectations are identified before the project begins.	3.876	0.694
Project stakeholder needs and expectations formally captured and documented	3.764	0.892
Aggregate	**3.898**	**0.873**

Project Stakeholder Conflict Management and Implementation of Water Projects

The second specific objective of the study was to assess the effect of project stakeholder conflict management on implementation of water projects in Kenya. The respondents were requested to indicate their level of agreement on various statements relating to project stakeholder conflict management and implementation of water projects in Kenya. The results were as presented in Table 4.2.

From the results, the respondents agreed that potential sources of stakeholder conflict are identified early on in the project life cycle. This is supported by a mean of 3.968 (std. dv = 0.905). In addition, as shown by a mean of 3.859 (std. dv = 0.885), the respondents agreed that project stakeholder conflicts are mapped and well documented. Further, the respondents agreed that project stakeholder conflicts are addressed using appropriate strategies as they arise. This is shown by a mean of 3.840 (std. dv = 0.605). With a mean of 3.835 (std. dv = 0.981), the respondents agreed that project stakeholder conflicts are resolved with at most respect.

The respondents agreed that project stakeholder conflicts are addressed openly and fairly. This is supported by a mean of 3.811 (std. dv = 0.863). In addition, as shown by a mean of 3.798 (std. dv = 0.786), the respondents agreed that there is well documented project stakeholder conflict resolution process. Further, the respondents agreed that there is a mechanism for post stakeholder conflict resolution decisions. This is shown by a mean of 3.724 (std. dv = 0.786).

Table 4. 2: Project Stakeholder Conflict Management

	Mean	Std. Deviation
Potential sources of stakeholder conflict are identified early on in the project life cycle	3.968	0.905
Project stakeholder conflicts are mapped and well documented	3.859	0.885
Project stakeholder conflicts are addressed using appropriate strategies as they arise	3.840	0.605
Project stakeholder conflicts are resolved with at most respect	3.835	0.981
Project stakeholder conflicts are addressed openly and fairly	3.811	0.863
There is well documented project stakeholder conflict resolution process	3.798	0.786
There is a mechanism for post stakeholder conflict resolution decisions	3.724	0.786
Aggregate	**3.813**	**0.867**

Correlation Analysis

The present study used Pearson correlation analysis to determine the strength of association between independent variables (project stakeholder identification and project stakeholder conflict management) and the dependent variable (implementation of water projects in Kenya) dependent variable.

Table 4. 3: Correlation Coefficients

		Project Implementation	Project stakeholder identification	Project stakeholder conflict management
Project Implementation	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	151		
Project stakeholder identification	Pearson Correlation	.836**	1	
	Sig. (2-tailed)	.002		
	N	151	151	
Project stakeholder conflict management	Pearson Correlation	.856**	.185	1
	Sig. (2-tailed)	.000	.078	
	N	151	151	151

From the results, there was a very strong relationship between project stakeholder identification and implementation of water projects in Kenya (r = 0.836, p value =0.002). The relationship was significant since the p value 0.002 was less than 0.05 (significant level). The findings are in line with the findings of Dwivedi and Dwiwedi (2021) who indicated that there is a very strong relationship between project stakeholder identification and project implementation

The results also revealed that there was a very strong relationship between project stakeholder conflict management and implementation of water projects in Kenya (r = 0.856, 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 results of Alayande *et al*., (2021) who revealed that there is a very strong relationship between project stakeholder conflict management and project implementation

Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables (project stakeholder identification and project stakeholder conflict management) and the dependent variable (implementation of water projects in Kenya)

Table 4. 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.840	.706	.707	.588

a. Predictors: (Constant), project stakeholder identification and project stakeholder conflict management

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 0.706. This implied that 70.6% of the variation in the dependent variable (implementation of water projects in Kenya) could be explained by independent variables (project stakeholder identification and project stakeholder conflict management).

Table 4. 5: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.027	2	6.014	65.61	.000[b]
	Residual	6.568	148	.045		
	Total	18.595	150			

a. Dependent Variable: Implementation of water projects

b. Predictors: (Constant), project stakeholder identification and project stakeholder conflict management

The ANOVA was used to determine whether the model was a good fit for the data. F calculated was 65.61 while the F critical was 2.433. The p value was 0.000. Since the F-calculated was greater than the F-critical and the p value 0.000 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 project stakeholder identification and project stakeholder conflict management on implementation of water projects in Kenya.

Table 4. 6: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.311	0.082		3.793	0.003
	project stakeholder identification	0.387	0.091	0.388	3.593	0.003
	project stakeholder conflict management	0.392	0.102	0.393	3.843	0.001

a Dependent Variable: Implementation of water projects in Kenya

The regression model was as follows:

$$\mathbf{Y = 0.311 + 0.387X_1 + 0.392X_2 + \varepsilon}$$

According to the results, project stakeholder identification has a significant effect on implementation of water projects in Kenya β_1=0.387, p value= 0.003). The relationship was considered significant since the p value 0.003 was less than the significant level of 0.05. The findings are in line with the findings of Dwivedi and Dwiwedi (2021)who indicated that there is a very strong relationship between project stakeholder identification and project implementation.

In addition, the results revealed that project stakeholder conflict management has significant effect on Implementation of water projects in Kenya β1=0.392, p value= 0.001). 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 results of Alayande *et al*., (2021) who revealed that there is a very strong relationship between project stakeholder conflict management and project implementation.

Conclusions

The study concludes that project stakeholder identification has a positive and significant effect on implementation of water projects in Kenya. Findings revealed that stakeholder types, stakeholders' number and stakeholder roles influences implementation of water projects in Kenya. This implies that improvement in project stakeholder identification will lead to improvement in project implementation

The study also concludes that stakeholder conflict management has a positive and significant effect on implementation of water projects in Kenya. Findings revealed that conflict identification, conflict recording and conflict resolution influences implementation of water projects in Kenya. This implies that improvement in stakeholder conflict management will lead to improvement in project implementation.

Recommendations

This study recommends that water project managers should conduct a thorough stakeholder analysis at the outset of the project to identify all relevant stakeholder groups, including local communities, government agencies, NGOs, private sector entities, and others. Understand their interests, concerns, and potential contributions to the project. This mapping exercise will provide a clear foundation for tailored engagement strategies.

The study also recommends that project managers should establish robust mechanisms to proactively identify potential conflicts among stakeholders early in the project planning phase. Conduct thorough stakeholder analyses and environmental scans to anticipate areas of disagreement or competing interests. Engage with stakeholders through open dialogue and active listening to understand their perspectives and concerns. By identifying conflicts early, project managers can implement preemptive measures to prevent escalation and mitigate potential disruptions to project implementation.

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