

Stakeholders Management and Performance of Last Mile Connectivity Project in Elgeyo-Marakwet County

Evans Kipngetch Cheserek, Dr. Muchelule Yusuf

Abstract— Stakeholders strongly influence the outcome of projects especially in complex projects with heterogeneous stakeholders, thus understanding their influence is essential to ensure project success and attainment of objectives. Elgeyo-Marakwet County projects involve a lot of stakeholders whose interests need to be met to ensure the company is successful with its projects and to enable it to provide reliable services to its customers. This study sought to understand how various stakeholders in the industry affect the performance of the Last mile connectivity project in Elgeyo Marakwet County. The study examined: Stakeholder risk management; project leadership; Stakeholder project planning; and Stakeholder project monitoring and how they affect the performance of last mile connectivity projects in Elgeyo Marakwet County. The study was guided by the Stakeholder theory, complexity and chaos theory, contingency theory of risk, and agency theory. Descriptive survey design will be adopted to conduct the study in Elgeyo Marakwet county, Kenya. The study population comprised of 43 projects where 109 people inclusive of project engineers, project managers, Connectivity officers and clerks, Technicians officers, county project representative officers, Local chiefs and local leaders, project contractors, County top management in Elgeyo-Marakwet region form the population. A census was used for the study. The questionnaire was the main tool for data collection where a drop and pick method was adopted by the researcher to ensure that all the respondents were administered with the questionnaires. The study aimed at establishing the relationship between stakeholder management and performance of last mile connectivity project in Elgeyo Marakwet County. The correlation analysis established that Stakeholder Risk Management, Stakeholder Project Planning, had significant positive strong correlation with performance of last mile projects in Elgeyo Marakwet County. The regression analysis established that all the independent variables had positive relationship with performance of last mile projects. They all influence performance by varied degree (Stakeholder Risk Management by 42.4%, Stakeholder Project Planning by 27.1%, Project Leadership by 45.7% and Stakeholder Project Monitoring by 49.7%). The study recommended that involvement of stakeholder in planning, monitoring, and risk management process. The study also recommended project managers to ensure participatory monitoring and planning where all stakeholders are involved. The study also recommended a similar study in other counties to ascertain the current findings.

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Index Terms—Last Mile Connectivity Project, Stakeholder Management, Stakeholder Project Planning, Stakeholder Risk Management.

I. INTRODUCTION

Stakeholders' management is paramount in the success of projects and organizations [1]. Even though minor decisions and emergencies are generally not appropriate for stakeholder participation, a complex situation with far-reaching impacts warrant stakeholder involvement and when done proactively, rather than in response to a problem, helps to avoid problems in the future [2]. The focus of stakeholder participation is usually to share information with and gather input from, members of the public who may have an interest in a project. The Constitution of Kenya [3] gives citizens the right to take part in activities that have a direct bearing on their lives. Eight components are the building blocks of stakeholders' engagement which include: stakeholder identification and analysis; information disclosure; stakeholder consultation; negotiation and partnerships; grievance management; stakeholder involvement in project monitoring; reporting to stakeholders; and management functions [4]. Projects are being extensively used in organizations as a means to fulfil strategy this is due to the growth and use of project tools and methodologies to help in changing and reshaping organizations [5].

Stakeholder engagement is regarded as a novel management strategy useful in addressing global sustainability concerns by incorporating broader competencies from stakeholders across the project management processes [6]. In New Zealand and Malaysia, for infrastructure projects of expressway and railway respectively, stakeholder was engaged at the early stages of project planning though less of the external stakeholders were involved in the initial phase of the project [7]. In Nigeria, [8] on the role of project managers in the stakeholder management found that both are key players in ensuring project success. The study also established a significant relationship between the role of project managers and the stakeholder management. [9] in the study of the role of stakeholder on project performance of KPLC last mile connectivity project in Embu County found that project planning, risk management, project monitoring & control, and project leadership had positive significant influence on performance of last mile connectivity in Embu County. the study recommended engagement, involvement and communication of various project stakeholders in order to ensure their expectations and interests are met for the success

of the last mile connectivity project.

A. Last Mile Connectivity

The Last Mile Connectivity Project is a project that aims at extending low voltage systems throughout the country to reach counties with low penetration rates. It is believed that this project will accelerate economic growth at the micro-economic level in line with the Government's vision 2030 [10]. The project entails supply of distribution material to reach 300,000 new connections; construction of low voltage (LV) distribution lines; supervision and management; and capacity building activities in targeted areas of expertise. The population located in rural areas, low-income groups, as well as small businesses, will particularly benefit from this project. Indeed, by providing increased electricity access, the project will contribute to improvement in standards of living of the targeted households in terms of education, health, and access to information. The last mile project is financed by the African Development Bank (ADB) and the Government of Kenya to the tune of Ksh 13.5 billion. The project is in three phases, the 1st phase is the extension of electricity to customers within 600 meters of transformers, 2nd phase is the installation of a half a million transformers, and the 3rd phase is the extension of electricity supply within the installed transformers [11].

B. Elgeyo-Marakwet County

According to Independent Electorate and Boundaries Commission (IEBC) Elgeyo Marakwet is located in the former Rift valley province. The county borders West Pokot County to the North, Baringo County to the East, South, and South East, Uasin Gishu County to the West and South West, and Trans Nzoia County to the North West. The county is having four sub-counties, namely; Marakwet East, Keiyo North, Marakwet West, and Keiyo South covering a total area of 3,032 sq. km [12]. Elgeyo Marakwet with a total population of approximately 0.5M People. County main economic activities include mining, livestock, small business and subsistence farming. The main source of household energy in the county is from charcoal, paraffin and firewood. The number of households with electricity coverage in the county are 25,419 households representing 30.38 % distributed as follows; 51.94% access in Keiyo North, 37.79% in Keiyo South, 26.85% in Marakwet West and 4.8% access rate in Marakwet East. The overall households connected with electricity was 30% as 2018 and it was expected to increase to 80% by the year 2022 [13].

II. STATEMENT OF THE PROBLEM

The world bank in 2018 rated the Kenya Electricity Modernization project to be satisfactory towards project development objectives and the progress towards completion of the project [14]. The last mile project in Kenya has been faced with diverse performance challenges. According to Elgeyo-Marakwet County in 2017, there was a challenge with customers' inability to load tokens in their meters where over 240,668 customers were affected. There has also been growing concern over the economic viability of the project as the customers connected are on semi-permanent houses and

some of the customers are connected without having fully settled the requisite fee of Ksh 15,000 which they pay in instalments [14]. Bureaucratic procedures and high unit cost of installation has also affected the rate of implementation since majority of Kenya still struggle to raise Ksh 15,000 installation fee due to high level of poverty. Though previous literature had discussed about stakeholders and last Mile project e.g. [9] none of the studies has dwelled on Last mile connectivity in Elgeyo Marakwet a gap this study sought to fill.

A. Objectives of the Study.

The main objective of the study was to examine the influence of stakeholders' management on performance of Last mile connectivity projects in Elgeyo Marakwet County, Kenya. Specifically, the study sought to:

- i) Determine the influence of Stakeholder risk management on performance of Last mile connectivity projects in Elgeyo Marakwet County, Kenya.
- ii) Assess the effect of Stakeholder project planning on performance of Last mile connectivity projects in Elgeyo Marakwet County, Kenya.

B. Scope of the Study

This research is concerned with an analysis of the influence of stakeholder management on the performance of Last Mile connectivity projects in Elgeyo Marakwet County. The study will use a census of the population of 109 respondents. The study was delimited to those stakeholders that are accessible and are involved in the last mile connectivity project. In this regard project managers, the consumers of power were involved in the study. The study was also delimited to Elgeyo Marakwet.

III. LITERATURE REVIEW

A. Theoretical Review

The theoretical framework in this study consists of theories and models that relate to stakeholder's management which included: Contingency theory of risk, Complexity and Chaos Theories, and Stakeholders Theory. The complexity theory was founded on an attempt to rationalize the behaviour of large and complex systems, believing they cannot be explained by usual rules of nature [15]. Complexity theory describes states varying from comparative order to complete disorder, or chaos, or where the system defies prediction or control. It is the recognition that projects or processes do not behave predictably, even when under the guidance of experienced teams or groups, whereas some parts will be very stable and behave predictable manner that has sustained continued interest in complexity [16]. The theory was useful in explaining the nature of the interaction between the various stakeholders in projects to ensure the success of projects. The theory was linked to risk management, planning, leadership, project monitoring with a focus on the performance of last mile connectivity projects in Elgeyo Marakwet County.

Contingency theory asserts that at the top level of the control system, the basic structures of risk management appear to be common across large organizations. At the -detailed level, however, the structures are fine tuned to

respond to specific risk management needs and environmental pressures. Further the theory asserts that external political uncertainty acts as an important driver of risk management because national policy influences how risks are prioritized, while locally elected members determine the resources available for control of risks. Politics also limits the scope for strategic choice, as well as imposing new strategies, such as the requirement for partnership working. Both of these restrictions affect the detail of the design and day to day operation of the risk management system in the renewable energy institutions [17]. The contingency theory draws focus away from concepts such as risk and safety, and towards social institutions were to deal with the risk reasonably, one must understand the underlying mechanisms. Thus, the energy industry is challenged with what decisions to make regarding sustainability where all stakeholders have a risk to take. The stakeholders are its government, community, investors, policymakers have the above-explained ways of life. Combining all these ways of life is complex in the decision-making process. The theory was useful in explaining the risk related to stakeholders' management in last mile connectivity projects in Elgeyo Marakwet County.

B. Conceptual Framework

The conceptual framework of the study is in Figure 1 below.

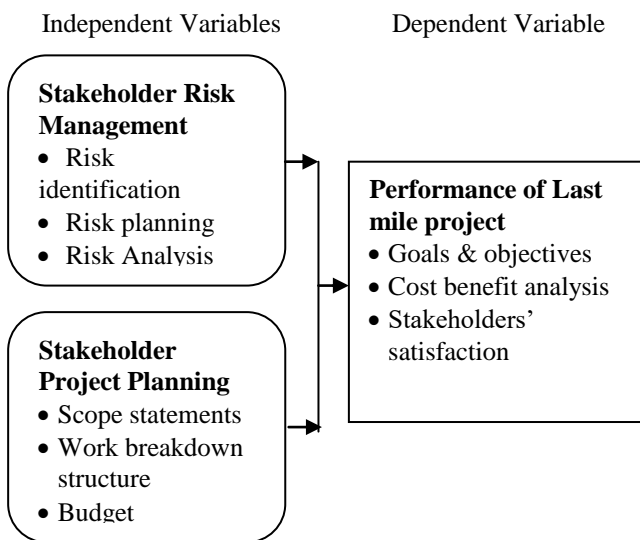


Fig 1: Conceptual Framework

1) Stakeholder Risk Management

Risk management as the process that attempts to manage uncertainty that influences the achievement of objectives, creating value to the organization, with a goal of reaching desired objectives [4]. Risk management aims at identifying risks and taking appropriate action in reduction of the impending effects on an organization. A risk matrix is a tool used to visualize various types of risks which renders probability and consequences in form of a graph categorizing them in the ranges of high and low. An organization can choose appropriate response or a combination to counter a specific risk with a consideration of risk tolerance and the effects of the available responses on a broader level and also consider the opportunities arising from the risk and a cost

benefit analysis [18]. It is evident that the management of projects is very challenging arising from the unusual risks and issues that traditional project methods cannot process [19]. There are several issues on which risks can be categorized and they include: sponsorship; market trends; social acceptability; regulatory; technological trends; political stability or influence; financial stability; government relations; host community relations; and the effect of multi-location execution of projects [20]. There is a challenge with the managerial issues notably by the project sponsors in managing and dealing with the unforeseen turbulence in the project organization structure, the complexity in establishing a common understanding with internationally stakeholders [21]. Lack of discussion on agreements, expectation, and cultures of the internal stakeholders usually leads to an ambiguous and a complex culture. The misalignment of processes in communication pattern as well as decisions made by the organizations is the major cause of the project issues of underestimation or overestimation of costs, unrealistic project duration and other risks. When designing the pattern of stakeholders' involvement, internal management risks should never be underestimated or assumed [9].

2) Stakeholder Project Planning

Stakeholders planning is the process that involves the development of appropriate management strategies to effectively involve stakeholders throughout the life cycle of the project in attempt to identify the needs, interests and even their impact on the project and its success [22]. Project planning activities include the identification of the project's objective; the specification of required project resources and their allocation; and the determination of the methods to be used to deliver the project end product, respond to critical events and evaluate activities and outcomes. The roles of stakeholders change throughout a project life cycle. However, the willingness of stakeholders to perform the activities assigned to them during the project planning process greatly contributes to the success or failure of the project. The benefits of stakeholder involvement in the planning process include a reduction in distrust of the project process or outcome, an increase in commitment to the project objectives and processes, and heightened credibility of the project's outcome [2]. The stakeholder's project team role, the project planning activities in which he participates and his level of involvement in or responsibility for a particular activity, depends on the project's mission and his reporting relationship to the project management office, or PMO, which, in particular, leads to his classification as an internal or external stakeholder. According to [23] stakeholders can be categorized as internal (project team) or external (outside the project team). Project planning activities in which external stakeholders participate are frequently identical to those of internal stakeholders. However, the roles of external stakeholders are limited to that of consultants rather than team members directly accountable for individual project planning activities [2].

3) Project Performance

Projects normally range from the small to the mega-size

and common to all is the utilization of resources. Each project would have an overarching objective that the facility or facilities arising from it should be fit for purpose by enabling certain functions to be carried out therein. Other objectives of projects would then concern, say completion on time, to a certain budget, quality, etc. These objectives become the yardsticks with which project completion is often assessed. It is thus ideal to specify these objectives upfront. Most contract documents would reflect the objectives of a project even if the information is not in one [24]. According to [2], various stakeholders evaluate project performance differently based on their expectations concerning the actual quality, cost, and time. Project performance can be measured in terms of the qualitative value the project has to the implementing organization or quantitative in terms of the earned value systems for utility and large government projects. However, [25] argued that an interesting way of evaluating the performance of the project is looking at the people involved with the projects or related to the ownership of the project (macro viewpoint) and those group of people such as developers and contractors who view performance in micro viewpoint.

There are four main components to performance management which entail strategy goal, performance index, duty, and performance goal [4]. The strategy goals are the organization's policies that represent the values of that given organization and the performance goal is actually is part of the strategy goal which include specific performance objectives of a specific or particular project in a given year. The performance index is about the criteria for successful evaluation of a project goal where there is development of quantitative measures for the [26]. Quality deals with the features of a product or service requested to meet the desired need. Quality requirements ought to be explicit and clear in the contract documents to ensure there are conformance and effectiveness of quality performance. In Kenya, project performance is measured in terms of time, cost, stakeholders' satisfaction, and quality. The timeliness of a project and achieving the objective of the project is assumed to be an effective indicator in measuring project performance [27].

C. Empirical Review

1) Stakeholder Risk Management and Project Performance

[28] in a study on 'risk management and project performance of UNDP projects in construction projects in Somalia' found that a close relationship between risk identification, risk response and performance of construction projects in Mogadishu Somalia. [29] examined the 'effects of project risk management practices on performance of consulting civil engineers in Nairobi County.

2) Stakeholder Project Planning and Project Performance

[30] in their study on the influence of stakeholders' management on performance of CDA projects found stakeholder planning to have a positive significant influence on performance of CDA projects. [31] in their study of the relationship between project planning and project success, revealed that project success was insensitive to the implementation level of management processes. Project

success is correlated to project planning specifically requirements definition planning and technical specifications development. They believe that through canning doesn't guarantee the success of the project, a minimum level of planning is necessary with an emphasis on the planning tools and procedures. The project manager has the responsibility of the formal planning while requirements development and specifications are dependent on the overall cooperation with the end-user of the project. Since projects are unique, the precise initial stage of planning where all the activities needed to be carried out for the completion of projects, their cost preparation is difficult or even sometimes impossible to be known. To aggravate the issue is where activities are dependent on other activities for out the come. It with such reason that some authors believe that planning isn't crucial and helpful for the overall project success.

D. Critique of existing literature relevant to the study

[32] assessed stakeholder engagement practices and project performance of prime cent ltd in Rwanda. The assessment was based on the stakeholder engagement and the four performance parameters of timeliness, cost efficiency, quality, and profitability. The study adopted a descriptive survey design and targeted employees of prime cement ltd in Rwanda. The study found a moderate negative correlation between stakeholder engagement practices in identification of project as well as performance. The study also found a positive correlation between stakeholder engagement practices in project planning and performance of project. finally, the study found a strong positive correlation between stakeholder engagement practices in project monitoring and performance of projects related to cost. Though the study was relevant to the current study it only focused on stakeholder engagement practices and was also done in Rwanda while the current study is done in Kenya. The study also focused on prime cement projects while the current study is about last mile connectivity project.

[30] examined the influence of stakeholders' management on performance of Coast Development Authority (CDA) projects in Kenya. Descriptive survey design was adopted where 171 key technical project personnel and beneficiaries were targeted and a sample of 120 was drawn. The study operationalized stakeholder management in to resource mobilization, stakeholder planning, stakeholder monitoring, and stakeholder communication. The study found that stakeholder management (resource mobilization, stakeholder planning, stakeholder monitoring, and stakeholder communication) had a positive significant influence on the performance of CDA projects in Kenya. The study recommended coming up with policies on stakeholder communication since its crucial for the projects. Further, the organization should adopt participatory approaches during project monitoring as well as have direct engagement with various project stakeholders rather than categorizing them in layers of groups. Thought the study add to the literature in this current study, it didn't target last mile connectivity project.

IV. RESEARCH METHODOLOGY

The study adopted a descriptive research design. The target

population for this study comprises of 109 key staffs with technical mandate of last mile connectivity projects in Elgeyo-Marakwet County. A census study was adopted. Regression analysis was done by the use of the following econometric model.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \mu \dots \dots \dots (i)$$

Where;

Y = Performance of Last Mile Project

X₁ = Project Risk Management;

X₂ = Project Planning;

V. RESEARCH FINDINGS AND DISCUSSIONS

A. Response Rate

The sample size was 109 project representatives involved in last mile connectivity projects in Elgeyo Marakwet County. A total of 109 questionnaires were distributed to respondents in Elgeyo Marakwet County where 88 were duly filled and returned giving a response rate of 80.7%.

B. Descriptive Statistics

The descriptive statistics tend to explain the responses for the items in each variable in relation to the objectives of the study. The 5-point liker scale was used where the responses were coded as 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5 = Strongly Agree. The percentage for each response was tabulated. The average for each response was then obtained together with the standard deviation.

1) Stakeholder Risk Management and Performance of Last Project

The first objective was to determine the influence of Stakeholder risk management on performance of Last mile connectivity projects in Elgeyo Marakwet County, Kenya. Risk management as the process that attempts to manage uncertainty that influences the achievement of objectives, creating value to the organization, with a goal of reaching desired objectives [4]. The descriptive statistics from Table 1 below indicated that (M = 3.64, SD =.891) respondents agreed on the indicators of Stakeholder Risk Management on performance of last mile projects in Elgeyo Marakwet County in Kenya. [19] asserted that the complexity and uncertainty of projects relate to the defining characteristics of projects, long duration, huge investment and the very many uncontrollable factors that emerge. There are several issues on which risks can categorize they include: sponsorship; market trends; social acceptability; regulatory; technological trends; political stability or influence; financial stability; government relations; host community relations; and the effect of multi-location execution of projects. It is evident that the management of projects is very challenging arising from the unusual risks and issues that traditional project methods cannot process.

Table 1: Stakeholder Risk Management and Performance of Last Project

Stakeholder Risk Management	SD %	D %	N %	A %	SA %	M
Project stakeholders are involved in the	2.3	9.1	15.9	47.7	25	3.84

risk identification process						
Stakeholder analysis is done to identify the extent of decision making.	4.5	18.2	20.5	29.5	27.3	3.57
Problem analysis is done to identify the role and contribution of various stakeholders towards the success of the project.	4.5	18.2	18.2	13.6	45.5	3.77
Once risks identified mitigation measures are documented.	6.8	13.6	18.2	34.1	27.3	3.61
Mitigation measures and strategies are communicated to the various stakeholders.	4.5	18.2	15.9	25	36.4	3.70
The risk registers are available and accessible to all stakeholders of the project.	4.5	11.4	25	38.6	20.5	3.59
The stakeholders are involved in monitoring the project risks.	11.4	20.5	15.9	25	27.3	3.36
Composite Mean						3.64

The descriptive statistics established that project stakeholders were involved in the risk identification process as agreed by 72.7% of the respondents (M = 3.84, SD = .987). Respondents (56.8%) agreed that stakeholder analysis is done to identify their extent in decision making (M = 3.57, SD = 1.208). Majority of the respondents (59.1%) also agreed that problem analysis is done to identify the role and contribution of various stakeholders towards the success of the project (M = 3.77, SD = 1.327). Respondents also agreed (61.4%) that mitigation measures for the risks identified are also documented (M =3.61, SD = 1.224). Further, the respondents (61.4%) also agreed that the mitigation measures and strategies are communicated to the various stakeholders of the project. Risk registers are also made available to the project stakeholders as agreed by 59.1% of the respondents (M =3.59, SD = 1.085). Finally, 52.3% of the respondents agreed that the stakeholders are involved in monitoring of the project risks (M = 3.36, SD = 1.382).

In what ways are stakeholders involved in project risk management process?

The respondents agreed that the last mile connectivity projects involve multiple stakeholders. Initially, stakeholder’s identification and engagement practice was

achieved through a dedicate stakeholder engagement team that coordinated with the various local leaders and members of the community. According to secondary data on the last mile connectivity program there were public consultations that aimed at understanding the risks, project befits and impacts and also the potential mitigation strategies. The consultations started in January 2014. Respondents outlined that before any construction work was initiated, the project stakeholders which included the local communities and project consultants were all consulted. The respondents also agreed that the residents from the local communities were screed in order to identify their actual electricity needs and demand, identify the technical constraints, and also agreeing on how to address the various concerns raised by the stakeholders. Stakeholder engagement included the Rural Electrification authority team, member of county assembly, and the community leaders where electricity access is needed [11]. The potential risks identified in the last mile connectivity program included selection of local communities, high connection fees, high risk of financial loss due to the large investment needed and the returns on investment were uncertain, prioritization needs, geographical challenges, and also shortage of investments [14]. The electrification rate in Kenya in 2016 was at 36% due to the identified challenges [14].

2) Stakeholder Project Planning and Performance of Last Project

The second objective was to assess the effect of Stakeholder project planning on performance of Last mile connectivity projects in Elgeyo Marakwet County, Kenya. Stakeholders planning is the process that involves the development of appropriate management strategies to effectively involve stakeholders throughout the life cycle of the project in attempt to identify the needs, interests and even their impact on the project and its success [22]. The descriptive statistics established that the Composite Mean of 3.60 abs standard deviation of .891 indicated that respondents agreed on the indicators of Project Planning on performance of Last mile projects in Elgeyo Marakwet County. According to [25] the initiation process determines the scope of the projects well as the nature of the project and if not well performed there is a likelihood that the project will not meet the expectations of its stakeholders’.

Table 2: Stakeholder Project Planning and Performance of Last Project

Stakeholder Project Planning	SD %	D %	N %	A %	SA %	M
Stakeholders are involved in the identification of the activities needed to complete deliverables.	9.1	20.5	11.4	9.1	50	3.70
The stakeholders were also involved in estimating the resources for the project activities	9.1	13.6	6.8	13.6	56.8	3.95
Planning tools like	9.1	29.5	29.5	18.2	13.6	2.98

PERT, CPM, GANTT CHARTS, WBS are used.	13.6	22.7	13.6	20.5	29.5	3.30
The stakeholders participate in the development of the project management plan	11.4	15.9	13.6	27.3	31.8	3.52
Planning of new projects is a collective responsibility that involves all the stakeholders of the project.	13.6	6.8	6.8	25	47.7	3.86
The project charter is the overall project reference document used.	15.9	4.5	4.5	27.3	47.7	3.86
Stakeholders are involved in planning of the project activities.						

Composite Mean

Majority of the respondents (59.1%) agreed that the stakeholders were involved in the identification of the activities needed to complete the deliverables (M = 3.70, SD = 1.488). respondents (70.4%) agreed that stakeholders were involved in estimating the resources for the project activities (M = 3.95, SD = 1.430). The respondents couldn’t clear establish on whether planning tools such as PERT, CPM, WBS, GANTT charts were used in the projects (M = 298, SD = 1.191). Only about, 50% of the respondents agreed that stakeholders participated in the development of the project management plan (M = 3.30, SD = 1.456). Majority of the respondents (591%) agreed that planning of new projects is a collective responsibility of the various stakeholders in the last mile projects (M = 3.52, SD = 1.389). Respondents (72.7%) also agreed that the project charter is the overall project reference for the last mile project (M = 3.86, SD = 1.440). Lastly, respondents agreed that the stakeholders’ involved in planning of the project activities (M = 3.86, SD = 1.472).

In your opinion what is the role stakeholder’s management in project planning activity?

In response to the above, the multiple stakeholders have different roles in planning of the projects. To mention a few, the local communities are responsible for mapping and identifying the beneficiaries of the projects, the county assembly representative plays an important role of ensuring the other stakeholders such as project consultants are given enough support by the local community in order to ensure success of the project. According to the [14] before construction work commenced, all the project stakeholders were consulted to identify the areas where the construction will take place as well those who are ready for the connectivity. [11] also affirmed that stakeholders were consulted during project and implementation stages and it was considered very important for the project.

3) Performance of Last Project

The main objective of the study was to examine the influence of stakeholders’ management on performance of Last mile connectivity projects in Elgeyo Marakwet County, Kenya. According to [2] various stakeholders evaluate project performance differently based on their expectations concerning the actual quality, cost, and time. Project performance can be measured in terms of the qualitative value the project has to the implementing organization or quantitative in terms of the earned value systems for utility and large government projects. The Composite Mean of 3.74 and standard deviation of .729 showed an agreement amongst respondents on the improvement of performance due to stakeholder management. According to the [24] project objectives become the yardsticks with which project completion is often assessed. Project performance has been considered to be related to project success which is also related to the project objectives. Project success can be measured by many dimensions which include, end-users’ benefits, the design goals, benefits to the developing organization, and overall success [2], [4]. [27] opined that in Kenya, performance of projects is measured based on achieving of objectives and timeliness of the project and these are assumed to be good indicators for measuring performance.

Table 3: Performance of Last Mile Project

Performance of Last Mile Project	SD %	D %	N %	A %	SA %	M
The project satisfies the End-user operational needs	11.4	15.9	13.6	29.5	29.5	3.50
The major stakeholders determine the standards of the project	4.5	15.9	27.3	22.7	29.5	3.57
Stakeholders believe that project resources were well utilized as per scope and schedule	11.4	6.8	9.1	25	47.7	3.91
The project records show that the project was according to budget	9.1	11.4	13.6	34.1	31.8	3.68
Concluded projects normally meet the required quality/standard	4.5	15.9	13.6	13.6	52.3	3.93
End-user satisfaction is the overall criteria for the success of a project.	4.5	13.6	6.8	15.9	59.1	4.11
Majority of the projects are completed on time and successfully	4.5	18.2	25	27.3	25	3.50
Composite Mean						3.74

The descriptive statistics established that respondents agreed (59%) that the project satisfied the End-user operational needs (M = 3.50, SD = 1.372). The respondents also agreed that (52.2%) the major stakeholders determined the standards of the project (M = 3.57, SD = 1.208). Stakeholders believed that project resources were well utilized according to the scope and schedule (M = 3.91, SD = 1.378). Majority of the respondents also agreed (65.9%) that the project records showed that the project was according to budget (M = 3.68, SD = 1.290). The respondents also agreed (65.9%) that the concluded projects normally met the required quality/standard (M = 3.93, SD = 1.319). End-user satisfaction was the overall criteria for the success of the project as agreed by 75% of the respondents (M = 4.11, SD = 1.280). Respondents also agreed (52.3%) that majority of the projects are completed on time and successfully (M = 3.50, SD = 1.191).

C. Correlation test

Correlation analysis was used to determine the magnitude, significance, and direction of the relationship. Pearson correlation analysis (r) was used to determine the strength of association between independent variables (Stakeholder Risk Management, Stakeholder Project Planning) and the dependent variable (Performance of Last Mile Projects).

Table 4 : Correlation Matrix

		Performance of Last Mile Projects (PLMP)
Stakeholder Risk Management (SRM)	R	.491**
	Sig.	.001
	N	88
Stakeholder Project Planning (SPP)	R	.447**
	Sig.	.002
	N	88

From Table 4 above the study found a slightly strong positive correlation between Stakeholder Risk Management and Performance of Last Mile Projects Elgeyo Marakwet County. The Pearson correlation coefficient 0.491 depicted a moderate strong positive and a direct relationship with Performance of Last Mile Projects Elgeyo Marakwet County. Further the P-value (0.001) which is below the significant value of 0.05 further affirms a significant relationship between Stakeholder Risk Management and Performance of Last Mile Projects Elgeyo Marakwet County. Thus, an increment in Stakeholder Risk Management may lead to positive increase in Performance of Last Mile Projects Elgeyo Marakwet County. The findings are supported by [9] found a strong positive correlation between stakeholder’s role in Stakeholder Risk Management and performance of Last mile connectivity project in Embu County.

Stakeholder Project Planning has a positive slightly strong correlation with Performance of Last Mile Projects Elgeyo Marakwet County. The Pearson correlation of 0.447 shows a slightly strong association as 0.447 nears 0.5. The p-value (0.002) which is below the threshold of 0.05 indicates the significance of the association. Since the association is positive it indicates a direct relationship i.e. an increase by a unit on any of the variable will lead to an increase in the other.

Stakeholder Project Planning as an element of Stakeholder Management can lead to a variation of Performance of Last Mile Projects Elgeyo Marakwet County. The findings are supported by [32] who found a positive correlation between stakeholder engagement in project planning and project performance of Prime cement ltd in Rwanda. Similarly, [9] found a strong positive correlation between stakeholders’ role in Project planning and performance of Last mile connectivity project in Embu County.

D. Regression Analysis

The study carried out a multiple regression analysis to determine the nature of relationship of the model by predicting the dependent in terms of the independent variables using the following linear regression model.

1) Regression Coefficients

Findings from regression analysis all the beta coefficients for the independent variables were significant i.e. the p-values were less than the significant value 0.05. Thus, individual variables (Stakeholder Risk Management, Stakeholder Project Planning) were significant in explaining the Performance of Last mile projects in Elgeyo Marakwet County. Stakeholder risks management with a correlation of .424 and finally, stakeholder project planning with a correlation of .271. Thus, Stakeholder Project Planning had had the least influence on performance of last mile connectivity projects at 27.1%. The beta coefficient for Stakeholder Risk Management .347, p-value .010; a unit increase in Stakeholder Risk Management leads to an improvement of Project Performance by .347 units. From the standardized beta coefficients, the study found that, Stakeholder Risk Management explained 0.424 or 42.4% of variation in performance. Stakeholder Risk Management positively and significantly influences performance of last mile connectivity projects in Elgeyo Marakwet County. The findings are supported by [33] who found the high contractor salience and a more supportive contractor in project related to lower critical risks in projects such as beaches of contracts, cost overruns, work delays, injury and accidents as well quality defects hence improving the performance of the projects. [9] on the role of stakeholders on project performance of KPLC last mile connectivity in Embu County found Stakeholder Risk Management to have a significant influence on performance of Last mile connectivity projects in Embu County.

Stakeholder Project Planning beta coefficient .222, P-value = .039; a unit increase in Stakeholder Project Planning leads to an improvement of Project Performance by .222 units. Stakeholder Project Planning explained 0.271 or 27.1% of variation in performance. Stakeholder Project Planning significantly influences performance of last mile connectivity projects in Elgeyo Marakwet County. The findings are supported by [34] who found as significant positive influence of stakeholder engagement in project planning influence delivery of projects in KAA. Similarly, [32] found a positive significant influence between stakeholder engagement in project planning and project performance of Prime cement ltd in Rwanda. [35] in the study on the effects of stakeholder management on performance of projects at GIZ in Ethiopia found stakeholder engagement in planning to have a

statistically significant positive effect on performance of projects. In another study by [30] on the influence of stakeholders’ management on performance of CDA projects found stakeholder planning to have a positive significant influence on performance of CDA projects.

Table 5: Regression Results

Model	Unstandardize		Standardized	T	Sig.
	d Coefficients	Std. Error	Coefficients Beta		
(Constant)	1.106	.449		2.462	.018
Stakeholder Risk Management	.347	.132	.424	2.627	.010
Stakeholder Project Planning	.222	.106	.271	2.099	.039

a. Dependent Variable: Performance of Last Mile Projects

$$Y = 1.106 + .347X_1 + .222X_2 \dots \dots \dots (ii)$$

$$PLMP = 1.106 + .347SRM + .222SPP \dots \dots \dots (iii)$$

VI. CONCLUSIONS

The main objective of the study was to examine the influence of stakeholders’ management on performance of Last mile connectivity projects in Elgeyo Marakwet County, Kenya. The study found that stakeholder’s management had a strong correlation with Performance of Last Mile Projects in Elgeyo Marakwet County in Kenya. The study findings are supported by [9] study on the role of stakeholders on project performance of KPLC last mile connectivity in Embu County who found (Stakeholder Risk Management, project leadership, and Stakeholder project monitoring & control) to have a positive significant relationship performance of the KPLC last mile connectivity project in Embu County. The study recommends that borrowing from the stakeholders’ theory, projects should have a framework for understanding as well as categorizing project stakeholders as a strategy to easily manage them to provide the necessary influence in projects. Project success is not only based on the iron triangle criteria but also on how well project stakeholders’ expectations and concerns are addressed in the project.

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