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Monitoring and Evaluation Planning on Performance of the Last Mile Rural Electrification Project in Kiserian, Kajiado County, Kenya

Authors: [1]Norah Lokwakol Dowan, [2]Stella Karimi Silas and [3]Mary Mutisya
[1,2&3]The Catholic University of Eastern Africa. **Website:** www.cuea.edu
Correspondence: [1]Norah Dowan. **Tel:** 254-722-609-467.**E-mail:** norahdowan2016@gmail.com

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Abstract: *The Last Mile Rural Electrification Project aimed to address the significant challenge of rural electrification and its implications for community development, particularly women's empowerment in rural electrification projects. Despite numerous rural electrification initiatives, the impact of monitoring and evaluation practices on project performance remains underexplored. The purpose of the study is to establish the influence of monitoring and evaluation planning and performance of the last mile rural electrification project in Kiserian, Kajiado County, Kenya. The objective that guided the study is to establish the influence of planning for monitoring and evaluation and performance of the last mile rural electrification projects in Kiserian, Kajiado Kenya. Data was collected from the respondents by use of questionnaires and interview guides from a target population of 2000 and a sample size of 322. The study adopted a descriptive research survey design and inferential statistics. Quantitative data was analyzed using SPSS software version 25. Arithmetic mean and standard deviation generated from the descriptive data and Pearson moment correlation coefficient (r) were computed. The coefficient of determination R^2 is 0.383 this is an indicator that R^2 was the coefficient of determination of this model and it depicted that monitoring and evaluation planning explained 38.3%. The remaining 61.7% was explained by other factors. The overall F statistics are 2.291 with p- 0.035b. The literature review emphasized the importance of monitoring and evaluation systems, individual performance on project outcomes, and gender-sensitive approaches in rural projects. The results demonstrated a significant positive relationship between M&E planning and project performance. In conclusion, the study underscores the pivotal role of robust M&E practices in enhancing the performance of rural electrification projects. Effective planning and efficient feedback of M&E results contribute to achieving project goals, particularly in empowering women. These findings imply that policymakers and practitioners should prioritize comprehensive M&E frameworks to ensure sustainable and impactful rural development initiatives. Future research should address the project implementation which is also part of the Monitoring and evaluation process.*

Keywords: *Monitoring and Evaluation Systems, Planning, Project Performance, Rural Electrification Project, Dissemination of results*

1.1 Introduction

Project evaluation is the process of identifying, quantifying, and assessing the costs and benefits generated by the project over a given period as stated (Haass & Guzman, 2020). In a study carried out

by Shah, (2020), on the assessment of whether the project execution is suitable for the person or team carrying it out. Project monitoring involves using tools and best practices to help project managers track the progress of their initiatives and project execution. In Africa, the statistics of initiatives that fail owing to inadequate monitoring and evaluation methods are much more distressing than they are in other parts of the world. A study by Kanyamuna, Kotzé & Phiri (2019), suggested that more than seventy percent of projects in Africa had failed as a result of inadequate planning during project initiations. These factors include faulty M&E planning, reporting writing, sharing results, and information analysis as depicted by (Woodhill, 2019). According to Jacob et al.'s (2020) findings, over the years 2018 and 2022, an average of eight rural initiative projects in Nigeria were unsuccessful. The lack of a monitoring and evaluation system in any of these programs hindered the planning, alignment of reports, and sharing of findings. In Uganda, it is evident that numerous rural projects fail due to the inadequate skills and knowledge of the project implementation staff in monitoring and evaluation.

In South Africa, the absence of monitoring and evaluation significantly obstructs project success. This was found in the Waterberg district in Limpopo province, where rural community projects failed due to insufficient supervision. Research from South Africa shows that the absence of technical expertise and skills, coupled with poor planning, monitoring, and evaluation, can lead to project failure when it comes to tackling poverty and sustainability (Dipela & Mohapi, 2021). Authorities have a great deal of difficulty as a result of the lack of coordination and careful preparation in community activities and projects. People sometimes forget the crucial roles that project participants play in training, monitoring, reviewing, and assessing the project. In Kenya, Mokua & Kimutai (2019) assert that over 60 percent of projects are unsuccessful due to project managers' inadequate planning, assessment, and dissemination of results to stakeholders. These deficiencies lead to project failure, particularly in rural projects (Nolte, 2020). The electricity projects undertaken in Kiambu County, Kenya failed due to project managers' failure to involve the community by providing regular reports (African Energy, 2021). This lack of community support resulted in project managers not receiving assistance for various grassroots activities hence low productivity of their outputs.

A study by Mogwambo (2019) on providing underprivileged Kenyan women's groups who did not profit from previous electrification programs with access to power was executed however still some women were disadvantaged. The project highlights the need for a long-term solution while addressing the socioeconomic difficulties that women face. The government, through the Rural Electrification Authority (REA), supports women-run enterprises by connecting them to transformers near public utilities. However, there are concerns that the Last Mile Rural Electrification project could have negative consequences on the empowerment of women, such as failing to provide them with a potential source of income. Effective systems in monitoring and evaluation including prioritizing women-led businesses for power connection at reduced cost, is essential to minimize the potential negative impacts (Lee, Miguel, & Wolfram, 2020). Additionally, ensuring gender equity in job opportunities created by the project is crucial. The Last Mile project can help identify and address gender inequality issues and promote the participation of women in decision-making at the sub-county level, in line with the Policy for the Development of Women. Evaluating the project's impact on women's empowerment and their productive use of energy is paramount (Almeshqab & Ustun, 2019). Defining clear goals, objectives, and activities is crucial in developing a management and evaluation strategy, and reporting the findings of monitoring and evaluation is vital for assessing the project's effectiveness and impact and identifying areas for

improvement. Regular reporting of project progress is important to keep stakeholders informed about the project's success or challenges. The goal was to enhance the technical and administrative capabilities of producers and entrepreneurs, while also incorporating a gender equality approach into the actions that were carried out (Ouma, 2020). It was therefore ensured that the activities included the participation of women as economic actors of development and also contributed to the exercise of their rights.

The success of the project depends on effective and efficient planning, Monitoring &Evaluation is in checking the progress ensuring that tasks are being completed as planned, and making sure that resources are being used effectively. However, the M&E process can be challenging due to various difficulties. The Last Mile Rural Electrification Project and similar projects have revealed recurring flaws that affect the project management's ability to measure, monitor, and use results data (Lahey, 2015). There are significant gaps in several areas related to the results framework in many M&E systems for rural projects, including poor project planning, reporting, and dissemination of results. Many M&E plans require a more precise, structured, and thorough approach to data collection, reporting, and analysis. There are often significant gaps in the performance measuring approach, including a lack of sources for relevant data and information, as well as feasible measurement techniques. Lastly, there is a concern about whether the Last Mile Rural Electrification Project's M&E framework is effectively ensuring women's empowerment by providing a source of income and livelihood.

2.Literature Review

To monitor and evaluate an activity, one must first observe it and formulate theories about it. Next, in-depth research utilizing qualitative or quantitative approaches must be conducted. These techniques systematically assess the effectiveness of public efforts, producing well-informed assessments and recommendations (Kissi et al., 2019). They are essential in monitoring activities and promptly adjusting courses to meet objectives. Throughout the project, monitoring and evaluation will be closely integrated and also seek to provide all parties involved with a shared understanding and drive. To maximize program outcomes, these systems include crucial judgment components and enable empirical testing. According to Muchelule (2018), it is possible to measure project performance, monitor, and control by comparing what was planned in its M&E framework with what is being executed in the field. However, there is a warning that it is not sufficient to compare the planned with the realized, as it is necessary to look at a longer-term perspective and align with project strategies. Zolfaghari, Aliahmadi & Mazde (2017) also highlight the strategic dimension, as they state that managing only time, cost, and scope as planned is not enough to guarantee project success and present the Strategic Project Leadership approach.

According to Szalay, Kovács & Sebestyén (2017) concluded that businesses who had Project Planning Management Offices offered better performances in the projects compared to businesses that did not have it. According to the findings of research conducted by Demirkesen & Ozorhon (2017), there is a correlation between the evaluation of individual performance of members of a project team and the implementation of various forms of recognition or rewards, which leads to an increase in overall team satisfaction and, as a result, a benefit to the performance of the project. M&E planning that satisfies the personal and professional requirements of project team members has a significant impact on their commitment, which makes it simpler to overcome obstacles and improves performance (Yu, 2018). The issue of providing power to houses with low incomes has been a persistent challenge in rural areas for a

long time (Last, 2022). On the other hand, this is due to several problems, such as the high costs associated with connecting rural and Peri-urban households to electricity, the absence of adequate incentives, the inadequate capacity to execute, the growth of the population, and the expense of the wiring loom of residents' premises. Households that are unable to pay the subsidized connection charge can also take advantage of the project's financial assistance program.

An investigation into the process of putting the Kenya Power Last Mile electrification project into action was carried out by Kweyu (2018). The World Bank and Kenya's National Environment Management Authority (NEMA) have established environmental and social governance requirements, and this one satisfies both of those standards. Niyonkuru & Barrett (2021) investigated whether or not women from both urban and rural areas are benefiting from the Last Mile Project. Women are frequently in a high percentage of vulnerable situations not only because they may be affected by the lack or limitation of energy resources, but also because they do not have community projects that do not prioritize their interests. Given that women play a large role in the success of community initiatives, this is one of the numerous reasons why rural projects continue to fail. It is also important to note that energy is not a gender-neutral issue because it is a fundamental part of development, which requires a focus on rights and social inclusion. According to the findings of Standal, Talevi, & Westskog (2020), comprehensive and fruitful projects that may empower women and make them active participants in their development were not developed.

When it comes to the implementation of projects, many women continue to face several disadvantages within their communities since they are not consulted throughout any aspect of the process. According to Ndavi (2015), firms will face a strategic challenge in terms of the success of their projects if they do not choose the appropriate organizational structure for their initiatives. The process of planning begins with the identification of significant project monitoring and evaluation stakeholders, as well as identification of interventions that are required for activities or inputs that directly affect project systems. This step requires the identification of the significant internal and external stakeholders who will either take part in the project or benefit from it. According to Micah & Luketero (2017), the main stakeholders include the project personnel, donors, key community stakeholders, partner organizations, local and national decision-makers, stakeholders from various government agencies and ministries, and beneficiaries of the initiative. To be ready to build the tools, instruments, and procedures that are required to collect the relevant information, project managers or M&E professionals are prepared to identify these questions at an early stage in the systems. Additionally, Woodhill (2019) argues that it is recommended to begin thinking about potential risks and unforeseen conditions that may develop throughout the implementation of the project. Any reluctance of key stakeholders to cooperate is an example of a potential risk that may arise. Based on Haass & Guzman's, (2020) research, the process of identifying, estimating, and assessing the costs and benefits that a project creates over a particular period is referred to as M&E planning. Project monitoring is defined by the Association of Project Management (2018) as a collection of tools, best practices, or activities that project managers can incorporate into their work to monitor the progress of their initiatives and the execution of the project. This enables project implementers or all stakeholders to evaluate the necessary steps to avoid or solve the problems. Thomas et al. (2022) state that the primary objective of all project monitoring and evaluation planning activities is to provide the project implementation team and stakeholders with the diverse data and information

that is required for making decisions based on the data being collected. In a study conducted by Kabeyi (2019), the use of Monitoring and Evaluation planning in project implementation was thoroughly investigated and the study established that M&E planning is a crucial indicator for making comparisons between different aspects. It unequivocally demonstrated that project stakeholders cannot only monitor and evaluate events that impact project beneficiaries, workers, and organizations but also ensure that project results align perfectly with the needs and expectations of beneficiaries. Despite this, a significant number of rural projects continue to meet with failures, inefficiencies, and delays as a result of inadequate planning (Famiyeh, Samuel, et al., 2017). The results of a survey about the failure of projects in the field of rural electrification indicated that just 28 percent of the projects were successful. One of the requirements for women's empowerment is satisfied in this scenario, which means that the project known as "last mile" would be finished. However, there is a gap in the research conducted by Nyakina (2016) on project performance and financial indicators which found that without proper planning projects fail onset. Factors determining planning in construction companies were the subject of an investigation that was carried out by Alzoubi (2022). As stated by the findings, a thorough evaluation of the actual execution in comparison to the requirements that were specified beforehand was examined and the results were not pleasing as per the plan. Corrective actions need to be implemented immediately if the implementation does not conform to the anticipated goals. Kerzner (2022) conducted a study on the project planning process and its impact on project performance. The findings are consistent with those of other scholars in the field of project monitoring and evaluation.

In their study, Fekadu et al, (2021), identified three common types of monitoring and evaluation; baseline reports, midterms, and end-line reporting. These reports emphasize the importance of providing necessary feedback to project stakeholders. Monitoring and evaluation reports should include an objective evaluation of a program or intervention. The frequency of data collection should be determined by project requirements, donor needs, available resources, and the intervention's schedule, as explained by Shikuku et al. (2020). A study by Omenge et al. (2020) highlighted the impact of Environment and Social Impact (ESI) reporting on renewable energy projects in Kenya. Lamdany (2022) pointed out the importance of evaluating project results, and ensuring transparency and reliability in reporting. Muchelule (2018) stressed that effective monitoring and evaluation reporting support government-led projects with accurate information, guiding project implementers, and informing decision-making processes for public sector stakeholders. An investigation conducted by Maksud (2023) on Oxfam's project in Iraq found that disseminating monitoring and evaluation reports is essential for communicating results to stakeholders in the M&E outcomes distribution practice. In line with its commitment to transparency and accountability, Oxfam Iraq collaborates with a diverse group of stakeholders, including government institutions, local communities, partner organizations, and donors. According to Dawson & Byers (2017), clear and concise reports that focus on key facts are more likely to be comprehensible and engaging to a wide range of stakeholders. Such reports enable stakeholders to easily grasp the project's objectives, challenges, outcomes, and implications. Through communication that is both clear and accurate, stakeholders can make well-informed decisions and take suitable actions. In their research, Winiko, Mbugua, & Kyalo, (2018) examined how sharing results on monitoring and evaluation affects the effectiveness of a digital education technology project in Nigeria. The study found that sharing monitoring and evaluation data has a moderately positive impact on the project's performance. Kanyamuna, Mubita, & Kotzé (2020) believe that successful result dissemination should consider the

available budget and the cost of preparation and production activities. Taking these factors into account can lead to successful result dissemination.

1.3 Theoretical framework

The study was anchored on the Theory of Change

Theory of Change

A theory is an overarching concept that provides a rational account of certain occurrences. The theoretical framework is Theory of Change. According to Connell and Kubisch (1998), Theory of Change (TOC) is a method of planning and evaluation that aims to gain an understanding of the causal connections that exist between the actions, outputs, and outcomes of a program. According to this view, monitoring and evaluation techniques are extremely important to guarantee that programs are on the right path to accomplishing their goals. It proposes that efficient management and evaluation procedures can assist in determining which assumptions are the most important and monitoring the progress that is being made toward reaching the results that are intended. There is a significant amount of relevance between Theory of Change and the study of monitoring and evaluation systems on the performance of the last mile rural electrification project in Kiserian Kajiado County, Kenya. Theory of Change is an essential framework that offers a road map for planning, implementation, and assessment of programs. It assists in determining the underlying assumptions, causal linkages, and outcomes that link the activities and inputs of the program to the outcomes that are sought. To identify the important stakeholders, their needs, and the most successful interventions to satisfy those needs, Theory of Change can be helpful in the context of performance of the last mile rural electrification project (Liberato, Pottie, & Gertler, 2017).

One of the deficiencies in the context of the execution of performance of the last mile rural electrification project in Kiserian Kajiado County, Kenya is the absence of monitoring and evaluation techniques that are both thorough and systematic. The evaluation reports of the last mile rural electrification project reveal that there are significant gaps in monitoring and evaluation system. These gaps include a lack of clear and measurable indicators, inadequate data collection and management systems, and a limited capacity of staff to conduct evaluations. Overall, the system is not ideal. This framework is necessary to ensure that program objectives are accomplished and that the impact is successfully quantified. The lack of understanding of the contextual elements that influence the implementation and outcomes of last mile rural electrification project in Kiserian Kajiado County, Kenya is another gap that has to be filled. Several political, economic, social, and environmental elements might affect the efficacy of last mile rural electrification project. Through engagement with stakeholders, the execution of a situational analysis, and the development of solutions that are sensitive to the local environment, a TOC approach can be of assistance in identifying and addressing the contextual elements that are at play. In conclusion, the framework of the Theory of Change is extremely pertinent to the investigation of the influence of monitoring and evaluation systems on the performance of last mile rural electrification project in Kiserian Kajiado County,Kenya. It is possible for the framework to assist in identifying the main stakeholders, their requirements, and the interventions that are most effective in meeting those requirements. The last mile rural electrification project through women empowerment can enhance the efficacy, efficiency, and long-term viability of its operations in Kiserian Kajiado County, Kenya by employing a total outcomes of Theory of Change approach.

1.4 The Conceptual Framework

The study conceptual framework is in Figure 1 below.

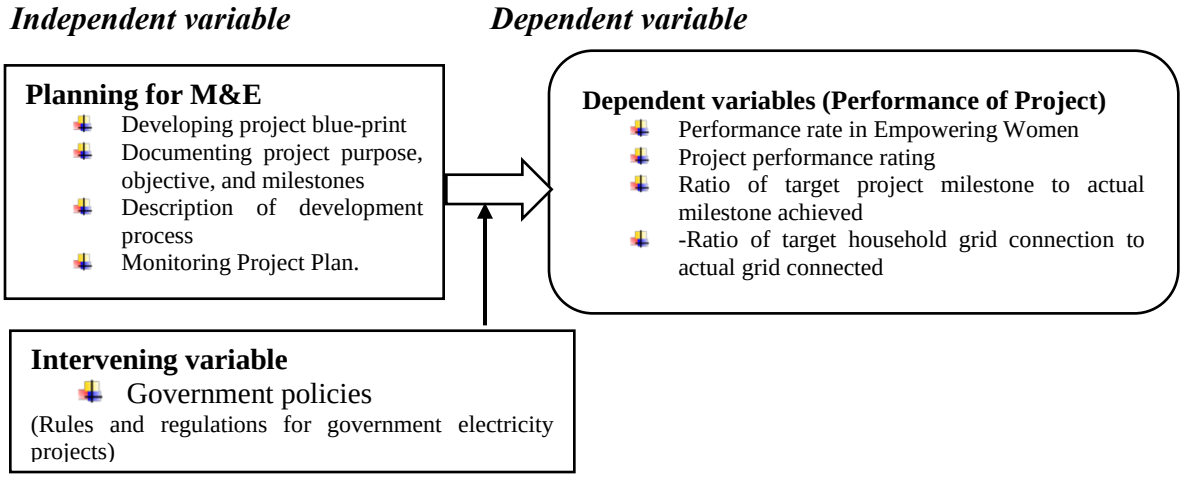

Figure 1: The Conceptual framework. *Monitoring and Evaluation Planning and Performance of the last mile rural electrification project in Kiserian, Kajiado County, Kenya*.

1.5 Methodology

Data collection was carried out through the use of questionnaires and an interview guide methodology. According to Creswell & Creswell (2017), this method offers an organized approach to the collection of data, which makes it possible to obtain precise responses to queries such as when, what, how, and where." According to Cooper and Schindler (2018), researchers who use this methodology can more accurately characterize the group that they are researching. This study utilized thematic context for the analysis of qualitative data, whereas SPSS version 25 was utilized for the analysis of quantitative data. The scope of the study is at Kiserian in Kajiando County Kenya, which is implementing the Last Mile electricity projects. This research aims to determine effective monitoring and evaluation systems and the performance of these projects.

The unit of analysis is the ongoing and completed projects of electricity and the unit of inquiry is the staff members and Women involved in the implementation of these Last Mile projects. A sample size of 322 was determined using Krechjie and Morgan Table of 1970 from a target population of 2000. Purposive sampling employed 10 Kenya Power M&E officials in the office who had in-depth information about the study under investigation, while questionnaires were issued to Kenya power field technicians and project community coordinators and also the households. Data collected was both qualitative and quantitative, cross-checked for correctness, coded, cleaned, and analyzed. Quantitative data was analyzed by employing descriptive and inferential statistics obtained using Pearson Product moment correlation while the F-test was used to test hypotheses. Descriptive data was analyzed and presented in tables with average means scores, standard deviations, frequencies, and percentages as per the findings of each variable. Pearson's Product Moment correlation coefficient(r) described the strength

of relationship between the independent predictor variable and dependent variable. The test was carried out on a two-tail test since it allowed for either influence to the positive or negative direction while hypothesis testing tested at a 95% level of confidence and significance level of .0.05. The hypothesis with linear relationship was analyzed using simple regression analysis and Pearson's Product Moment Correlation was used for interpretation of results. Together with simple graphics analysis, descriptive statistics form the basis of virtually every quantitative analysis of data. Correlation analysis to establish the relationship between the independent and dependent variables employed. Interpretation of the results for the linear relationships of this study was based on; a weak correlation ranging from +0.10 to +0.29; a moderate correlation between +0.30 to +0.49; and a strong correlation from +0.50 to +1.0 (Shirley, Stanley, & Daniel, 2005). Hence, r=0.38.3 implies a positive strong relationship between Monitoring and Evaluation Planning and Performance of the last mile rural electrification project in Kiserian, Kajiado County, Kenya**.**

1.6 Results

The main goal of the study was to establish the extent to which Monitoring and Evaluation Planning influence the Performance of the last-mile rural electrification project in Kiserian, Kajiado County, Kenya. A total number of questionnaires were 322 delivered to the respondents only 280, were filled and returned representing a response rate of 87% generally representative enough to analyze and generalize results to the population. The results are about studies by Richardson (2005) who states that a return rate of 50% is sufficient

Overall Descriptive Analysis of Performance of the Last Mile Rural Electrification Project in Kiserian, Kajiado County, Kenya,

As pertains Performance of the Last Mile Rural Electrification Project in Kiserian, Kajiado County, Keny*a* the respondents were subjected to several statements to solicit their opinions on a Likert scale of 1-5 whereby; Strongly disagree(SD)=1, Disagree(D)=2, Neutral(N)=3, Agree(A)=4 and Strongly Agree(SA)=5 as depicted on Table 1.

Table 1: Performance of the Last Mile Rural Electrification Project in Kiserian, Kajiado County, Kenya

Statements (Performance of the last mile rural electrification projects)	**Std % F**	**D % F**	**N % F**	**A % F**	**SA % F**	**Mean**	**Std Dev**
1. Some ratings are formulated according to women's performance	16 (5.7%)	28 (10%)	6 (2.1%)	117 (41.8%)	113 (40.4%)	**4.01**	**1.15**
2. There were no ratio targets of project milestones which were achieved as planned during project planning.	100 (35.7%)	137 (48.9%)	6 (3.1%)	27 (9.6%)	10 (3.6%)	**1.96**	**1.04**
3. The connection of the actual grid as per the household is perfectly done as per the initial plan	19 (6.8%)	39 (13.9%)	5 (1.8%)	95 (33.9%)	122 (43.6%)	**3.94**	**1.27**

4. There is customer satisfaction as many of them are happy with the connection of electricity in their houses	22 (7.9%)	49 (16.4%)	6 (2.1%)	93 (33.2%)	113 (40.4%)	**3.82**	**1.32**
5. Many clients felt that the project of electricity on women's empowerment could also include men	19 (6.8%)	23 (8.2%)	5 (1.8%)	102 (36.4%)	131 (46.8%)	**4.08**	**1.19**
6. There was not much influence when dealing with women's issues during project implementation	160 (57.1%)	71 (25.4%)	4 (1.4%)	20 (7.1%)	25 (8.9%)	**1.85**	**1.28**
7. Many women were not satisfied with the process of implementing the last mile project	14 (5%)	149 (53.2%)	9 (3.2%)	22 (7.9%)	86 (30.7%)	**3.06**	**1.42**
Overall composite Mean and Std deviation						**3.24**	**1.27**

Source: ***Field data, 2024***

The findings of the statement on ratings which are formulated according to women's performance are good had a mean score of 4.01 and a standard deviation of 1.15. Data collected from 280 respondents revealed that 16(5.7%) strongly disagreed, 28(10%) disagreed, 6(2.1%) were neutral, 117(41.8%) agreed, and 113(40.4%) strongly agreed. These findings indicate that the mean of 4.01 is higher than the overall mean of 3.24. The implication of these findings is milestones were achieved since many agreed that the ratings were well formulated. The Standard Deviation of 1.15 is lower than the overall standard deviation of 1.27, indicating convergence opinions. There were no ratio targets of project milestones which were achieved as planned during project planning had a mean score of 1.96 and a standard deviation of 1.04. Data collected from respondents revealed that 100(35.7%) strongly disagreed, 137(48.9%) disagreed, 6(2.1%) were neutral, 27(9.6%) agreed, and 10(3.6%) strongly agreed. These findings indicate that the mean of 1.96 is lower than the overall mean of 3.24. The implication of these findings is no ratio target on milestones was achieved this is due to the majority disagreeing with the information provided.

On the connection of the actual grid as per the household is perfectly done as per the initial plan had a mean score of 3.94 and a standard deviation of 1.27. Data collected from respondents revealed that 19(6.8%) strongly disagreed, 39(13.9%) disagreed, 5(1.8%) were neutral, 95(33.9%) agreed, and 122(43.9%) strongly agreed. These findings indicate that initial plans were followed to the latter overall mean of 3.94. The implication of these findings on an actual grid of households is perfectly done as agreed by many. The Standard Deviation of 1.27 is at par with the overall standard deviation of 1.27, indicating convergence opinions. There is customer satisfaction as many of them are happy with the connection of electricity in their houses had a mean score of 3.82 and a standard deviation of 1.32. Data collected from respondents revealed that 22(7.9%) strongly disagreed, 46(16.4%) disagreed, 6(2.1%) were neutral, 93(33.2%) agreed, and 113(40.4%) strongly agreed. These findings indicate that initial plans were followed to the latter overall mean of 3.84. The implication of these findings is many households have electricity in their houses thus very happy with the project intervention from women

empowerment Last Mile. The Standard Deviation of 1.32 is higher than the overall standard deviation of 1.27, indicating agreeing opinions.

In this response, many clients felt that the project of electricity on women empowerment could also include men had a mean score of 4.08 and a standard deviation of 1.19. Data collected from respondents revealed that 19(6.8%) strongly disagreed, 23(8.2%) disagreed, 5(1.8%) were neutral, 102(36.4%) agreed, and 131(46.8%) strongly agreed. These findings indicate that the mean should be included in the project had a mean of 4.08. These findings imply that men should also be included in electricity projects. The Standard Deviation of 1.19 is lower than the overall standard deviation of 1.27, indicating agreeing opinions. The statement that there was not much influence when dealing with women issues during project implementation had a mean score of 1.85 and a standard deviation of 1.28. Data collected from 280 respondents revealed that 160(57.1%) strongly disagreed, 71(25.4%) disagreed, 4(1.4%) were neutral, 20(7.1%) agreed, and 25(8.6%) strongly agreed. These findings indicate that women didn't have much influence and had a mean of 1.85. These findings imply that women didn't require much influence for them to be involved in the projects. Women who were not satisfied with the process of implementing the last mile project had a mean score of 3.06 and a standard deviation of 1.42. Most respondents revealed that 14(%) strongly disagreed, 149(53.3%) disagreed, 9(3.2%) were neutral, 22(7.9%) agreed, and 86(30.7%) strongly agreed. These findings indicate that women who were not satisfied with the project implementation process had an overall mean of 3.06. These findings imply that women were not happy with the process of being undertaken while implementing the projects. In conclusion, all the models were tested all the null hypotheses were rejected and the alternate hypotheses were accepted thus the findings concluded that there was a significant relationship between independent and dependent variables which the performance of the last mile rural electrification projects Kiserian, Kajiado, County, Kenya. The study findings on the other hand on monitoring and evaluation systems ought to be followed to latter to succeed in implementing any projects in the community.

Planning for monitoring and evaluation is the independent variable which is measured by developing a project blueprint, documenting the project purpose and objectives, describing of development process, and monitoring the project plan. Nine statements were addressed, as shown in Table 2, regarding the implementation of the project of last-mile rural electrification in Kiserian Kajiado **County,** Kenya.

***Table 2: Descriptive Statistics on Planning for monitoring and evaluation and performance of the last mile rural electrification projects Kiserian Kajiado County, Kenya*.**

Statements (Planning for monitoring and evaluation)	**Std % F**	**D % F**	**N % F**	**A % F**	**SA % F**	**Mean**	**Std Deviation**
1. Developing project blueprints was essential for high project performance.	17 (6.1%)	38 (13.6%)	8 (2.9%)	136 (48.6%)	81 (28.9%)	**3.81**	**1.17**
2. Documenting project purpose, objective, and milestones was critical for high project	19 (6.8%)	27 (14.5%)	5 (1.8%)	135 (48.2%)	94 (33.6%)	**3.92**	**1.16**

performance based on the four project indicators							
3. Description of the development process was integral and essential for high project performance	20 (7.1%)	70 (25.5%)	7 (2.5%)	116 (41.4%)	67 (23.9%)	**3.50**	**1.29**
4. Monitoring Project Plan led to high performance of projects which were being implemented.	11 (3.9%)	87 (31.1%)	10 (3.6%)	113 (40.4%)	59 (31.1%)	**3.44**	**1.23**
5. How would you rate customer satisfaction of the Last Mile Rural Electrification project?	13 (4.6%)	30 (10.7%)	8 (2.9%)	99 (35.4%)	130 (46.4%)	**4.08**	**2.16**
6. There many project milestones which were not achieved in time or were not completed.	107 (38.2%)	111 (39.6%)	5 (1.8%)	25 (8.9%)	32 (11.4%)	**2.16**	**1.32**
7. In each of the project phases i.e. phase one, two, three, M&E was not implemented	123 (43.9%)	78 (27.9%)	7 (2.5%)	25 (8.9%)	47 (16.8%)	**2.27**	**1.50**
8. In project implementation phases in the Last Mile Rural Electrification stakeholders were not involved as per the agreement in the community meetings	79 (28.2%)	88 (31.4%)	5 (1.8%)	35 (12.5%)	73 (26.1%)	**2.77**	**1.60**
9. There were no M&E report writing activities during project implementation	28 (10%)	152 (54.3%)	3 (1.1%)	11 (3.9%)	86 (30.7%)	**2.91**	**1.48**
Overall composite Mean and Std deviation						**3.15**	**1.89**

Source: ***Field data, 2024***

Based on the findings in this variable the statements of developing project blue-print were essential for high project performance with an average score of 3.81 and a standard deviation of 1.17. Data collected from 280 respondents revealed the following breakdown 17 (6.1%) strongly disagreed, 38 (13.6%)

disagreed, 8(2.9%) were neutral, 136(48.6%) agreed, and 81(28.9%) strongly agreed. These findings indicate that the calculated mean of 3.81 is above the overall mean of 3.15. The inference drawn from these findings is that developing project blueprints was essential for high project performance. Furthermore, the Standard Deviation of 1.17 is lower than the overall standard deviation of 1.89, indicating an agreement in views among the study participants. The results in the statements of documenting project purpose, objective, and milestones were critical for high project performance based on the four project indicators with an average score of 3.92 and a standard deviation of 1.16. Data collected from respondents revealed that 19(6.8%) strongly disagreed, 27(9.6%) disagreed, 5(1.8%) were neutral, 135(48.2%) agreed, and 94(33.6%) strongly agreed. These findings indicate that the mean of 3.92 is higher than the overall mean of 3.15. These findings imply that project purpose and the way it is documented matters a lot in every organization. Furthermore, the Standard Deviation of 1.17 is lower than the overall standard deviation of 1.89, indicating a convergence in views among the study respondents.

The results in the statements of description of the development process were integral and essential for high project performance with an average score of 3.50 and a standard deviation of 1.29. Data collected from 280 respondents revealed that 20(7.1%) strongly disagreed, 70(25%) disagreed, 7(2.5%) were neutral, 116(41.4%) agreed, and 76(23.9%) strongly agreed. These findings indicate that the mean of 3.50 is higher than the overall mean of 3.15. These findings imply that the development process enhances high-project performance. Furthermore, the Standard Deviation of 1.29 is lower than the overall standard deviation of 1.89, indicating a convergence in opinions among the respondents. The statements of the Monitoring Project Plan led to high performance of projects which were being implemented had a mean of 3.44 and a standard deviation of 1.23. Data collected from respondents revealed that 11(3.9%) strongly disagreed, 87(311%) disagreed, 10(3.6%) were neutral, 113(40.4%) agreed, and 59(21.1%) strongly agreed. These findings indicate that the mean of 3.44 is higher than the overall mean of 3.15. These findings imply that developing a monitoring and evaluation plan enhances project implementation. Therefore, the Standard Deviation of 1.23 is lower than the overall standard deviation of 1.89, indicating a convergence in opinions among the respondents.

The answer to the question of how would you rate customer satisfaction with the Last Mile Rural Electrification project had a mean score of 4.08 and a standard deviation of 2.16. Data collected from 280 respondents revealed that 13(4.6%) strongly disagreed, 30(10.7%) disagreed, 8(2.9%) were neutral, 99(35.4%) agreed, and 130(46.4%) strongly agreed. These findings indicate that the mean of 4.08 is higher than the overall mean of 3.15. These findings imply that customer satisfaction with the Last Mile Rural Electrification project is rated high according to the respondents who strongly agreed with a question. Furthermore, the Standard Deviation of 2.16 is lower than the overall standard deviation of 1.89, indicating a convergence in opinions among the respondents. According to this statement, many project milestones that were not achieved in time or were not completed had a mean score of 2.16 and a standard deviation of 1.32. Data collected from 280 respondents revealed that 107(38.2%) strongly disagreed, 111(39.6%) disagreed, 5(1.8%) were neutral, 25(8.9%) agreed, and 32(11.4%) strongly agreed. These findings indicate a mean of 2.16 is higher than the overall mean of 3.15. These findings imply that many projects were not achieved meaning there is a gap that needs to be addressed. The Standard Deviation of 1.32 is lower than the overall standard deviation of 1.89, indicating a convergence in opinions among the respondents

According to this statement, in each of the project phases like phases one, two, and three, M&E was not implemented and had a mean score of 2.27 and a standard deviation of 1.50. Data collected from 280 respondents revealed that 123(43.9%) strongly disagreed, 78(27.9%) disagreed, 7(2.5%) were neutral, 25(8.9%) agreed, and 47(16.8%) strongly agreed. These findings indicate that the mean of 2.27 is lower than the overall mean of 3.15. These findings imply that many projects were not implemented as per the agreement and neither on time. The Standard Deviation of 1.50 is lower than the overall standard deviation of 1.89, indicating convergence of opinions among the respondents. In this statement of project implementation phases in the Last Mile Rural Electrification stakeholders were not involved as per the agreement in the community meetings had a mean score of 2.77 and a standard deviation of 1.60. Data collected from 280 respondents revealed that 79(28.2%) strongly disagreed, 88(31.4%) disagreed, 5(1.8%) were neutral, 35(12.5%) agreed, and 73(26.1%) strongly agreed. These findings indicate that the mean of 2.77 is lower than the overall mean of 3.15. These findings imply that if stakeholders were not involved as per the agreement in the community meetings, problems emanated from within the community members. The Standard Deviation of 1.60 is lower than the overall standard deviation of 1.89, indicating agreement in opinions.

In this statement there were no M&E report writing activities during project implementation had a mean score of 2.91 and a standard deviation of 1.48. Data collected from 280 respondents revealed that 28(10%) strongly disagreed, 152(54.3%) disagreed, 3(1.1%) were neutral, 11(3.9%) agreed, and 86(30.7%) strongly agreed. These findings indicate that the mean of 2.91 is lower than the overall mean of 3.15. These findings imply that the lack of reports led to low productivity in the project outcome. The Standard Deviation of 1.48 is lower than the overall standard deviation of 1.89, indicating disagreement of opinions

Inferential Statistics on Planning for monitoring and evaluation and performance of the last mile rural electrification projects Kiserian, Kajiado Kenya

Linkage which joins the preparation of a Planning for monitoring and evaluation was carried out using statistical outputs laid out in Table 4.4 and Pearson's correlational analyses. At a 95% confidence level, the participant's ratings on each item have been incorporated to figure out the rating scale's cumulative scores. Table 4.4 shows the findings of the correlational analysis.

Table 4: Planning for monitoring and evaluation and performance of the last mile rural electrification projects Kiserian, Kajiado Kenya

Variable	Statistics	Performance of the last mile rural electrification projects
Planning for monitoring and evaluation	Pearson *r*	0.619**
	P-value	0.035
	N	280

(n=280); ** The correlation is statistically significant at the 0.05 level (two-tailed).

This Study discovered a statistically substantial positive overall connection of 0.619 (P-Value=0.035 < 0.05), indicating a meaningful relationship between Planning for monitoring and evaluation and performance of the last mile rural electrification projects. This result led to the dismissal of the null

hypothesis. Consequently, this study successfully concludes there is indeed substantial linkage on Planning for monitoring and evaluation and performance of the last mile rural electrification projects

Model summary of Planning for monitoring and evaluation and performance of the Last Mile rural electrification projects in Kiserian Kajiado County, Kenya.

This framework sought to determine how Planning for monitoring and evaluation as a predictor meaningfully or trivially affected the performance of the last-mile rural electrification projects. Simple linear regression was tailored to explore how Planning for monitoring and evaluation influences the performance of the last-mile rural electrification projects. The regression model's brief conclusions are outlined in Table 5.

Table 51: Planning for monitoring and evaluation and performance of the last mile rural electrification projects Kiserian, Kajiado County, Kenya

Model outline				
Framwork	R	R Square	Amended R Square	Std. Error of the Estimate
1	0. 619[a]	0.383	0.042	0.44628

a. Predicator: (Constant), Planning for monitoring and evaluation

ANOVA

Model		**Sum of Squares**	**Df**	**Mean Squares**	**F**	**Sig.**
1	Regression	0.456	1	0.456	2.291	0.031 [b]
	Residual	55.367	278	0.199		
	Total	55.823	279			

a. Setting up for Planning for monitoring and evaluation and performance of the last mile rural electrification projects in Kiserian Kajiado **County,** Kenya

b. Predictors: (Constant), Planning for monitoring and evaluation

Coefficients[a]

Analysis		Unstandardized Coefficients		Standardized Coefficients	T	Sig (p-value)
		B	Std. Error	Beta		
1	(Constant)	2.946	0.174		16.973	0.000
	Planning for monitoring and evaluation	0.038	0.055	0.090	1.514	0.031

a. Independent Variable: Planning for monitoring and evaluation.

The model summary suggests a positive correlation (R2=0.383) between Planning for monitoring and evaluation and performance of the last mile rural electrification projects as predicted by the regression model at 38.3%. The ANOVA data indicates that with an F-value of 2.291, Planning for monitoring and evaluation significantly influences the performance of the last mile rural electrification projects, as the

sig. level (p=0.031) is below the significance level of 0.05. Thus, the model adequately predicts the dependent variable.

Examining the coefficient data, and while holding other factors constant, the accomplishment of Planning for monitoring and evaluation is estimated to be 0.038. An item raised in Planning for monitoring and evaluation would correspond to a 0.038 change with the performance of the last mile rural electrification projects, conferred that other considerations remain constant.
The relieved model is denoted as below:
Model $Y = 2.946 + 0.038X1 + \varepsilon$
Where:
Y = Performance of the last mile rural electrification projects
X1 = Planning for monitoring and evaluation
ε =term for Error.
It was discovered that Planning for monitoring and evaluation and performance of the last mile rural electrification projects existed related to the answers given to the assertions provided at each variable in the interview guide questions. The qualitative responses are summarized,

> *"Rural* electrification projects did not involve all the people in the community but just a few. *Field coordinators were fully engaged in the projects and trying so much to involve the community" KII-Respondent 1, 2 &3*

A critical scrutiny of research data showed a combined average score for the nine aspects was 3.15 with a standard deviation of 1.89. This suggests that most participants agreed regarding the effect of planning for monitoring and evaluation and performance of the last mile rural electrification projects in Kiserian, Kajiado Kenya. The connection coefficient was measured at 0.619, indicating a positive relationship between Planning for monitoring and evaluation and performance of the last mile rural electrification projects in Kiserian, Kajiado Kenya (p-value of 0.035 <0.05). Consequently, the null proposition was rejected due to compelling evidence suggesting that Planning for monitoring and evaluation significantly influences the performance of the last mile rural electrification projects in Kiserian, Kajiado Kenya

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