



**STAKEHOLDER PARTICIPATION AND PERFORMANCE OF IRRIGATION PROJECTS IN GARISSA COUNTY,  
KENYA**

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**ABSTRACT**

*This study investigated the influence of stakeholder participation on the performance of irrigation projects in Garissa County, Kenya. The study was guided by stakeholder theory, realistic evaluation theory and systems theory. The study adopted a descriptive research design. The study targeted irrigation projects in Garissa County, Kenya. The targeted respondents were 85 respondents comprising of 10 project managers and 75 project team members. A census of 85 respondents was carried out. Questionnaires were used for the purpose of collecting primary data. The study conducted a multiple regression analysis to test the relationship between independent variables and dependent variable. The study found that stakeholder analysis, stakeholder engagement, stakeholder motivation, stakeholder monitoring and evaluation and had a positive significant influence on the performance of irrigation projects in Garissa County, Kenya. The study concluded that a stakeholder analysis helps an organization to gain more support and resources, increase project visibility, especially to executive stakeholders, prevent costly roadblocks later in the project cycle, communicate through the right channels at the right time and share the right level of information with the stakeholders. Engaging with different perspectives provides opportunities for learning and potentially changing the approach to ensure it fits the needs of stakeholders. Stakeholders with a high need for affiliation are moved to act because of their positive interest in and concern for others. Stakeholders play a critical role in the success of monitoring and evaluation (M&E) processes in development programs and policies. The study recommended that the organization should make sure to account for both internal and external stakeholders and create a clear stakeholder map that outlines each stakeholder's influence-interest level. The organization should analyse and categorize all your stakeholders using a mapping chart to manage how, where and when it should communicate with them. The organization should track the stakeholders so as to be aware of the different groups. Project managers must ensure that stakeholders remain actively engaged to help garner a successful project outcome.*

**Key Words:** Stakeholder Analysis, Stakeholder Engagement, Motivation Monitoring and Evaluation

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## INTRODUCTION

Project performance has been modified to include completion within allocated period, within the budgeted cost, at the proper performance or specification level (Jin & Ling, 2019). According to Assefa, Rivera and Vencatachellum (2021) the performance enhancing factors once identified are useful diagnostic tools to correct deviations by building in warning systems and assist in improving the project performance and delivery. Therefore, the overall measurement of whether a project has met objectives and requirements of scope, cost, and schedule determines project performance.

In recent years, farmers have adopted motorised water pumping machines and other complex technologies that require high initial capital investments. Also, large-scale commercial irrigation is characterised by high-powered pumps, the existence of out-growers, and can be established as joint ventures between the government of Kenya and private companies. Formerly, the formal irrigation schemes were owned and financed by the government of Kenya; however, it failed to operate effectively due to high operation and maintenance cost. This led to the implementation of Participatory Irrigation Management (PIM) strategy in the 1990s. PIM strategy suggests that local users of irrigation resources, if empowered as a group to participate actively in the management of water resources, have the incentive to manage it more efficiently and sustainably than a wholly centrally financed government agency (Braithwaite, King, Sulemana, 2014).

Project performance according to Yang (2018), are done to provide information to management in order to exert control over the project. Those metrics must be adequate for the organizational level that can make fast changes depending on new information in order to keep track of the project's progress. Measurement of the project's earned value will offer information on the project's performance, allowing management to make important decisions to bring the project to a successful conclusion. Willar (2017) observe that for

a successful project, it is mandatory to determine project success and its measurement and this requires knowledge sharing and communication to enhance the performance of cost, time and quality of the project. In this study, project performance was measured in terms of schedule, cost and client satisfaction.

Participation by project stakeholders means sharing a common understanding and involvement in the decision-making process of the project. Participation by stakeholders leads to empowerment and to joint ownership of the project (Luyet, Schlaepfer, Parlange & Buttler, 2019). According to Decker, Ras, Rech, Jaubert and Rieth (2021) stakeholder participation provide all stakeholders with full opportunities to share their views, needs and knowledge on flood management, build consensus through bringing together a diverse range of stakeholders to share needs, information, ideas and knowledge and harmonize the objectives of individual groups to reach common societal goals and provide all stakeholders and the public with appropriate information so that they can understand the process, the issues and values. In this study, stakeholder participation was measured in terms of stakeholder analysis, stakeholder engagement, stakeholder motivation and stakeholder monitoring and evaluation.

Garissa County Government has launched a Sh 20 million canal rehabilitation project for irrigation farmers in Balambala and Jarajara. The project is meant to serve 21 farms in Jarajara and Balambala wards and benefit over 15,000 residents. The project which is part of the national government's Big Four Agenda is meant to addresses food security and improve on nutritional among area residents. The project scope entail canal excavation works at Debi intake, protection work with galvanised pipes, fencing of 400m stretch from the intake, dyke construction at Omar Dalab Lake with gabion at spillway, inlets and rehabilitation of Kulan and Farm B Schemes.

### Statement of the Problem

The reviewed studies on stakeholder-participation have proved to be lacking the capacity to solve stakeholder-participation related challenges yet it is hindrance to timely completion of projects. Available literature is unable to challenge participatory approaches related to limitations on financial and material capacity (Smith, 2008). Claver (2001) emphasizes that while it is a fact that communities have valuable knowledge of local environments and are highly motivated, motivated and committed to their project, lack of materials and various inputs delays or stop projects. In this way, this stakeholder participation studies incapability to deal not only with the main stakeholder participation but also with others such as poverty, geographic fragmentation, weak infrastructure and illiteracy (Tseng & Penning-Rowell, 2012);

In Garissa County, the factors that affect the performance of irrigation projects include the faulty design of irrigation schemes, lack of maintenance of the irrigation schemes, limited financial capital for operation and maintenance of irrigation infrastructure, irrigation service fees conflicts, and inadequate coordination among institutions. The main problem facing irrigation farming in Kenya is poor management and maintenance of the schemes. Continuous funding of irrigation projects followed by their collapse soon after donors pull out in Kenya such as Bura irrigation scheme is an issue of great concern both locally and internationally. This was due to lack of proper operation and maintenance of these projects and mismanagement of water at field level due to lack of comprehensive community and or beneficiary involvement.

Njogu (2016) conducted a study on the influence of stakeholder's involvement on project performance at Nema automobile. The study found that stakeholder Involvement in project monitoring influence performance of Automobile emission control project to a great extent. Muiruri (2017) assessed the determinants of performance of irrigation projects at Nthawa irrigation project of Mbeere North Sub- County. It was observed that

management of the projects, resource adequacy, and technology used, community participation and availability of sizable land for irrigation all positively and greatly affect the performance of public irrigation projects in Kenya. Abdi (2019) researched on the influence of stakeholders' participation in performance of agricultural projects in Wajir County. The study found that stakeholder involvement in the project at initiation, execution and monitoring and evaluation has positive effect on project performance while participation during funding has negative effect to project performance. Therefore, this study investigated the influence of stakeholder participation on the performance of irrigation projects in Garissa County, Kenya.

### Objectives of the Study

The general objective of this study was to investigate the influence of stakeholder participation on the performance of irrigation projects in Garissa County, Kenya. The study was guided by the following specific Objectives;

- To determine influence of stakeholder analysis on performance of irrigation projects in Garissa County, Kenya.
- To examine the influence of stakeholder engagement on performance of irrigation projects in Garissa County, Kenya.
- To evaluate the influence of stakeholder motivation on performance of irrigation projects in Garissa County, Kenya.
- To determine the influence of stakeholder monitoring and evaluation on performance of irrigation projects in Garissa County, Kenya

The study hypotheses were;

- **HO<sub>1</sub>:** There is no significant relationship between stakeholder analysis and performance of irrigation projects in Garissa County, Kenya.
- **HO<sub>2</sub>:** There is no significant relationship between stakeholder engagement and performance of irrigation projects in Garissa County, Kenya.
- **HO<sub>3</sub>:** There is no significant relationship between stakeholder motivation and

performance of irrigation projects in Garissa County, Kenya.

- **H0<sub>4</sub>:** There is no significant relationship between stakeholder monitoring and evaluation and performance of irrigation projects in Garissa County, Kenya

## LITERATURE REVIEW

### Theoretical Review

#### Stakeholder Theory

According to Freeman's (1984) stakeholder theory, the organization is a collection of stakeholders and its function is to represent their interests, requirements and opinions. The managers of a company are considered to carry out this type of stakeholder management. The term "stakeholder" refers to any group or individual that can influence or be influenced by the success of an organization's goals. In addition, Stakeholders can have a significant impact on an organization's performance, objectives, growth and even its survival.

Parmar, Freeman, Harrison, Wicks, Purnell and DeColle (2018) observe that project stakeholders are people and organizations that are part of the project or whose interest may be impacted by the project or the successful completion of the project. Stakeholders play a critical role in the success of a project, as their inability to consistently support the project's vision or goals is one of the main reasons why many projects fail. Stakeholder engagement means giving and receiving stakeholder input and collaboration to create, plan and implement new business opportunities.

#### Realistic Evaluation Theory

The realistic evaluation theory, first published by Pawson in 1997, provides a model centred on finding out what outcomes are produced from project interventions, how they are produced, and what is significant about the varying conditions in the which the interventions take place (Pawson & Tilley, 2004). Realistic evaluation deals with 'What works for whom in what circumstances and in what respects, and how?' (Pawson & Tilley, 2004). The model allows

the evaluator to understand what aspects of an intervention make it effective or ineffective and what contextual factors are needed to replicate the intervention in other areas (Cohen, Manion, & Morison, 2008). Realistic evaluation seeks to find the contextual conditions that make interventions effective therefore developing lessons about how they produce outcomes (Fukuda-Parr, Lopes, & Malik, 2002).

Byng, Norman and Redfern (2015) observe that realist evaluation changes the basic evaluation question. It does not ask what works, or does this work. It asks 'what works for whom, in what contexts, in what respects and how'. A realist approach assumes that projects are 'theories incarnate'. That is, whenever a program is implemented, it is testing a theory about what 'might cause change', even though that theory may not be explicit. One of the tasks of realist evaluation is therefore to make the theories within a project explicit, by developing clear hypotheses about how, and for whom, projects might 'work'. The implementation of the project and the evaluation of it, then tests those hypotheses. This means collecting data, not just about projects impacts, or the process of project implementation, but also about the specific aspects of project context that might impact on project and about the specific mechanisms that might be creating change. This theory can greatly aid in understanding how project deliverables are produced during monitoring and evaluation process.

#### Systems Theory

Open system theory was brought forward by Ludwig von Bertalanffy (1956) who was a biologist which came to be applicable to all the organizational disciplines. Organizations are seen as an open system containing structures of a particular hierarchy and structures that are loosely coupled. The principle of an open system takes assumption that all big organizations are composed of subsystems that are more than one, each of which is fed by a different sub-system and converts them into outputs that is to be used by a different sub-system.



These subsystems are not every time represented through the business departments but could otherwise adhere to the interests of the organization. The interrelated dependency and relationships within each subsystem have the behavior of being tight than those between subsystems

System Theory is one of the major theories in management. A system is a group of interrelated distinct parts forming and influencing the functioning of a unified whole. An element in a system will be affected by the changes in one or another element in the system and thereby influencing the whole system (Kapsali, 2017). Chi and Han (2019) observe that the underlying fundamental assumption of a system is that the whole is greater than the sum of its parts. A system is defined by the boundaries and the parts of a system interact to accomplish a common purpose. A system cannot exist in isolation and hence its performance will be defined by its adaptation to its environment.

### **Empirical Review**

Kamau (2019) assessed the effect of stakeholders' analysis and engagement on the performance of constituency development funded projects: A Survey of Vihiga County. Descriptive survey design was used. The survey was conducted in Vihiga County, constituencies namely: Emuhaya, Luanda, Hamisi, Sabatia and Vihiga. A complete survey involving all 80 committee members from all the CDF projects was done. Data was collected using predesigned questionnaires. Multiple regressions model/analysis was used to determine the relationship between the independent and dependent variable. The regression model showed that stakeholders' analysis and engagement had a positive significant influence on the level of project completion and project performance.

Mir and Rezanian (2022) study focused from interactive control to IT project performance: examining the mediating role of stakeholder analysis effectiveness. Partial least square-structural equation modelling analysis was conducted on the cross-sectional questionnaire data collected from

109 information technology (IT) projects. The interactive use of project control systems (PCS) enables project managers to effectively deal with the stakeholders-related uncertainty, and stakeholder analysis effectiveness partially mediates the positive relationship between the interactive use of PCS and IT project performance. However, the study used secondary data.

Olwande (2021) study examine the influence of stakeholder engagement on performance of the antiretroviral therapy supply chain project by national aids and sexually transmitted infections control program in health facilities, Kenya. Both descriptive and explanatory research designs were employed. A population of 541 pharmacists and pharmaceutical technologists across Kenya was targeted, out of which 229 were sampled using stratified proportional sampling. For efficiency and ease in data collection, an electronic questionnaire was used to collect primary data. Results revealed that stakeholder capacity building, human resource management, monitoring and evaluation, and communication management all had a positive and significant effect on project performance. However, the study focused on health projects.

Mambwe, Mwanaumo, Nsefu and Sakala (2020) study examined the impact of stakeholder engagement on performance of construction projects in Lusaka District. The research approach that was adopted was a quantitative with descriptive research design. Both primary and secondary data were collected using a semi structured questionnaire which gave a 98% response rate. Findings revealed presence of a strong and positive correlation between stakeholder engagement and project schedule also between stakeholder engagement and project specifications. Results also showed that stakeholder's engagement was strongly but negatively correlated to project cost. However, the study focused on construction projects in Lusaka District.

Maina and Kimutai (2018) study examined the influence of stakeholder motivation on project performance of open air market projects in Nyeri

County, Kenya. The research adopted both descriptive and explanatory research design. The target population was all the six Open air upgrading projects in Nyeri County funded under Economic Stimulus Programme. The target population was appropriate as it represented all the constituencies in Nyeri County. The study targeted 255 respondents out of which 213 successfully filled the questionnaire. The results of the study established that the stakeholder motivation was positive and significant and thus these factors determine project performance. However, the study focused on open air market projects in Nyeri County, Kenya.

Mushimiyimana (2020) investigated stakeholders' motivation on project performance. The study was a descriptive research and to collect data, random sampling and stratified techniques were used. Then after, interviews, focus group discussions were made up on a sample size of 100 respondents from the target population of 278,858 stakeholders of L3 project in Gisagara district including concern worldwide staff. After data collection, the data analysis was made through simple description statistics. The findings showed that stakeholders know about their involvement and their roles in making a project successfully thought their involvement is still critical. However, the study was a case study of L3 Project.

Tengan and Aigbavboa (2017) study examined the influence of the level of stakeholder engagement and participation in monitoring and evaluation of construction projects in Ghana. Both structured interview guide and questionnaire schedule were used to collect relevant data for the study. A desk review of journal articles, books, conference proceedings, published and unpublished thesis work from the institutions' database and internet sources relevant to the study were adopted to underpin the study. Project implementation minutes and meeting attendance were also perused. Data was descriptively analyzed. Six key stakeholders were identified in local government project delivery in Ghana. It was evident from the study that there was a high level of stakeholder engagement in project

delivery while participation of stakeholders in monitoring and evaluation of public projects at the local government level was very poor. However, the study used secondary data.

Osiemo, Wagude and Ogombe (2019) study examined the influence of stakeholders' involvement in monitoring and evaluation on completion of CDF Health Construction Projects in Busia County, Kenya. This study employed a descriptive survey research design. The total target population for the study comprised of 154 and therefore sample size for this study was 48 respondents. The main tools of data collection for this study were questionnaires and interview schedules for the key informants. The data was analyzed using both descriptive (arithmetic means, standard deviations), and inferential (Simple, multiple linear regression and Pearson's correlation coefficient) statistical methods. The study established that stakeholder involvement in M&E significantly influences completion of CDF health construction projects. However, the study focused on implementation of projects between the year 2014 to 2018.

## **METHODOLOGY**

The study adopted a descriptive research design. The study targeted irrigation projects in Garissa County, Kenya. The targeted respondents were 85 respondents comprising of 10 project managers and 75 project team members. Therefore, a census of 85 respondents was carried out. Questionnaires were used for the purpose of collecting primary data. The questionnaires were divided into five sections whereby section A obtained data on background of the respondent, Section B, C, D, E and obtained data on stakeholder analysis, stakeholder motivation, stakeholder engagement, stakeholder monitoring and evaluation and project performance respectively. The close-ended question was on 5-point likert scale to allow the respondents to indicate their level of agreement on each statement provided.

The study used both quantitative and qualitative method of data analysis. Qualitative data was obtained from open ended questions and analysed using content analysis technique and reported in narrative form as per the specific research objective. Quantitative data was obtained from the questionnaires, analysed using descriptive statistics such as mean and standard deviation and presented in terms of tables, frequencies, graphs and charts using Statistical Package for Social Sciences (SPSS) version 20.0. The study conducted a multiple regression analysis to test the relationship between independent variables and dependent variable.

The regression equation was:  $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$

Whereby; Y= Project Performance

X<sub>1</sub>= Stakeholder analysis

X<sub>2</sub>= Stakeholder engagement

X<sub>3</sub>= Stakeholder motivation

X<sub>4</sub> = Stakeholder monitoring and evaluation

$\beta_1, \beta_2, \beta_3$  and  $\beta_4$  are coefficients of determination

$\epsilon$  is the error term

## FINDINGS AND DISCUSSIONS

### Results of Descriptive Statistics

Analysis of descriptive data was presented in terms of Mean (M) and Standard Deviation (SD). The results are presented as per the study specific variables as follows;

### Stakeholder Analysis

The study sought to determine influence of stakeholder analysis on performance of irrigation projects in Garissa County, Kenya. The descriptive statistics results on stakeholder analysis are presented in Table 1.

**Table 1: Stakeholder Analysis**

Statement	M	SD
Understanding stakeholder viewpoint helps in identifying risk, requirements and required to ease schedule management.	4.66	0.34
Knowing the project stakeholder helps in managing expenditure where it is required	3.43	1.57
Stakeholder analysis helps in identifying and understanding who all need to be consulted to find the various aspects of project development	4.26	0.74
Stakeholder analysis helps in outlining the key stakeholders and their needs at the start of the project	3.71	1.29
Stakeholder analysis leads to a clear understanding of each stakeholder and what they expect	4.77	0.23

### Source: Research Data (2023)

The results presented in Table 1 indicated that most of the respondents strongly agreed on the statement that stakeholder analysis leads to a clear understanding of each stakeholder and what they expect (M=4.77, SD=0.23) and that understanding stakeholder viewpoint helps in identifying risk, requirements and required to ease schedule management (M=4.66, SD=0.34). This is in line with Aaltonen (2018) who observe that stakeholder analysis typically refers to the range of techniques or tools to identify and understand the needs and expectations of major interests inside and outside the project environment.

The respondents agreed that the stakeholder analysis helps in identifying and understanding who all need to be consulted to find the various aspects of project development (M=4.26, SD=0.74) and that stakeholder analysis helps in outlining the key stakeholders and their needs at the start of the project (M=3.71, SD=1.29). This finding agrees with Jepsen and Eskerod (2019) who observe that a stakeholder analysis map is a way to identify your project stakeholders and the impact they might have on the project based on two key aspects: stakeholder impact and stakeholder interest.



The respondents indicated to neutral on the statements that knowing the project stakeholder helps in managing expenditure where it is required (M=3.43, SD=1.57). This is in contrary to the Aaltonen (2018) observation that a stakeholder map can help in understanding which stakeholders have a high and low impact on the project and which stakeholders have a high or low interest on the project.

### Stakeholder Engagement

The study sought to examine the influence of stakeholder engagement on performance of irrigation projects in Garissa County, Kenya. The descriptive statistics results on stakeholder engagement are presented in Table 2.

**Table 2: Stakeholder Engagement**

Statement	M	SD
There is sharing of a common understanding and involvement in the decision-making process of the project.	4.12	0.88
Develops an environment of trusts by allowing the voices of the stakeholders be heard and their issues be known	4.09	0.91
Promotes transparency in the actions of the project and ensures that the project is held accountable for its actions.	3.39	1.61
Ensures that the project plans are a reflection of the real needs and priorities	4.18	0.82
Enables the voices of the stakeholders to be heard which increases the level of trust.	4.54	0.46

**Source: Research Data (2023)**

The results presented in Table 2 indicated that most of the respondents strongly agreed on the statement that stakeholder engagement enables the voices of the stakeholders to be heard which increases the level of trust (M=4.54, SD=0.46). This finding agrees with Silviu and Schipper (2019) who indicate that stakeholder engagement involves building and maintaining relationships and also involves preserving the active support and commitment of the people to the implementation of change, throughout the project delivery.

The respondents agreed that the stakeholder engagement ensures that the project plans are a reflection of the real needs and priorities (M=4.18, SD=0.82), there is sharing of a common understanding and involvement in the decision-making process of the project (M=4.12, SD=0.88) and that stakeholder engagement develops an environment of trusts by allowing the voices of the stakeholders be heard and their issues be known (M=4.09, SD=0.91). The finding concurs with Bourne

and Walker (2020) who observe that engaging stakeholders is crucial for successful strategic planning and also involves identifying, understanding and involving people who have a stake in the outcome of the plan.

The respondents indicated neutral on the statement that stakeholder engagement promotes transparency in the actions of the project and ensures that the project is held accountable for its actions (M=3.39, SD=1.61). The finding is different from Silviu and Schipper (2019) observation that effective stakeholder engagement management requires a comprehensive approach that includes ongoing communication, listening, and collaboration.

### Stakeholder Motivation

The study sought to evaluate the influence of stakeholder motivation on performance of irrigation projects in Garissa County, Kenya. The descriptive statistics results on stakeholder motivation are presented in Table 3.

**Table 3: Stakeholder Motivation**

Statement	M	SD
Stakeholder motivation helps the team focus on the objectives and the end goal.	4.62	0.38
Stakeholder motivation allows project managers to keep track on which resources have been allocated and thus avoid over-allocation	3.82	1.18
Stakeholder motivation leads to the development of strong team-work and teams with identity fully with project goals	3.40	1.60
The Stakeholder motivation ensures a timely completion of projects	4.43	0.57
Stakeholder motivation attempts to integrate all individual efforts through proper coordination	3.33	1.67

**Source: Research Data (2023)**

The results presented in Table 3 indicated that most of the respondents strongly agreed on the statement that stakeholder motivation helps the team focus on the objectives and the end goal (M=4.62, SD=0.38). The finding is consistent with Eskerod and Larsen (2018) who observe that stakeholder motivation is about creating positive interest in the project since motivated stakeholders lead to having automatically have driven and invested supporters that are focused on the ultimate objectives of the project.

The respondents agreed on the statement that the stakeholder motivation ensures a timely completion of projects (M=4.43, SD=0.57) and that stakeholder motivation allows project managers to keep track on which resources have been allocated and thus avoid over-allocation (M=3.82, SD=1.18). The finding concur with Zwikael, Salmona, Meredith and Zarghami (2022) who observe that building motivation can be achieved through emphasizing personal benefits to stakeholders, overall benefits of

the project; and continuously communicating project successes.

The respondents indicated neutral on the statements that stakeholder motivation leads to the development of strong team-work and teams with identity fully with project goals (M=3.40, SD=1.60) and that stakeholder motivation attempts to integrate all individual efforts through proper coordination (M=3.33, SD=1.67). The finding do not agree with Eskerod and Larsen (2018) observation that motivation is a tool project managers can use to continuously foster excitement surrounding the project, both internally and externally.

#### **Stakeholder Monitoring**

The study sought to determine the influence of stakeholder monitoring and evaluation on performance of irrigation projects in Garissa County, Kenya. The descriptive statistics results on stakeholder monitoring are presented in Table 4.

**Table 4: Stakeholder Monitoring**

Statement	M	SD
Stakeholder roles and responsibilities are well defined for effective project implementation	4.02	0.98
A proper strategy for communication with stakeholders is well defined for effective flow of information	4.66	0.34
Involvement of stakeholders increases public interest in project implementation.	4.03	0.17
Stakeholder participation leads to customer acceptance of projects that meet their needs.	4.31	0.69
Stakeholder involvement has increased openness in the project's actions and ensures that the project is held accountable for its actions.	3.51	1.49

**Source: Research Data (2023)**

The results presented in Table 4 indicated that most of the respondents strongly agreed on the statement

that a proper strategy for communication with stakeholders is well defined for effective flow of

information (M=4.66, SD=0.34). The finding concurs with Tengan and Aigbavboa (2017) who observe that stakeholders in Monitoring and Evaluation (M&E) play a critical role in ensuring that the monitoring and evaluation is effective, and efficient, and produces meaningful insights to improve project or program outcomes.

The respondents agreed on the statements that stakeholder participation leads to customer acceptance of projects that meet their needs (M=4.31, SD=0.69), involvement of stakeholders increases public interest in project implementation (M=4.03, SD=0.17), stakeholder roles and responsibilities are well defined for effective project implementation (M=4.02, SD=0.98) and that

stakeholder involvement has increased openness in the project's actions and ensures that the project is held accountable for its actions (M=3.51, SD=1.49). The finding concurs with Crawford and Bryce (2019) who observes that stakeholders play a critical role in the success of monitoring and evaluation (M&E) processes in development programs and policies. They can provide valuable input on program design and implementation, as well as on the collection, analysis, and use of data for decision-making.

### Project Performance

The study sought to investigate the performance of irrigation projects in Garissa County, Kenya. The descriptive statistics results on project performance are presented in Table 5.

**Table 5: Project Performance**

Statement	M	SD
Projects are delivered within the set budget	4.11	0.89
Projects are delivered within the set schedule	4.04	0.96
Projects are of higher quality that satisfy clients' needs	4.08	0.92

**Source: Research Data (2023)**

The results presented in Table 5 indicated that most of the respondents agreed on the statement that projects are delivered within the set budget (M=4.11, SD=0.89), projects are of higher quality that satisfy clients' needs (M=4.08, SD=0.92) and that projects are delivered within the set schedule (M=4.04, SD=0.96). The finding is in line with Jha and Iyer (2020) who indicate that the measurement of project performance entails the determination of a group of measures, measuring the aspects/factors that service users and stakeholders' find significant and staff involvement in identifying the measures to

ensure that perception measures and quantifiable performance indicators are all covered.

### Results of Multiple Regression Analysis

Regression analysis was carried out to show the extent to which independent variables studied which include; stakeholder analysis, stakeholder engagement, stakeholder motivation and stakeholder monitoring influence the dependent variable which is the project performance. The findings are shown as follows;

**Table 6: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.946 <sup>a</sup>	.896	.891	.169

**Source: Research Data (2023)**

The results presented in Table 6 indicated that the four independent variables that were studied, explain 0.891(89.1%) of performance of irrigation projects in Garissa County, Kenya as represented by

the adjusted R square. This therefore means that other factors not studied in this research contribute 10.9% of project performance.

**Table 7: Analysis of Variance**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	200.614	4	50.154	62.279	.001
	Residual	60.397	75	.805		
	Total	261.011	79			

Source: Research Data (2023)

The results presented in Table 7 showed that the level of significance was 0.001. The results also indicate that the statistical F value is 62.279 greater than the statistical mean value (50.154). Based on

these conditions, the study concluded that the model was significant in determining the influence of stakeholder participation on the performance of irrigation projects in Garissa County, Kenya.

**Table 8: Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.524	.179		2.927	.001
	Stakeholder analysis	0.679	.034	5.207	19.970	.001
	Stakeholder engagement	0.706	.027	4.170	26.148	.000
	Stakeholder motivation	0.889	.040	2.342	22.225	.000
	Stakeholder monitoring	0.654	.123	1.213	5.317	.001

Source: Research Data (2023)

The findings in Table 8 revealed that a constant value at 0.524 represents the amount by which the dependent variable changes when independent variables studied are kept at constant. A unit increase in stakeholder analysis would increase the performance of irrigation projects in Garissa County, Kenya by 67.9%. A unit increase in stakeholder engagement would increase the performance of irrigation projects in Garissa County, Kenya by 70.6%. A unit increase in stakeholder motivation would increase the performance of irrigation projects in Garissa County, Kenya by 88.9% and a unit increase in stakeholder monitoring would increase the performance of irrigation projects in Garissa County, Kenya by 65.4%. Based on this finding the regression equation became as expressed below;

Project performance = 0.524 + 0.679(stakeholder analysis) + 0.706(stakeholder engagement) + 0.889(stakeholder motivation) and 0.654(stakeholder monitoring)

The study established that stakeholder analysis had a positive and significant influence on the on performance of irrigation projects in Garissa County, Kenya as indicated by t value (t= 19.970, p < 0.05). This finding agrees with Kamau (2019) who assessed the effect of stakeholders' analysis and engagement on the performance of constituency development funded projects: A Survey of Vihiga County. The regression model showed that stakeholders' analysis and engagement had a positive significant influence on the level of project completion and project performance. The finding also concurs with Mugata and Yusuf (2018) who investigated the effect of stakeholder analysis on performance of road construction projects in Elgeyo Marakwet County, Kenya. The study found out that stakeholder analysis had significant effect on performance of road construction projects on performance of road construction projects in Elgeyo Marakwet.

The study found that stakeholder engagement had a positive and significant influence on the on performance of irrigation projects in Garissa County, Kenya as indicated by t value ( $t= 26.148, p < 0.05$ ). The finding concur with Olwande (2021) study examine the influence of stakeholder engagement on performance of the antiretroviral therapy supply chain project by national aids and sexually transmitted infections control program in health facilities, Kenya. The results revealed that stakeholder capacity building, human resource management, monitoring and evaluation, and communication management all had a positive and significant effect on project performance. However, the finding is in contrary with Mambwe, Mwanaumo, Nsefu and Sakala (2020) study which examined the impact of stakeholder engagement on performance of construction projects in Lusaka District. The results showed that stakeholder's engagement was negatively correlated to project cost.

The study revealed that stakeholder motivation had a positive and significant influence on the on performance of irrigation projects in Garissa County, Kenya as indicated by t value ( $t= 22.225, p < 0.05$ ). The finding is in line with Maina and Kimutai (2018) study which examined the influence of stakeholder motivation on project performance of open air market projects in Nyeri County, Kenya. The results of the study established that the stakeholder motivation was positive and significant and thus these factors determine project performance. The finding also agrees with Magagan and Ngugi (2021) study which investigated the influence of stakeholder motivation on performance of projects in Unilever Kenya Ltd and found that stakeholder motivation positively influences project performance.

The study established that stakeholder monitoring had a positive and significant influence on the on performance of irrigation projects in Garissa County, Kenya as indicated by t value ( $t= 5.317, p < 0.05$ ). The finding agrees with Osiemo, Wagude and Ogombe (2019) study which examined the influence of

stakeholders' involvement in monitoring and evaluation on completion of CDF Health Construction Projects in Busia County, Kenya. The study established that stakeholder involvement in M&E significantly influences completion of CDF health construction projects. The finding also agree with a study by Kalu and Rugami (2020) examined the influence of monitoring and evaluation stakeholder involvement on infrastructure projects implementation at Kenya Ports Authority and found that monitoring and evaluation stakeholder empowerment increases the ability and confidence of stakeholders to make choices and decisions which contributed positively and significantly to the projects implementation at Kenya Ports Authority.

### **CONCLUSIONS AND RECOMMENDATIONS**

The general objective of this study was to investigate the influence of stakeholder participation on the performance of irrigation projects in Garissa County, Kenya. The stakeholder participation was conceptualized in terms of stakeholder analysis, stakeholder engagement, stakeholder motivation and stakeholder monitoring. Data was collected from project managers and project team members using structured questionnaire. Analysis of data was done using descriptive analysis and multiple regression analysis. The following is the summary of the findings;

The first research objective study sought to determine influence of stakeholder analysis on performance of irrigation projects in Garissa County, Kenya. The study found that stakeholder analysis had a positive significant influence on the performance of irrigation projects in Garissa County, Kenya. Stakeholder analysis leads to a clear understanding of each stakeholder and what they expect, understanding stakeholder viewpoint helps in identifying risk, requirements and required to ease schedule management and stakeholder analysis helps in identifying and understanding who all need to be consulted to find the various aspects of project development.



The second research objective sought to examine the influence of stakeholder engagement on performance of irrigation projects in Garissa County, Kenya. The study revealed that stakeholder analysis had a positive significant influence on the performance of irrigation projects in Garissa County, Kenya. Stakeholder engagement enables the voices of the stakeholders to be heard which increases the level of trust, stakeholder engagement ensures that the project plans are a reflection of the real needs and priorities and that there is sharing of a common understanding and involvement in the decision-making process of the project.

The third research objective sought to evaluate the influence of stakeholder motivation on performance of irrigation projects in Garissa County, Kenya. The study established that stakeholder motivation had a positive significant influence on the performance of irrigation projects in Garissa County, Kenya. Stakeholder motivation helps the team focus on the objectives and the end goal, stakeholder motivation ensures a timely completion of projects and that stakeholder motivation allows project managers to keep track on which resources have been allocated and thus avoid over-allocation.

The fourth research objective sought to determine the influence of stakeholder monitoring and evaluation on performance of irrigation projects in Garissa County, Kenya. The study examined that stakeholder monitoring had a positive significant influence on the performance of irrigation projects in Garissa County, Kenya. A proper strategy for communication with stakeholders is well defined for effective flow of information, stakeholder participation leads to customer acceptance of projects that meet their needs, involvement of stakeholders increases public interest in project implementation and that stakeholder roles and responsibilities are well defined for effective project implementation.

The study concluded that a stakeholder analysis helps an organization to gain more support and resources, increase project visibility, especially to executive stakeholders, prevent costly roadblocks

later in the project cycle, communicate through the right channels at the right time and share the right level of information with the stakeholders. By gaining the support of powerful individuals, project managers can improve their chances of succeeding in projects. Stakeholder analysis makes it easier to understand and forecast their needs, to communicate with them in a way they prefer throughout the project's lifetime. This analysis will also help the project managers spot competing interests, navigate potential roadblocks, and make sure that everyone involved is satisfied with the project outcome.

The study concluded that engaging with different perspectives provides opportunities for learning and potentially changing the approach to ensure it fits the needs of stakeholders, communicating directly with a stakeholder allows project managers to learn not only their perspective, but can provide new insights on a product or issue to help them achieve better project performance. Understanding the views and interests of different stakeholders can lead to more effective decision-making. Engaging early can lead to savings of both time and money in the long term. Engaging with stakeholders is central to improving accountability within own organization as well as to the wider market. The organization should include diverse perspectives in its outreach to ensure its hearing from all angles of the project stakeholders

The study concluded that stakeholders with a high need for affiliation are moved to act because of their positive interest in and concern for others. Stakeholders with a high need for power are motivated by the ability to exercise control and influence. Stakeholders with a high Need for Achievement not only spend time thinking about achievement goals, but they think about how to attain goals, what obstacles or blocks might be encountered, where they can get help, and how they will feel if they succeed or fail. Achievement motivated stakeholders rely upon their entrepreneurial spirit in that they think about doing something unique or innovative. They set

challenging, but realistic goals for themselves and others. Never satisfied with the status quo, they continuously seek performance-related feedback, whether positive or negative with the view that any feedback can be used to improve performance.

The study concluded that stakeholders play a critical role in the success of monitoring and evaluation (M&E) processes in development programs and policies. They can provide valuable input on program design and implementation, as well as on the collection, analysis, and use of data for decision-making. Stakeholders are individuals or groups that have an interest or concern in a particular project, program, or activity. In the context of monitoring and evaluation (M&E), stakeholders are those who have a vested interest in the success of the M&E process, the findings, and the outcomes. Stakeholders in M&E play a critical role in ensuring that the monitoring and evaluation is effective and efficient, and produces meaningful insights to improve project or program outcomes.

The study recommended that the organization should make sure to account for both internal and external stakeholders and create a clear stakeholder map that outlines each stakeholder's influence-interest level. The project manager should understand the stakeholders' needs and perspectives and come to a solution that does not negatively impact the success of the project. As the project gets underway, the project managers make sure to update any relevant stakeholders on changes and progress. In addition to increasing visibility, documenting your processes early reduces the risk of any miscommunication down the road.

The study recommends that the organization should analyse and categorise all your stakeholders using a mapping chart to manage how, where and when it should communicate with them. Bring engagement to stakeholders' attention using multiple channels, especially with hard-to-reach groups. Share simple and digestible facts about the project, outline timescales, how the consultation will be conducted and when and where engagement will be captured.

Understand the local area and what will be the positive effects your project will have on the community. Make sure clear timescales are set and communicated to all your stakeholders. In addition, provide plenty of options on how they can take part (online, by post, by telephone or at scheduled events) and provide feedback.

The study recommends that the organization should track the stakeholders so as to aware of the different groups. Determine how it wants them involved and the level of motivation or action needed from each group of stakeholders. Focus on the stakeholders with a great deal of power or interest in the company. Identify the motivating factors for its stakeholders that will get them more involved in the company and brainstorm specific motivators for the stakeholders the organization its trying to inspire. Focus on how the stakeholders benefit as a way to motivate them, hold regular informational and educational meetings for your high-priority stakeholders and ask stakeholders for feedback on a regular basis.

The study recommends that project managers must ensure that stakeholders remain actively engaged to help garner a successful project outcome. Review items from the stakeholder engagement plan by including items on each status meeting agenda that are specific to the stakeholder(s). Check in with stakeholders regularly to ensure that the project team truly understand the stakeholders' needs, whether those needs being met, stakeholders' questions being addressed adequately, they feel supported, are supporting the project as expected and they have suggestions for ongoing activities.

### **Suggestions for Further Studies**

The study suggests that other studies should be carried out that focus on other stakeholder participation elements in order to address the gap of 10.9% identified from the regression analysis results. The study also suggests that similar studies can be done that focus on the performance of irrigation projects in other Counties except Garissa County, Kenya.

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