INFLUENCE OF PROJECT INSTITUTIONAL BASED FACTORS ON THE IMPLEMENTATION OF RURAL ELECTRIFICATION AND RENEWABLE ENERGY CORPORATION PROJECTS IN NAKURU COUNTY, KENYA

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DECLARATION AND APPROVAL

Declaration by student

This project is my original work and has never been presented for any academic award in any institution.

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This project is being submitted for examination with our approval as University supervisors.

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DEDICATION

This study is dedicated to my mother, Purity, whose constant encouragement and support have motivated me during my academic career. I'm grateful for everything.

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ABBREVIATIONS AND ACRONYMS

CSR:	Corporate Social Responsibility.
CIDP	County Integrated Development Plan.
GIS:	Geographic Information System
IEA:	International Energy Agency
KEMP:	Kenya Electricity Modernization Project
M&E:	Monitoring and Evaluation
NGOs:	Non-Governmental Organizations
OECD:	Organisation for Economic Co-operation and Development
REREC:	Rural Electrification and Renewable Energy Corporation
WB:	World Bank
VIF:	Variance Inflation Factor

ABSTRACT

Significant obstacles stand in the way of Kenya's rural electrification initiative, such as poor infrastructure, the shortage of finance, and logistical hurdles in reaching remote areas. These obstacles make it more difficult to provide rural populations with effective and sustainable energy options. This study looked at how project institutional elements affected the implementation of rural electrification and renewable energy projects in Kenya's Nakuru County. Financial management, stakeholder participation, organisational monitoring and evaluation, and project communication were the four main goals of the study. Stakeholder, program evaluation, and communication theories served as its pillars. Field officers, REREC engineers, Ministry of Energy employees, and subcontracted engineers in the Rift Valley Region were asked to complete closed-ended questionnaires as part of a descriptive survey design. With input from thesis supervisors improving instrument content and face validity, a pilot study with REREC officials from nearby Kericho County was carried out to guarantee research validity and dependability. Reliability was assessed using Cronbach's alpha, and quantitative data were examined using descriptive and inferential statistics in SPSS software. The association between institutional characteristics and the successful execution of renewable energy and rural electrification projects was ascertained through the use of multiple regression analysis. The study concluded that key factors like communication, stakeholder participation, monitoring, and financial management significantly influenced project implementation. The inferential statistics revealed significant positive correlations between project implementation and key factors: project communication ($r = 0.632$), stakeholder participation ($r = 0.663$), monitoring and evaluation ($r = 0.569$), and financial management ($r = 0.721$). Regression analysis showed that these predictors collectively explained 51.4% of the variance in project implementation. The regression coefficients indicated that financial management had the strongest impact, followed by project communication. The ANOVA results confirmed the statistical significance of the model ($F = 127.132$, $p < 0.01$). Research recommended enhancing community involvement through comprehensive stakeholder engagement and regular satisfaction surveys, fostering participative decision-making, improving communication on risks and environmental impacts, and strengthening financial management practices with better expenditure tracking and frequent audits.

CHAPTER ONE

1.0 Introduction

In Chapter One, the introduction covers the study's background, purpose, goals, research questions, significance, and scope.

1.1 Background of the Study

In rural areas, having access to electricity is essential for reducing poverty and laying the groundwork for modernization (Chege & Kinoti, 2019). The goal of rural electrification projects is to enhance the quality of life in these areas, and their accomplishments are demonstrated by the expansion of the economy and the development of society. Chang et al. (2018) assert that electrification is essential for sustaining business and industrial operations, acting as a reliable energy source that makes a substantial contribution to the corporate sector. In addition to supplying lights, electricity improves company operations, generates jobs, and helps fight poverty. It also makes it easier for entertainment and information to be shared across a variety of mass media channels.

1.1.1 Global Perspective

Developed countries like China and Japan have governments that aggressively promote power distribution and make large investments to promote global industrialization and growth.

However, Japan has unique difficulties since it depends on international law and because natur al disasters have an impact on the development of electricity transmission networks (Japan Ele ctric electricity Information Centre, JEPIC, 2019).

In Asia, about a billion people now have access to electricity. In 2000, just 67 percent of Asians had access to electricity. Currently, electricity is available to 94% of Asians. Over two-thirds of Asia's improved access to power may be attributed to India. More than 100

million Indians were linked to the electrical grid in 2018. Under the Saubhagya initiative, the Indian government provided power to 26 million people in 2019 (International Energy Agency, 2020). The majority of Middle Eastern nations now have universal access to electricity. One of the wealthiest regions of the globe is the Middle East, which includes Saudi Arabia, Iraq, Kuwait, Qatar, the United Arab Emirates, and Algeria. In 2016, 98 percent of the urban population and 78 percent of the rural population in the Middle East had access to electricity, with the rural electricity supply rate standing at 88.8 percent (Mousa & Mousa, 2020).

1.1.2 Regional Perspective

Rural electrification in Mali faces significant obstacles due to its densely inhabited rural areas. With support from foreign donors, the government has given renewable energy sources top priority in order to overcome these challenges. Initiatives like the Mali Rural Electrification Hybrid Systems Project, which combines diesel generators and solar energy, have shown promising outcomes (World Bank, 2023). However, the broad implementation and sustainability of these programs are hampered by political unpredictability, financial constraints, and infrastructure shortcomings (Diallo et al., 2022).

Although African countries like Egypt and South Africa have made great strides in expanding their electricity transmission networks, they have also encountered several obstacles. The utilisation of clean energy sources, Egypt's fast population growth, and the government's meagre supply of electricity are the main obstacles to the development of the country's electric power transmission network (Dóci, Vasileiadou, & Petersen, 2014). According to Joffe (2016), a focus on generating rather than transferring and inadequate transmission process design are the causes of South Africa's malfunctioning electricity transmission

system. According to Joffe, generating is required for the supply of power, but it is insufficient without adequate transmission and upkeep of power lines.

Tanzania's national development goal has placed a high priority on rural electrification, investing heavily in off-grid and grid extension technologies. Through a range of renewable energy initiatives, mostly solar power, the Rural Energy Agency (REA) has contributed to the expansion of electricity availability in rural areas. Recent statistics show that rural power rates have significantly increased, which has benefited health and educational outcomes (REA Tanzania, 2023). However, these systems' affordability and upkeep problems still exist, necessitating continued government and donor support (Mwansasu & Lyimo, 2023).

1.1.3 Local Perspective

The government's commitment to achieving universal electricity access has allowed Kenya to make notable strides in rural electrification. One important element of these initiatives has been the Last Mile Connectivity Project, which aims to connect distant areas to the national grid. In order to reach the most remote people, Kenya has also embraced off-grid solar solutions (Kenya Power, 2023). Rural areas now have better access to power and a greater standard of living as a result of these initiatives. However, to guarantee long-term sustainability, issues like high connection prices and power supply stability still need to be resolved (Mutua et al., 2023).

Kenya's overall rural electrification rate is 14%, much below the average of 23% for Sub-Saharan Africa (Abdullah, 2017). Poor craftsmanship, a lack of contractor skills and competency, disagreements among team members, inefficient monitoring and assessment processes, and a lack of money are just a few of the many variables that lead to the failure of rural electrification projects (Maendo et al., 2018). Due to insufficient institutional components, rural electrification projects have lasted longer than anticipated and beyond

budgets, which has delayed the nation's capacity to connect to the electrical grid and forced it to rely on alternate energy sources. The country uses 22% fossil fuels, 9% hydropower, 68% traditional biomass, and other sources, according to (KNBS, 2019).

Kenya is currently among the Sub-Saharan African (SSA) nations that are unquestionably dealing with an energy crisis and economic deficit. Access to contemporary, renewable energy has long been regarded as a luxury in Kenya. It also ranks among the SSA nations with the weakest rates of recent development and yearly GDP growth. The SSA region is the world's least developed sub region, with a significant number of scattered rural villages. The region is economically and technologically weak in regards to advancing the growth of its power industry, which Kenya cannot be distinguished from, due to the dispersed dispersion of its rural population. (Assumpção de Castro et al., 2020).

In Nakuru County, electrification efforts have seen a steady rise, particularly in peri-urban areas; however, many remote villages still lack reliable energy sources. REREC has implemented multiple projects in the county to expand electricity coverage, with an emphasis on renewable energy solutions such as solar and mini-grid systems to enhance sustainability (Rotich, Chepkirui & Musyimi, 2024). Despite these efforts, electrification in Nakuru County faces several institutional challenges that impact project implementation.

One of the key challenges affecting REREC projects in Nakuru County is inadequate funding and delayed disbursement of allocated resources, which have resulted in stalled or slow-moving projects (REREC Annual Report, 2023). Additionally, weak stakeholder coordination has led to inefficiencies in planning and execution, with some communities experiencing resistance due to inadequate engagement and lack of awareness regarding project benefits. A report by the Energy and Petroleum Regulatory Authority (EPRA, 2023) highlights that only 58% of REREC-initiated projects in Nakuru County have met their intended completion

timelines, citing bureaucratic bottlenecks, logistical challenges, and insufficient technical capacity as major barriers. This study seeks to examine how these institutional-based factors influence the implementation of REREC projects in Nakuru County and identify strategies to improve project success and sustainability.

1.1.4 Performance Metrics and Success Indicators

Top management support, which is essential for mobilizing and directing resources towards project objectives, has a significant impact on a project's performance (Njeri & Were, 2017). Meeting technical goals and utilising the finished product to its full potential are essential components of project achievement evaluation (Zwikael & Meredith 2019). Benchmarks like quality, time, and money are typically used to evaluate positive outcomes; nevertheless, a more thorough approach is required to analyse project management success (Zwikael & Meredith, 2019). Although cost, quality, and time are efficient, not all facets of performance management may be covered by their stringent evaluations (Kabeyi, 2019). Success in sectors like construction and energy projects might involve traits like a lack of accidents (Kabeyi, 2019). Evaluating upper-management support, alignment with client goals, and the availability of qualified persons are all part of evaluating the project team's capacity to identify critical success elements (Njeri & Were, 2017).

Critical performance criteria were found in a recent study on energy projects in Kenya, demonstrating the project's complex impact on the environment and local population. According to Mwakughu et al. (2023), greater access to energy and its benefits are demonstrated by indicators like higher electrical connections, which are reliable markers of project success. Kenya's dedication to sustainable development is also demonstrated by the decline in environmental deterioration. In order to evaluate the ecological impact of energy projects, Ndiritu et al. (2023) emphasise the importance of environmentally friendly

electrification techniques. One important social metric that shows how much energy modernization impacts the community's daily lives is receiver satisfaction. This aligns with the results of Ochieng et al. (2022), who highlight the connection between long-term project outcomes and community satisfaction. Additionally, enhancements to social amenities, such medical and educational facilities, act as indirect markers of project success and foster overall development.

1.2 Statement of the Problem

The provision of reliable and sustainable electricity remains a critical issue in Nakuru County, particularly in rural areas where electrification rates remain low. Despite the implementation of multiple REREC projects aimed at increasing energy access, challenges such as financial constraints, weak stakeholder coordination, and project management inefficiencies continue to undermine progress. The 2022 County Integrated Development Plan (CIDP) reports a significant electrification disparity, with rural areas having an access rate of only 1.8% compared to 28.4% in urban centers. This disparity persists despite the county's strategic focus on rural electrification as a driver of economic growth and improved living standards.

Institutional factors play a significant role in the challenges faced by rural electrification projects in Nakuru County. Ineffective project communication leads to misalignment between project goals and community expectations, causing resistance and delays in implementation (Gilbert, 2024). Stakeholder participation is often limited, with local communities and county governments having minimal involvement in decision-making, reducing project ownership and sustainability (World Bank, 2022). Additionally, weak organizational monitoring and evaluation (M&E) frameworks hinder the ability to track project progress, identify inefficiencies, and implement corrective actions (EPRA, 2023). Financial mismanagement,

including delayed disbursement of funds and poor budget allocation, results in cost overruns and project stagnation (REREC, 2022).

Funding disbursement delays and mismanagement have stalled several projects, limiting their effectiveness in bridging the energy gap (REREC, 2022). Additionally, weak collaboration among government agencies, private sector players, and community stakeholders has led to inefficiencies in project planning and implementation. Logistical constraints such as poor road networks and inadequate technical capacity further hinder the timely execution of electrification initiatives. Without addressing these institutional-based challenges, the goal of universal energy access in Nakuru County remains difficult to achieve. The 2022 County Integrated Development Plan (CIDP) states that there is a discrepancy in the rates of electrification in Nakuru County. The rural population had a far lower rate of 1.8% than the urban population's 28.4% (Wambui, 2024). This happened in spite of concerted attempts to oversee rural electrification projects by Kenya Power, the county administration, and the Rural Electrification and Renewable Energy Corporation (REREC). Therefore, the purpose of this study was to evaluate how project institutional elements affected the execution of renewable energy and rural electrification projects in Kenya's Nakuru County.

1.3 Purpose of the study

The study investigated how project institutional elements affected Nakuru County's impleme ntation of renewable energy and rural electrification initiatives.

1.4 Objectives of the Study

The study addressed the following specific objectives:

i. To examine the impact of project communication on the implementation of rural electrification and renewable energy projects in Nakuru County.

ii. To analyze the influence of stakeholder participation on the implementation of rural electrification and renewable energy projects in Nakuru County.

iii. To assess the role of organizational monitoring and evaluation in the implementation of rural electrification and renewable energy projects in Nakuru County.

iv. To determine the impact of financial management on the implementation of rural electrification and renewable energy projects in Nakuru County.

1.5 Research Questions

This research study was based on the following research questions.

i. How does project communication influence the implementation of rural electrification and renewable energy projects in Nakuru County?

ii. What is the impact of stakeholder participation on the implementation of rural electrification and renewable energy projects in Nakuru County?

iii. How does organizational monitoring and evaluation affect the implementation of rural electrification and renewable energy projects in Nakuru County?

iv. What role does financial management play in the implementation of rural electrification and renewable energy projects in Nakuru County?

1.5 Significance of the Study

The study's conclusions are crucial for many stakeholders involved in renewable energy and rural electrification initiatives in Kenya's Nakuru County. The study might provide governments and policymakers with information that will enable them to create customised policies and plans that will improve the success of renewable energy and rural electrification initiatives. Developing suitable rules and support structures for the development of sustainable energy can be aided by an understanding of the effects of project institutional

elements. The study offers crucial information on best practices and potential issues in project communication, stakeholder participation, monitoring, and evaluation for organisations and individuals in charge of carrying out initiatives like REREC. This information could impact project planning and execution, leading to better results and more efficient use of resources.

Successful renewable energy and electrification initiatives will help the people of Nakuru County. The results of this study may contribute to better access to reliable energy sources, which would enhance economic growth, promote health and education, and improve quality of life. Businesses and investors can use the report's essential information on the factors that affect project performance to make better decisions regarding future partnerships or investments in renewable energy and rural electrification projects. A thorough grasp of the local context and challenges may be beneficial when it comes to risk assessment and strategy formulation. The study adds to the corpus of knowledge on the implementation of renewable energy projects and rural electrification. Researchers and academics can utilize the data to carry out comparative studies in other nations, further analyse the subject, and help develop best practices in the industry.

1.6 Scope of the Study

This study looked into how project institutional components affected the successful implementation of renewable energy and rural electrification projects in Kenya's Nakuru County. The study concentrated on four key themes: the effects of financial management, organisational monitoring and evaluation, stakeholder participation, and project communication on project outcomes. Data was gathered from a specific group of field officers, REREC officials, REREC-subcontracted engineers, and Ministry of Energy employees in the Rift Valley region using a descriptive survey approach. The analysis was especially concerned with Nakuru County's REREC projects.

1.7 Limitations of the Study

It was difficult to collect comprehensive and precise data for the study on the effects of project institutional aspects on rural electrification and renewable energy projects in Nakuru County, which might have limited the scope of the analysis. Furthermore, the results' generalizability to other areas with different cultural, economic, or infrastructure contexts was limited by the study's exclusive emphasis on Nakuru County. Although the study looked at certain aspects like stakeholder participation and communication, it ignored other important factors that could affect how a project is implemented.

Another drawback was self-reporting bias, since data gathering techniques like surveys and interviews might have yielded inaccurate or biased findings. The study's capacity to collect comprehensive data and spot long-term trends was further limited by time constraints. Furthermore, the study's conclusions may not be as applicable in the long run due to the dynamic nature of rural electrification and renewable energy projects, which are susceptible to shifting laws, technological advancements, and economic circumstances.

1.8 Delimitations of the Study

The study provided a thorough assessment of the particular opportunities and constraints faced by the area in putting these projects into action, focussing only on rural electrification and renewable energy projects in Nakuru County, Kenya. It was restricted to the September–December 2024 timeframe, giving an overview of the effects of project institutional components at that time. Furthermore, the research was limited to REREC projects in Nakuru County, and the majority of the data was gathered from field officers, REREC officers, engineers that REREC subcontracted, and Ministry of Energy employees from the Rift Valley Region.

1.9 Assumptions of the Study

Several fundamental presumptions served as the foundation for the study on how project institutional factors affected rural electrification and renewable energy projects in Nakuru County. Initially, it was presumed that information gathered from multiple sources, including surveys and interviews, would be reliable and representative of the larger population engaged in the endeavours. This included the presumption that participants were honest with themselves and completely cognizant of the activities and consequences of the project.

Additionally, the study assumed that the chosen sample was sizable and varied enough to offer pertinent insights into the project's effects. Additionally, it was expected that it would be possible to quantify and analyse the relationship between project outcomes and project institutional characteristics, including financial management, monitoring and evaluation, stakeholder participation, and communication. This required making the assumption that the research design and methodologies were sufficient to adequately capture these connections.

Furthermore, the study made the assumption that outside variables, including shifts in economic conditions or policy, stayed mostly constant during the study period and did not materially affect the findings. Lastly, despite possible variations in other areas, it was believed that the results from Nakuru County could provide insights relevant to other rural situations.

1.10 Operational Definition of Key Terms

Institutional Based Factors: These are an organization's internal characteristics and dynamics that influence how renewable energy and rural electrification initiatives are carried out. They consist of traits including financial management, M&E, stakeholder participation, and communication.

Project Implementation: This covers every facet of overseeing renewable energy and rural electrification projects, from planning and inception to execution and completion. It include allocating resources, planning tasks, and making sure that project goals are fulfilled within the allocated budget and time frame.

Project Communication: refers to the methods and platforms utilised to spread knowledge and foster comprehension among project participants.

Stakeholder Participation: refers to the involvement of many people and organisations interested in renewable energy and rural electrification projects. Non-governmental organisations, government agencies, business partners, and members of the community can all help with the planning, execution, and assessment of projects.

Organizational Monitoring and Evaluation: refers to the procedure by which a company gathers and analyses information about project activities and results in order to evaluate progress and performance.

Financial Management: refers to the methodical planning, arranging, guiding, and managing of financial resources to meet the goals of renewable energy and rural electrification initiatives.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter covers theoretical and empirical reviews, a summary of the literature examined, research gaps, and a conceptual framework.

2.1 Empirical Literature

Publications from books and magazines that discuss theories and provide empirical findings relevant to the subject of study are considered empirical literature reviews (Zikmund et al., 2013).

2.1.1 Project Communication and Performance of Projects

Empirical studies demonstrated the significance of strategic communication and organizational factors in improving project performance. Putri and Syarifuddin (2019) found that strategic communication, systematic decision-making, and information sharing enhanced performance across financial, internal processes, learning, and customer perspectives in an Indonesian private institution. Similarly, Arinanye (2020) established that communication and organizational commitment influenced employee performance at Makerere University, recommending improved dialogue between staff and management. However, these studies focused on structured institutional environments, unlike rural electrification projects in Nakuru County, which involved diverse stakeholders and logistical challenges. The studies did not address how institutional factors such as stakeholder participation, financial management, and project monitoring affected implementation in rural electrification. Therefore, this study filled this gap by assessing how institutional-based factors influenced the execution of REREC projects in Nakuru County.

Chepkosgei et al. (2020) used a descriptive research design to examine the impact of strategic communication on the profitability of financial state enterprises in Kenya. Their findings indicated that the success of Kenya's Financial and Commercial State Corporations depended on effective communication, leading them to recommend structured guidelines for improving information exchange within and across divisions. Similarly, Oyekunle et al. (2024) emphasized the role of communication management in coordinating international projects, highlighting its role in risk reduction, conflict resolution, and project transparency. They found that structured communication plans and advanced communication tools enhanced coordination and implementation. However, both studies focused on financial enterprises and international projects, which differed from rural electrification in Nakuru County. They did not address institutional challenges such as stakeholder participation, financial management, and project monitoring in rural electrification, which this study investigated.

Al-Aloosy, Mirvalad, and Shabakhty (2024) investigated the effect of internet communication quality on human resource management and productivity in Iraqi construction projects. Their findings showed a strong positive correlation between communication quality and labor productivity, with human resource management having a minimal effect. Similarly, Hatamleh et al. (2024) examined project risk management strategies in Jordan, emphasizing the role of project integration and communication management in mitigating risks. They identified deficiencies in coordination and visibility, proposing a structured approach to enhance risk management. While both studies underscored the significance of communication in project success, their contexts in construction and risk management differed from rural electrification projects. They did not account for rural-specific institutional challenges, such as stakeholder participation, financial management, and monitoring, which this study explored in Nakuru County.

Nyangena and Mungai (2024) investigated the impact of project communications management on the sustainability of affordable housing programs in Nairobi City County, Kenya. The study specifically examined how communication channels and systems influenced program sustainability. Employing a descriptive research design, the study targeted 11 affordable housing programs, with a sample comprising project supervisors, housing staff, contractors, engineers, and steering committee members. Primary data was collected, with a pilot test involving 10% of the sample to ensure validity and reliability, assessed using Cronbach's Alpha. Data analysis, conducted through SPSS Version 28, revealed a moderate significant relationship between communication channels and program sustainability ($r=0.456$, $p=0.045$) and a strong significant relationship between communication systems and sustainability ($r=0.625$, $p=0.000$). The study recommended adopting accessible communication channels and investing in effective information management systems to enhance integration and sustainability.

Kioko and Mose (2024) examined the influence of project management on health sector projects in Kenya's metropolitan counties, highlighting stakeholder involvement and monitoring and evaluation as key drivers of performance. Their findings emphasized the need to enhance these aspects to improve health project outcomes. Similarly, Thitai and Kamaara (2024) explored the role of stakeholder communication in solar streetlight projects in Nairobi, demonstrating its significant positive impact on project performance. Both studies underscored the importance of stakeholder engagement in project success, aligning with broader project management principles. However, their focus on urban infrastructure and health projects differed from rural electrification programs in Nakuru County. Unlike these studies, the rural electrification context involved additional complexities such as geographical constraints, resource limitations, and socio-cultural dynamics, which this study considered.

Ng'etich (2020) examined the impact of monitoring and assessment on project success in Kenyan parastatals, emphasizing the importance of sending out monitoring reports for program effectiveness. The study recommended comprehensive stakeholder engagement during planning, advocating collaboration with local communities, government agencies, and beneficiaries to improve project outcomes. While the findings reinforced the significance of monitoring in project performance, the study's reliance on the Yamane technique, purposive sampling, and a focus on parastatals may not have fully aligned with the objectives of rural electrification projects in Nakuru County. Unlike parastatal projects, rural electrification initiatives involved unique challenges such as infrastructural limitations, diverse stakeholder interests, and socio-economic constraints. These contextual differences suggested that additional factors, such as localized communication frameworks and adaptive monitoring strategies, were necessary for effective implementation in rural energy projects.

2.1.2 Stakeholder Participation and Project Performance

Nederhand and Klijn (2019) identified four key benefits of stakeholder inclusion in managerial processes, emphasizing enhanced employee support for organizational changes, diversified problem-solving approaches, increased loyalty due to participatory decision-making, and greater commitment to achieving shared goals. While the study underscored the importance of stakeholder engagement, its focus on general management processes may not have directly aligned with rural electrification projects in Nakuru County, where cultural, geographic, and project-specific factors influenced stakeholder interactions. Similarly, Srinivasan and Dhivya (2020) examined stakeholder management in the Irish construction sector, revealing that project managers favored standardized stakeholder engagement strategies tailored to specific project and stakeholder variables. Varral (2020) reached similar conclusions in Malaysia, stressing collaborative stakeholder participation throughout project

lifecycles. However, differences in project scope, stakeholder diversity, and geographical context limited the direct applicability of these findings to rural electrification initiatives in Nakuru County.

Frimpong (2019) analyzed the critical elements necessary for the effective implementation of donor-funded projects within Ghana's Ministry of Education, focusing on institutional frameworks, project design, planning, and stakeholder involvement. The study found that effective community engagement significantly enhanced project success. However, additional aspects such as resource mobilization, managerial participation, and conflict resolution were also considered vital. Despite these insights, sectoral and cultural differences could have posed challenges in applying the findings to rural electrification projects in Nakuru County. Similarly, Gilbert and James (2021) examined key factors influencing donor-funded projects in Zimbabwe, particularly the role of technology, innovation, monitoring, evaluation, and financial management. Using a descriptive approach, they sampled 102 project staff members and collected both qualitative and quantitative data through questionnaires. The study concluded that management involvement, technological advancements, and financial oversight positively influenced project execution. However, while offering useful insights, the study's focus on Zimbabwean donor-funded programs may not have fully aligned with the specific challenges faced in Nakuru County due to regional and cultural differences.

Nshunguyinka (2020) assessed stakeholder influence on a donor-funded project in Rwanda, examining engagement at the design, startup, and execution phases. The study used interviews and questionnaires to gather donor perspectives, sampling 75 participants. Data analysis employed descriptive statistical methods, revealing that project ownership and community empowerment significantly affected project performance, with community acceptance playing a key role in project success. While the study underscored the importance

of stakeholder participation, the geographical and cultural context of Rwanda's donor-supported initiatives differed from that of Nakuru County's rural electrification projects, potentially limiting the direct applicability of its findings.

Moreira et al. (2024) investigated stakeholder participation for comprehensive water management in Monte Verde de Minas, Brazil, using the Água Viva Program. The four stages of this three-year community case study, carried out by Global Wash, were Planning and Discovery, Recognition, Engagement, and Intervention. The research emphasised the significance of community engagement and multi-stakeholder participation in attaining efficient governance. In linking community needs with government aims, it outlined the difficulties in harmonizing disparate interests and highlighted the critical role played by Wash specialists with relationship-building expertise. The results highlight the need of inclusive participation and teamwork in water governance.

Heikoop et al. (2024) investigated stakeholder participation in the Banger polder system project in Semarang, which was launched in 2016 to reduce flood risk and improve water management. The study conducted a SWOT analysis to assess stakeholder participation, emphasizing important strengths, weaknesses, opportunities, and threats. The outcomes found that Semarang's involvement of stakeholders ranked low on the OECD engagement scale. Major hazards highlighted included low resident awareness, which led to inappropriate trash disposal, insufficient administration and finance, and uncertainty about future maintenance. The report emphasises the need for enhanced stakeholder engagement to maintain the sustainability and effectiveness of the polder system.

Pandu (2024) examined the link between stakeholder engagement and the effectiveness of water resource projects in Zanzibar's South Unguja District. The study assessed participation modes, barriers to involvement, and stakeholder engagement levels using a mixed-methods

approach and the ladder of citizen participation theory. Data from 175 respondents, analyzed via IBM SPSS version 24, revealed minimal involvement from local communities, NGOs (Jamabeco, ZOP, Rotary), and ZAWA. Key challenges included low public awareness, outdated infrastructure, budget constraints, and corruption, all of which hindered effective participation. The study recommended eliminating these barriers to enhance stakeholder engagement and improve water project outcomes.

Similarly, Ainomugisha, Mpangwire, and Musiita (2024) explored the impact of stakeholder engagement on rural electricity projects in southwestern Uganda. Using a cross-sectional study approach, they analyzed data from 34 of 39 studies through Pearson correlation and regression techniques. Findings showed a significant positive relationship between communication, legal compliance, stakeholder involvement, and project performance. Regression analysis indicated that these factors accounted for 39.5% of the variation in project success, suggesting that other elements influenced the remaining 60.5%. The study underscored the importance of comprehensive stakeholder participation, transparent communication, and adherence to legal frameworks in enhancing rural electricity project performance.

The study conducted by Rukunga and Pedo (2024) investigated how the identification of stakeholders and the management of conflicts affected the execution of water projects in Kenya. The research was based on the theories of planned behaviour and participation. With 291 ongoing water projects within the purview of Water Works Development Agencies, the research was conducted using a cross-sectional design and positivist principles. By use proportionate random sampling, the sample size of 169 project managers was determined. Structured questionnaires were used to gather data, and a pilot study with 17 participants was carried out to assess the tool's dependability. While Pearson correlation examined the direction and degree of relationships between variables, descriptive statistics provided an

overview of the data. Multiple and hierarchical regression models were used to assess the moderating influence of project manager competency and the effects of independent factors on project execution. The results showed that the implementation of water projects was positively and significantly impacted by both stakeholder identification and conflict management. According to the report, in order to identify all pertinent groups, project managers should perform comprehensive stakeholder evaluations at the outset of initiatives.

Maomond and Kyule (2024) looked into how managing relationships and public consultation affected the execution of water projects in the Mount Kenya region. Targeting eight counties with 420 residents, the study used a descriptive design and included members of project management committees, county water engineers, government officials, and leaders of the community. Stratified random sampling was used to choose 130 respondents from the sample using the Nassim formula. Semi-structured questionnaires were used for data collection, and SPSS version 22 was used for both qualitative and quantitative data analysis. The results, which were displayed in tables, demonstrated that relationship management and public consultation both significantly and favourably impacted the execution of water projects. The report suggested that in order to promote community engagement and ensure broader development knowledge beyond only project identification and implementation, training and capacity-building programs be put into place. External assistance was recommended for additional capacity building.

Awino and Mungai (2024) examined the influence of stakeholder engagement on the effectiveness of irrigation facilities in Kisumu County, Kenya, using an exploratory approach. Focusing on five irrigation projects, the study targeted 65 project steering committee members, 15 block chiefs, and 15 Ministry of Water, Sanitation, and Irrigation personnel, applying a census technique due to the small population. Data collected via questionnaires

indicated a strong positive relationship between stakeholder mapping and project performance, as well as between stakeholder engagement evaluation and project success. The study recommended sufficient funding, clear project goals and timelines, and innovative monitoring methods for real-time stakeholder involvement tracking. Similarly, Monyenye, Benard, and Julius (2024) investigated the impact of community involvement on large-scale dam projects in Kenya, sampling 221 respondents, including representatives from donor organizations, government ministries, water service providers, statutory bodies, consultant engineers, and local residents near dam construction sites. Using descriptive and inferential statistical analysis, the study found mixed perceptions regarding community participation, with interviews revealing concerns about inadequate informed consent and local political interference. The study concluded that enhanced community involvement improves dam project performance and recommended inclusive stakeholder engagement throughout all project phases to foster local ownership and awareness of socioeconomic benefits.

2.1.3 Organizational Monitoring and Evaluation and Project Implementation

Liu et al. (2024) conducted a comprehensive analysis of the Grain for Green Project in Wuqi County, China, using satellite imagery and GIS technology to assess its geographical and temporal effects. Launched in 2000, the project aimed to convert agricultural land into grassland and forest to mitigate soil erosion and restore vegetation. Findings revealed a notable increase in plant cover and a reduction in soil erosion severity, with approximately 64% of agricultural land converted—primarily into grassland, which was deemed more suitable than forest growth. The study highlighted the influence of less steep cropland (<25°) on the conversion of steeper agricultural land (>25°) and emphasized the importance of robust monitoring and evaluation techniques in achieving these outcomes. Similarly, Wambua (2019) underscored the critical role of monitoring and evaluation (M&E) in project

management, describing it as a continuous process of data collection and assessment to track project progress. Effective tracking techniques were noted as essential for analyzing trends, measuring impacts, and ensuring productivity and efficiency in project execution.

Ochenge (2018) evaluated the impact of organisational strategies on the accomplishment of road construction projects designed by local companies in the Lake Basin Area. The study found that project tracking and evaluation had a major influence on initiatives meant to increase the effectiveness of the road infrastructure. Wambua (2019) assessed how M&E practices affected the success of Makueni County-sponsored educational initiatives. The study design was a descriptive survey. Every sub-county program's M&E teams engaged in initial assessments and received M&E training. Initiatives for female table-banking groups were not the main focus of the poll. It's possible that rural electricity initiatives won't directly benefit from the unique difficulties and techniques involved in road construction.

Mutai and Musembi (2024) evaluated how the monitoring and assessment (M&E) procedures affected the effectiveness of water programs in Western Kenya. Using a descriptive research approach, the study examined 219 projects related to water with a sample of 242 those surveyed, including managers of projects, administrators, and surveyors. Data was gathered using a semi-structured questionnaire and analysed with descriptive statistics. The data was analysed using SPSS software. According to the study, both M&E planning and technical capability had a favourable and significant impact on the performance of regional water projects. Furthermore, they emphasised the need of educating people in M&E, ensuring that they have suitable experience and academic degrees to improve project results.

Ng'etich (2020) examined how project monitoring and evaluation (M&E) influence project success in Kenyan parastatals using a descriptive research design. A sample of 98 respondents was selected through the Yamane technique, with 10 purposively chosen from

university administration. Primary data was collected via questionnaires, while secondary data came from published sources. Findings highlighted the importance of baseline surveys in ensuring technical performance and cost control. However, its focus on parastatals limits applicability to rural electrification in Nakuru County. Similarly, Safari and Kisimbii (2020) studied county-funded projects in Kwale County, sampling 100 respondents from 113. Using surveys and ex post facto research designs, findings revealed that structured M&E and training improved project outcomes, though regional and project-specific factors may limit applicability elsewhere.

Njeru and Luketero (2018) investigated how M&E strategies affected medical camps' efficacy in Kenyan hospitals. The study looked at things including M&E skills, stakeholder participation, systems for measurement and evaluation adoption, and resource allocation. The study included 167 survey respondents out of a sample of 1225 participants, which included 1005 patients and 220 important stakeholders. The application of M&E techniques, resource allocation, and involvement of stakeholders all improved project outcomes, according to the findings, which also demonstrated that M&E skills had a significant impact on the success of the project. Stakeholder participation in M&E improved comprehension of the project's objectives and scope. Although useful, the study's emphasis on medical camps might not be immediately applicable to Nakuru County's rural electrification projects because of sectoral and contextual variations.

Otieno and Muchelule (2024) conducted research on how irrigation project success in Siaya County, Kenya, was affected by M&E procedures. They gathered information from 447 project participants throughout the course of 16 irrigation projects using a descriptive study methodology. A questionnaire was used to collect data from the 210 individuals who were chosen by stratified random sampling. The reliability of the questionnaire was verified by a

pilot study employing the Cronbach Alpha Coefficient. 81% of respondents, according to SPSS data analysis, were contacted. There was a substantial positive association between M&E practices and project performance, according to descriptive and inferential statistics like multilinear regression and Pearson correlation testing. More specifically, project performance increased by 0.355 and 0.372 units for every unit increase in M&E planning and training. The study stated that complete M&E techniques should be implemented in Kenyan irrigation projects to improve project performance, and it also advised that effective M&E planning and training be provided.

Kwareh, Mgale, and Rwela (2024) looked into how the SIKIKA Healthcare Programme in Dodoma and Dar es Salaam, Tanzania, performed in relation to its monitoring and assessment procedures. The study involved 73 participants who were selected by purposive sampling. Interviews, focus groups, and documentary reviews were used to collect data. The results showed that a number of M&E practices, including site visits, reporting, the use of common M&E tools, supportive supervision, and participatory monitoring, were critical to the project's success. According to the report, project staff members were trained in M&E activities, and the SIKIKA Health Project successfully integrated the M&E strategy from the planning stage. But there wasn't enough community involvement in project monitoring. The study's findings demonstrated the significance of strong M&E practices for project success by showing how regular M&E, stakeholder participation, appropriate funding allocation, adoption of emerging technologies, and management commitment significantly impacted project performance.

Kimatu and Musembi (2024) investigated how community water project success in Machakos County, Kenya, was affected by Monitoring and Evaluation (M&E) techniques. The study's objective was to evaluate the impact of planning review and M&E stakeholder

participation. Using a census technique for data collecting using semi-structured questionnaires, the research employed a descriptive design and targeted 152 respondents, including project managers, M&E officials, and technical staff. While descriptive statistics and Pearson R correlation were used to analyse quantitative data for associations between variables, content analysis was used to analyse qualitative data. The results showed that planning review and M&E stakeholder involvement had a beneficial impact on project performance. According to the study, holding frequent stakeholder workshops would help to keep participants involved and provide a systematic reporting system that would make project updates and results easy to understand.

In Kismayu, Somalia, Mohamud and Nyandoro (2024) investigated the impact of monitoring and evaluation (M&E) procedures on the long-term viability of community water projects supported by donors. The study emphasised the difficulties in implementing sustainable water projects, which are exacerbated by the region's socioeconomic and climatic conditions. 132 participants in 250 water projects completed questionnaires as part of a descriptive research approach. Using SPSS software, the analysis combined quantitative techniques with qualitative content analysis. The findings showed that timely M&E activity execution, enough finance for M&E, and stakeholder participation were essential for sustainability. Stakeholder involvement was enhanced by increased funding, and careful monitoring was made possible by enough resources. Early issue identification and timely remedial action were made possible by timely M&E activities. The investigation came to the conclusion that good M&E procedures are essential to these projects' long-term viability. To maximise project success, recommendations included increasing stakeholder involvement, obtaining adequate M&E money, and keeping to deadlines. These conclusions provided useful advice for NGOs and legislators in comparable situations.

2.1.4 Financial Management and Project Implementation

Many programs used financial tools to reduce risks such as cash shortages or donor withdrawals, according to Kristin's (2022) analysis of the financial sustainability of Canadian donor-funded initiatives. The study underlined how crucial it is to evaluate and disclose the financial standing of programs supported by donors because sustainability depends on sound financial planning. Although donor-funded initiatives may not place a high priority on profitability, they do use financial planning information to guide their decisions, such as accounting records and comparisons between actual and budgeted or historical spending. The study, which examined qualitative data from five donor-funded initiatives in three Canadian sectors, might not be immediately applicable to rural electrification initiatives in Kenya's Nakuru County because of the disparity in project focus and geographic setting.

In their 2019 study, Mohamoud and Muturi looked at the factors influencing the sustainability of donor-sponsored initiatives in Somalia. The study found that a project's financial situation has a big impact on how sustainable it is. They suggested that among other management-related factors, a project's sustainability is positively impacted by efficient governance frameworks and financial planning. The sector also has to contend with problems such as inadequate financial planning. It was acknowledged that sustainability is enhanced by the development and application of financial plans as well as the allocation of cash for local non-governmental organizations' operations. The sample consisted of 94 employees. A project management team from Puntland State, Somalia, was the intended audience.

Shigoli (2018) focused on the International Rescue Committee, Kenya, and investigated the elements influencing the strategic implementation of donor-funded initiatives in Kenya. The results showed that huge projects were experiencing financial difficulties even though there were chances to make better investment, structuring, and financing decisions. Of the

objectives, only 40% are in line with the organisational strategy. Funds cannot be used for overhead expenses like human resources and fundraising because donors keep a careful eye on spending. Usually lasting one to three years, funding establishes a set time frame for project assistance. The unpredictability of the operational environment puts financial resources at risk and could have a direct or indirect impact on project success.

The factors influencing the economic viability of projects supported by donors in Nakuru County were investigated by Mutinda and Ngahu (2021). They emphasised how important financial controls are for controlling expenses and spotting holes in planning, two things that affect fund retention. In order to reduce organisational risks and preserve donor support even in the event of misappropriation, strong financial controls are essential. The study came to the conclusion that putting in place efficient financial management systems is essential to the sustainability of donor-funded projects. Out of 168 program managers in charge of 56 programs in Nakuru, Kenya, 96 participated in the study.

Ariyo-Edu and Woli-Jimoh (2024) explored the impact of budgeting and budgetary control on public sector performance in Kwara State, Nigeria. The study targeted 130 senior staff from the directorates of planning, research, statistics, personnel, finance, and supply across five ministries, employing a purposive sampling technique to select 98 respondents. Primary data was collected using structured questionnaires based on a five-point Likert scale. Multivariate regression analysis, conducted with SPSS version 23.0, revealed that budgeting processes accounted for 82.2% of the variability in public sector performance ($R^2 = 0.822$, $p < 0.05$). Key factors identified included budget efficiency, effective budgetary systems, and proper budget planning and implementation. The study concluded that budgetary control significantly enhanced public sector performance and recommended promoting transparency and inclusivity in budgeting to align stakeholder interests with organizational goals.

Kaithia, Moguche, and Rintari (2024) examined the effect of budget planning on the financial performance of public universities in Kenya's Mount Kenya region. The study targeted seven universities, with data collected from 284 heads of departments in academic and administrative divisions using structured questionnaires. Census sampling was employed, and data analysis involved descriptive statistics (frequencies, percentages, means) and inferential statistics, including correlations. A pilot study conducted at Laikipia University validated the research instruments. Findings revealed a significant positive correlation between budget planning and financial performance ($r = 0.817$, $p = 0.000$). While budgets provided financial guidance, universities faced challenges in consistent revenue generation. The study recommended introducing incremental and activity-based budgeting, emphasizing planning, monitoring, implementation, and staff engagement to strengthen budgetary control and enhance financial performance in public universities.

Wadesango and Muwishi (2024) investigated the role of internal auditing in enhancing operational efficiency and financial performance at BLESSING Finance, a privatized financial institution. The study employed a mixed-methods approach, combining qualitative data from interviews and quantitative data from questionnaires, to assess the impact of internal audits. Findings indicated that internal audits had a positive and significant effect on both operational efficiency and financial performance, emphasizing their importance in identifying internal control deficiencies and guiding management in policy formulation. The study recommended that BLESSING Finance prioritize hiring qualified auditors to improve the effectiveness of audits, thus enhancing both operational efficiency and financial outcomes. It concluded that robust internal audit functions are critical to driving strategic success and financial stability in financial institutions.

2.2 Theoretical Framework

These are theories that helps shape the research. This research study was based on three theories: stakeholder theory, program evaluation theory, and communication accommodation theory.

2.2.1 Stakeholder Theory

In the 1980s, Milton Friedman presented a theory that highlighted the significance of all stakeholders in an organisation working together to accomplish its goals, acknowledging it as a fundamental element of Corporate Social Responsibility (CSR). Freeman (1984) elaborated on this by emphasizing how stakeholder theory promoted efficient management and successful performance, particularly in demanding settings. The theory recognised the importance of stakeholders in organisations and offered recommendations for achieving project objectives while taking their interests into account. Friedman, Wicks, and Palmer (2004) assert that stakeholders were essential to decision-making throughout the course of a project. Stakeholders in rural electrification initiatives include the government, funders, managers, staff, and customers.

According to Lynda (2006), the successful completion of initiatives depended heavily on stakeholder theory. According to Lynda's theory, project managers had an obligation to ensure that cooperation and conflict resolution were used to enhance project performance, as well as to include stakeholders in the decision-making process. The stakeholder theory highlights the importance of accurately identifying each significant stakeholder participating in a project. Local governments, regulatory bodies, non-governmental organisations, funding sources, suppliers, and others may be involved in rural power initiatives. By recognizing and understanding these stakeholders, the study may assess their concerns, interests, and impact on project performance.

In the 1980s, Milton Friedman presented a theory that highlighted the significance of all stakeholders in an organisation working together to accomplish its goals, acknowledging it as a fundamental element of Corporate Social Responsibility (CSR). Freeman (1984) elaborated on this by emphasizing how stakeholder theory promoted efficient management and successful performance, particularly in demanding settings. The theory recognised the importance of stakeholders in organisations and offered recommendations for achieving project objectives while taking their interests into account. Friedman, Wicks, and Palmer (2004) assert that stakeholders were essential to decision-making throughout the course of a project. Stakeholders in rural electrification initiatives include the government, funders, managers, staff, and customers.

2.2.2 Program Evaluation Theory

Michael Scriven developed program evaluation theory in the 1960s with the goal of evaluating the impact and efficacy of social projects. Scriven's research highlighted the importance of assessing not only the results but also the procedures and strategies employed to accomplish program objectives. The theory covers a range of methods and techniques for assessing the planning, execution, and results of programs, such as renewable energy and rural electrification initiatives. It offers a methodical framework for gathering and evaluating data in order to gauge the efficacy and efficiency of programs. Researchers can determine how well a program is accomplishing its goals and pinpoint areas for improvement by using methods such as formative and summative assessments (Patton, 2015).

The focus on specific goals and quantifiable measures of program performance is a fundamental component of program evaluation theory. It promotes the application of particular standards to evaluate many facets of a program, such as its procedures, results, and outputs. A thorough assessment that can direct strategic planning and decision-making is

made possible by this methodical approach (Rossi et al., 2019). Furthermore, the theory encourages the inclusion of stakeholder viewpoints in the assessment procedure, guaranteeing that the assessment takes into account the requirements and preferences of all stakeholders (Fetterman & Wandersman, 2017).

The significance of adaptive and participative approaches to evaluation is further highlighted by recent developments in program evaluation theory, especially in complex and dynamic situations like renewable energy projects and rural electrification (Scriven, 2020). Researchers may make sure that assessment techniques and results are pertinent and helpful to all parties by incorporating stakeholders at every stage of the process. Additionally, by allowing for ongoing feedback and development, this flexible method produces project solutions that are more efficient and long-lasting. Program Evaluation Theory was pertinent to the study because it offered a framework for analysing how organisational monitoring and evaluation procedures affected the execution of renewable energy and rural electrification projects in Nakuru County.

2.2.3 Communication Accommodation Theory

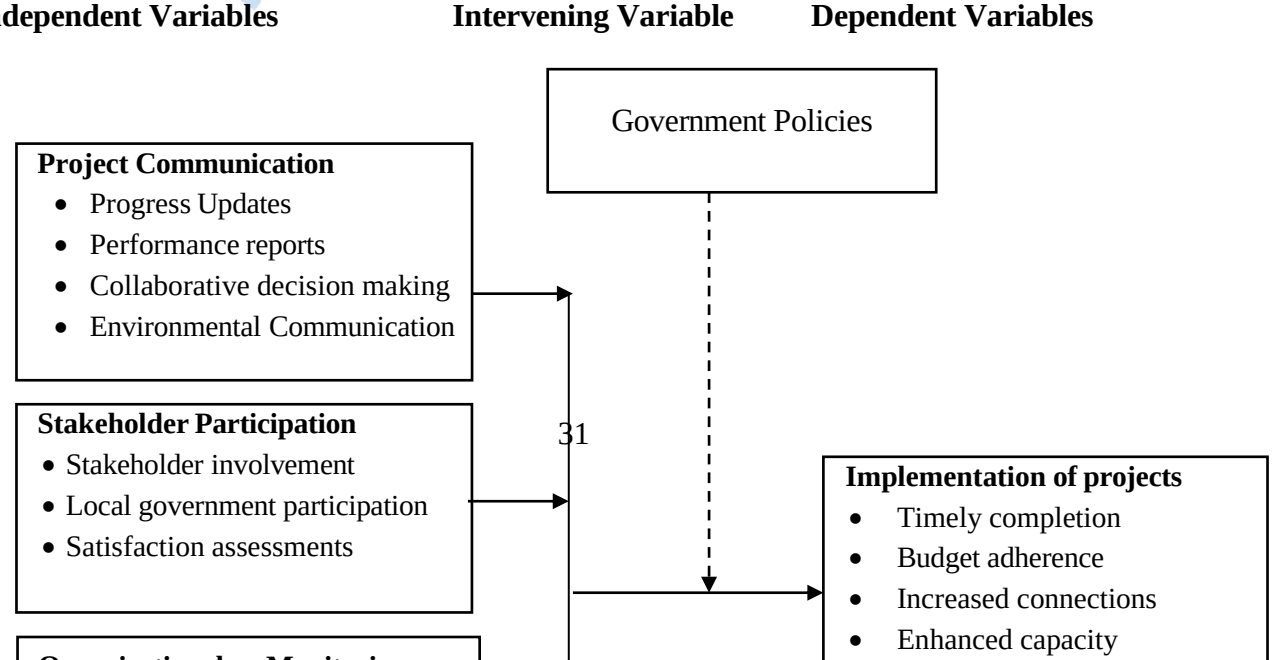
CAT, which was created by Howard Giles in the 1970s, looks at how people modify their communication methods to fit in with different social situations. This theory can be used to understand how team members and project managers modify their communication tactics to interact with various stakeholders, including members of the community, governmental organisations, and private sector partners, in the context of project implementation (Giles, 1973).

Convergence and divergence are the two main processes that CAT highlights. By changing one's communication style to more closely resemble that of the other person, convergence promotes cooperation, understanding, and rapport. Divergence, on the other hand, happens

when someone purposefully set their communication style apart from others, frequently to highlight distinctions or declare their individuality. Convergence in project communication can promote cooperation and help rural electrification and renewable energy projects be implemented successfully (Coupland et al., 1991).

The significance of CAT has been emphasised by recent research in cross-cultural and multi-stakeholder settings, such rural development initiatives. Project managers can improve stakeholder involvement and project success by implementing convergence tactics to establish more inclusive and cohesive communication environments. Stronger bonds and more successful communication, for instance, can result from modifying vocabulary, tone, and style to accommodate various audiences (Harwood, 2017). Since it offered a framework for comprehending how successful communication tactics might promote stakeholder participation and collaboration, Communication Accommodation Theory was pertinent to the study's communication goal.

2.3 Conceptual Framework



Source: Researcher (2025)

Figure 1: Conceptual Framework

2.4 Summary of Variables

2.4.1 Project Communication

Information sharing and understanding building amongst stakeholders in rural electrification initiatives are key components of project communication. Project success is correlated with effective communication since it guarantees that all stakeholders are informed and involved. Putri and Syarifuddin (2019) assert that strategic communication improves performance indicators in a variety of industries, highlighting its significance in accomplishing project goals.

2.4.2 Stakeholder Participation

The term "stakeholder participation" describes how different groups, including members of the community, governmental organisations, and non-governmental organisations, are involved in the development and implementation of initiatives. According to Nederhand and Klijn (2019), active stakeholder participation increases support and loyalty for project efforts, which makes implementation go more smoothly. Additionally, it has been demonstrated that successful community engagement greatly improves project outcomes (Frimpong, 2019).

2.4.3 Organizational Monitoring and Evaluation

The methodical process of gathering and examining data in order to evaluate the effectiveness and advancement of initiatives is known as organisational monitoring and evaluation. According to Wambua (2019), trend identification and early project success indicators depend on monitoring and assessment. In support of this, Ochenge (2018) points out that efficient monitoring can greatly increase the effectiveness of infrastructure projects, including those involving rural electricity.

2.4.4 Financial Management

Planning, organizing, directing, and regulating financial resources within a project are all included in financial management. Effective financial management is essential to making sure that projects are completed on schedule and within budget. Organisations with sound financial management procedures typically have superior project outcomes because they can effectively allocate resources and reduce financial risks, claim Chepkosgei et al. (2020).

2.5 Recap of the Literature Review

The literature review is highlighted in the study's second chapter. A conceptual framework, a summary of the literature being studied, and theoretical and empirical reviews are all included. Three main theories that are pertinent to the study are included in the theoretical

framework: stakeholder theory, program evaluation theory, and communication accommodation theory. The significance of including a wide variety of stakeholders in rural electrification projects is emphasised by stakeholder theory. The thesis states that companies should control stakeholder expectations and promote genuine engagement with local communities to guarantee project success. Through the systematic collection and analysis of data, the concept of program assessment offers an organised technique for assessing the effectiveness and efficiency of a program. This concept encourages the integration of defined goals and measurable indicators for program success, and it facilitates the inclusion of stakeholder opinions throughout the assessment process. The study of communication accommodation looks into how people change the way they communicate in order to interact with other stakeholders in a productive way. This theory highlights the advantages of convergence strategies that foster cooperation and improve stakeholder engagement in the context of project execution.

The empirical literature review looks at earlier studies on how stakeholder participation, project communication, and organisational M&E affect project completion. By showing how good communication improves project performance across a variety of industries, numerous studies highlight the significance of strategic communication. Additionally, studies demonstrate that stakeholder participation improves project outcomes, especially when it comes to resource mobilisation, dispute resolution, and community involvement. Organisational monitoring and evaluation research highlights the importance of this activity in project management, with well-executed M&E procedures leading to improved project outcomes.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter contains the research methodology that was employed by the researcher to collect and analyze data.

3.1 Research Design

The research design is the process framework in which the investigation is conducted (Sileyew, 2020). Research design is defined by the methods and strategies used to arrive at results and discoveries, as well as tools for verifying or disproving such information (Patel and Patel, 2019). This study used a descriptive survey as its research strategy. A descriptive survey design was used because it effectively captures and explains the characteristics of a population while establishing relationships between variables. This approach is well-suited for studies aiming to describe phenomena and quantify the prevalence of specific traits within a population (Siedlecki, 2020). Its strength lies in its ability to integrate multiple elements, providing flexibility in data collection and analysis. Additionally, it enhances the researcher's understanding of the issue by offering a structured yet comprehensive examination of the subject matter.

3.2 Location of the Study

Nakuru County, Kenya, was the study's primary focus because of the stark disparities in electrification rates between urban and rural areas, which offered a great chance to investigate the variables influencing electrification initiatives in rural areas. For government projects like the Last Mile Connectivity Project, the county was a crucial site that made it possible to evaluate stakeholder participation and project implementation difficulties. Furthermore, Nakuru's varied social and economic conditions brought attention to the necessity of

comprehending the institutional elements affecting energy availability, filling a major study vacuum.

3.3 Target Population

Tracy (2020) recognized that populations consist of subgroups with shared features. According to the sample criteria, the target population consists of people or things that possess particular characteristics (Stokes & Wall, 2017). The entire group of people or things with uniform qualities that the researcher is examining is the target population, according to Saunders et al. (2014). Field officers who were engineers under contract with REREC, REREC officers, and Ministry of Energy Rift Valley Region employees made up the study's population. REREC projects in Nakuru County served as the analytical unit.

Table 1: Target Population

Category	Target Population	Percentage
REREC engineers	72	47.7%
REREC Officers	47	31%
Ministry of Energy Staff	32	21.3%
Total	**151**	**100%**

Source: REREC Nakuru County (2024)

3.4 Sample and Sampling Technique

Census sampling was used because the study's target population was relatively small, making it feasible to include all respondents. This approach ensured that the findings were more accurate and comprehensive by capturing data from every relevant individual. Since the population comprised field officers, REREC engineers, and Ministry of Energy employees in Nakuru County, surveying all of them provided a complete representation of the study group. This method minimized sampling bias and enhanced the reliability of the study's conclusions.

3.5 Data Collection Methods and Procedures

Closed-ended questions were used in the study. The tool was divided into two parts: the first part collected the respondents' demographic information, and the second part asked questions on the four independent variables. The conceptual framework's variables were employed in the formulation of the questionnaire to collect data from research participants. Einola and Alvesson (2021) claim that questionnaires are appropriate for the study since they collect information that cannot be examined directly. Additionally, they point out that using questionnaires to collect data has the added advantage of being less costly and time-consuming.

3.5.1 Piloting of Instruments

A pilot study, or preliminary test, is carried out before to the major investigation. Pilot studies follow the same concept as the major inquiry, but they are conducted on a smaller scale and in compliance with established protocols, although being smaller in scope than the bigger study (Payne, 2016). Twenty REREC employees in Kericho County, which borders Nakuru County, participated in a pilot research. This reduced logistical difficulties while guaranteeing efficient participation and data gathering.

3.5.2 Validity of the Research Instruments

According to Sekaran & Bougie (2019), validity is the degree to which sampling structures appropriately assess the study's objectives and effectively represent the intended measure. A test-retest procedure will be used to guarantee the validity of the questionnaire. The establishment of content validity was achieved by the implementation of a thorough literature analysis, expert consultation, and alignment of the questionnaire with the research objectives and conceptual framework. By getting input from my supervisor and making the required changes to the questionnaire, face validity was ensured. In order to guarantee simplicity and

clarity, content validity was also given top priority. To increase participant engagement and comprehension, this entailed simplifying the tools and using straightforward language in the questions.

3.5.3 Reliability of Instruments

According to Livingston et al. (2018), measuring measurement dependability entails determining how free measurements are from random or unstable error. In this study, piloted outcomes were evaluated to ensure they yielded consistent results. Cronbach's alpha was used to calculate the reliability index, following descriptive statistics of individual variables. A higher score indicated greater scale reliability.

3.6 Data Analysis and Presentation

This procedure include reviewing, adjusting, transforming, and modelling data in order to find important patterns, make judgements, and support decision-making. Qualitative data was converted analysed thematically. The quantitative data analysis was conducted using SPSS version 28 software. A frequency distribution table with the statistical estimates for each variable was maintained. The researcher computed descriptive statistics, such as measures of dispersion and central tendency.

A multiple regression analysis was conducted to assess the combined influence of project communications, stakeholder participation, organizational monitoring and evaluation, and financial management on the implementation of REREC projects in Nakuru County. The regression model, $Y=\beta0+\beta1X1+\beta2X2+\beta3X3+\beta4X4+e$, measured the individual contribution of each independent variable while controlling for others. The regression coefficients ($\beta1,\beta2,\beta3,\beta4$) indicate the extent to which changes in each predictor impact project implementation. A statistically significant coefficient suggests a meaningful effect on the dependent variable. The error term (eee) captures unexplained variations, ensuring model

robustness.. The following particular multiple regression model was employed in the investigation:

$$Y= Y = \beta0 + \beta1 * X1 + \beta2 * X2 + \beta3 * X3 + \beta4 * X4 + e$$

Where: Y = Implementation of projects

X1 = Project communications

X2 = Stakeholder participation

X3 = Organizational monitoring and evaluation

X4 = Financial management

e = error term

β0= represents the constant

β=1, 2, 3, 4 are regression coefficients.

3.7 Diagnostic Tests

3.7.1 Test for Autocorrelation

The Durbin-Watson statistic was used to test for autocorrelation in residuals, ensuring the independence of errors in regression analysis. A value close to 2 indicates no autocorrelation, while values below 1.5 suggest positive autocorrelation and above 2.5 indicate negative autocorrelation. Detecting and addressing autocorrelation is crucial, as its presence can distort standard errors, leading to unreliable hypothesis tests and inaccurate regression estimates.

3.7.2 Heteroscedacisty

The Breusch-Pagan test was used to check for heteroscedasticity by assessing whether residual variance depends on independent variables. A significant p-value (typically <0.05) suggests heteroscedasticity, indicating non-constant variance, which can lead to inefficient estimates and unreliable hypothesis testing. If heteroscedasticity is detected, corrective

measures like robust standard errors or data transformation may be necessary to improve the accuracy and reliability of regression results.

3.7.3 Multi-collinearity

The Variance Inflation Factor (VIF) test was applied to assess multicollinearity by measuring how strongly each predictor variable is correlated with others. A VIF above 10 indicates severe multicollinearity, which can distort coefficient estimates and weaken statistical inference. If high VIF values are detected, corrective actions such as removing highly correlated variables or combining them may be necessary to enhance the reliability of the regression model.

3.8 Ethical Considerations

The study followed ethical research principles, including obtaining informed consent to ensure participants understood the study's purpose and had the option to withdraw at any time. Participants' data were anonymized and kept confidential to maintain privacy. Respect for participants was upheld by valuing their opinions and treating them with dignity throughout the research process.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

The data gathered to investigate the impact of project institutional-based determinants is analysed and interpreted in Chapter 4 of this study.

4.2 Response Rate

As indicated in Table 2, the study targeted a total of 151 respondents from these groups. Out of the 151 questionnaires issued, 132 were returned, with 2 being incomplete. This resulted in 130 completed questionnaires, yielding a response rate of 86%. This high response rate reflects a strong level of engagement and participation from the targeted respondents, enhancing the credibility and reliability of the study's findings. The presence of 2 incomplete questionnaires suggests that a few respondents may have faced challenges in fully completing the survey. However, the majority provided thorough and complete responses. An 86% response rate is commendable, providing a solid foundation for drawing meaningful conclusions, as Nulty (2021) asserts that a response rate exceeding 70% ensures representativeness and validity in survey-based research.

Table 2: Response Rate Summary

Total No of questionnaire issued out	Total No of returned questionnaires	Number of incomplete Questionnaires	Completed questionnaire received	Response Rate
151	132	2	130	86%

Source: Researcher (2025)

4.3 Reliability Results

The researcher used the completed questionnaire to generate the Cronbach Alpha Coefficients.

Table 3: Reliability Results

	No. of Items	Cronbach Alpha Coefficient
Implementation of REREC projects	4	.832
Project communication	5	.890
Stakeholder participation	4	.877
Monitoring and evaluation	5	.902
Financial management	4	.878

Table 3 presents the reliability results for the study's variables, showing the Cronbach Alpha coefficients for each construct. The coefficients indicate the internal consistency of the items measuring each variable. The Implementation of REREC projects had a Cronbach Alpha of .832, suggesting good reliability. Project communication achieved a higher coefficient of .890, demonstrating excellent reliability. Stakeholder participation had a Cronbach Alpha of .877, also indicating strong reliability. Monitoring and evaluation recorded the highest coefficient of .902, reflecting very high reliability. Finally, financial management showed a coefficient of .878, indicating good reliability as well. Overall, the Cronbach Alpha values for all variables are well above the commonly accepted threshold of .70, confirming that the measurement tools used in the study are reliable and produce consistent results. According to Taber (2018), Cronbach's Alpha values between 0.7 and 0.9 confirm good internal consistency, ensuring that the research instruments consistently measure the constructs.

4.4 Demographic Attributes of Respondents

This outlines various attributes of the participants in terms of their gender, their age and their highest educational attainment. These attributes are important in getting to know the type of respondents that took in the study. For instance, their education qualifications help understand whether the responses given are more reliable.

4.4.1 Percentage Response by Gender

This section provides an overview of the different genders that participated in the study. It presents the number of male and female respondents involved in the research. The table below shows the percentage distribution of participants based on gender.

Table 4: Distribution by Gender

Gender	Frequency	Percentage (%)
Female	46	35%
Male	84	65%
Total	**130**	**100.0%**

Source: Researcher (2025)

Table 4 presents the gender distribution of the respondents in the study on the implementation of REREC projects in Nakuru County, Kenya. The data indicates that 46 respondents, or 35%, were female, while 84 respondents, or 65%, were male. This shows a higher representation of male participants compared to female participants. The male dominance in this study can likely be attributed to the higher proportion of men in the engineering and technical fields, particularly in energy-related projects. Historically, these fields have been male-dominated, which could explain the gender imbalance in the respondents.

4.4.2 Age Distribution

The survey encompassed a wide age range, from those who are below 24 years to those between 56-60 years. This diverse age representation ensures a well-rounded view of perspectives across different life stages. Table 5 details how responses are distributed by age group.

Table 5: Respondents by Age

Age	Frequency	Percent %
Below 24	3	2%
25-35	40	31%
36-45	43	33%
46-55	33	25%
56-60	11	9%
Total	**130**	**100%**

Table 5 illustrates the age distribution of the respondents in the study on the implementation of REREC projects in Nakuru County, Kenya. The largest group of respondents, 43 individuals (33%), fell within the 36-45 age range, followed closely by 40 respondents (31%) in the 25-35 age group. Additionally, 33 respondents (25%) were aged between 46-55, while 11 respondents (9%) were between 56-60 years old, and only 3 respondents (2%) were under 24.

The concentration of respondents in the 25-45 age range suggests that individuals within this age group are more actively involved in energy projects, likely due to their career stage, experience, and professional involvement. The presence of fewer younger and older respondents may indicate limited participation from those either still in the early stages of their careers or nearing retirement. This age distribution may provide insights into the

workforce dynamics of REREC projects and the level of experience contributing to the implementation of these initiatives.

4.4.3 Highest Level of Education

This section explores the educational backgrounds of survey respondents, reflecting the varying levels of formal education within the group. Understanding the highest level of education achieved provides insight into the qualifications and expertise of participants.

Table 6: Distribution of Respondents as per Academic Qualifications

Category	Frequency	Percent %
Certificate	8	6%
Diploma	41	31.5%
Undergraduate	69	53%
Masters	11	8.5%
PhD	1	1%
Total	130	100%

Source: Researcher (2025)

Table 6 presents the distribution of respondents based on their academic qualifications in the study on the implementation of REREC projects in Nakuru County, Kenya. The majority of the respondents, 69 individuals (53%), held an undergraduate degree, reflecting a well-educated workforce. This is followed by 41 respondents (31.5%) who had completed a diploma, indicating a significant number of individuals with specialized technical training.

A smaller group, 11 respondents (8.5%), held a master's degree, while just 1 respondent (1%) had obtained a PhD. Additionally, 8 respondents (6%) held a certificate qualification.

The predominance of undergraduate and diploma qualifications suggests that REREC projects are largely managed by professionals with practical and technical expertise, with a

smaller proportion having advanced degrees. This distribution implies a focus on skill-based knowledge and experience, which is essential for the successful implementation of energy projects.

4.5 Implementation of REREC Projects in Nakuru County

This section examines how REREC Projects are implemented. Assessed through four constructs measured on a Likert scale. Descriptive statistics, including means, percentages, and standard deviations (SDs), were calculated to provide a comprehensive overview of respondents' perceptions regarding project implementation.

Table 7: Implementation of REREC Projects in Nakuru County

Statements	SD 1	D 2	N 3	A 4	SA 5	Mean	SD
The REREC projects are finished on schedule.	24%	40%	15%	11%	10%	2.32	0.983
The REREC projects are finished within the budget that has been set up.	24%	32%	15%	19%	10%	2.94	1.118
The number of electrical connections in Nakuru County has increased as a result of the execution of REREC projects.	8%	13%	10%	40%	29%	4.21	0.518
Throughout the project, resources—including money and materials—are used effectively.	4%	8%	14%	45%	29%	4.28	0.478
Composite mean and composite SD						3.44	0.774

N=130

The findings indicate that REREC projects in Nakuru County have been successful in expanding electricity access and utilizing resources efficiently. The high mean scores for increased electrical connections (4.21) and resource utilization (4.28) suggest strong agreement among respondents that the projects have contributed positively in these areas. However, challenges persist regarding project timelines and budget adherence. The low mean score of 2.32 on timely completion suggests frequent delays, likely due to logistical constraints, procurement inefficiencies, or inadequate planning. Additionally, the neutral mean score of 2.94 on budget adherence indicates that while cost overruns are not extreme, financial management issues exist. The overall composite mean of 3.44 suggests moderate satisfaction with project implementation, with room for improvement in efficiency and financial oversight.

The thematic analysis of qualitative responses revealed key issues affecting the implementation of REREC projects. Respondents highlighted communication challenges among stakeholders as a major factor contributing to project delays, aligning with the low mean score (2.32) on timely completion. Poor coordination between project teams, contractors, and government agencies was identified as a bottleneck in execution. Additionally, weak monitoring and evaluation (M&E) mechanisms emerged as a recurring theme, supporting the findings on budget concerns (mean = 2.94). Several respondents pointed out that inconsistent financial oversight led to inefficiencies in fund allocation, which in turn affected project timelines.

On the positive side, qualitative findings supported the strong performance in electricity access and resource utilization. Many respondents attributed the high level of electrical connections (mean = 4.21) to well-planned infrastructure expansion and targeted rural

electrification efforts. Similarly, the efficient use of materials and funds (mean = 4.28) was reinforced by qualitative feedback emphasizing effective procurement processes and proper allocation of technical resources. However, some respondents raised concerns about equity in distribution, noting that certain areas received more attention than others. Another critical theme was the need for community involvement, with respondents suggesting that greater engagement with local leaders and residents could improve project sustainability and acceptance.

The findings align with Ng'etich (2020), who found that project monitoring and evaluation significantly influence project success in Kenyan parastatals. Similar to the challenges in REREC projects, Ng'etich's study emphasized the role of baseline surveys in tracking progress and ensuring cost control. However, his study focused on parastatals, while the current findings highlight challenges unique to rural electrification, such as logistical barriers and community engagement gaps.

Similarly, Safari and Kisimbii (2020) found that county-funded projects in Kwale County benefited from proper M&E practices, reinforcing the importance of real-time tracking mechanisms. Their findings suggest that training and capacity building enhance project success, which resonates with REREC respondents who called for increased training for field officers and local stakeholders.

In contrast, Liu et al. (2024) reported that China's Grain for Green Project achieved significant environmental success due to its strong M&E frameworks. Unlike the REREC projects, where weak oversight has led to delays and budgetary concerns, Liu et al. (2024) found that GIS-based monitoring facilitated real-time progress tracking, ensuring efficient land conversion. This contrast suggests that adopting more advanced tracking systems in Nakuru County could help mitigate the existing challenges.

4.6 Project communication and Implementation of REREC Projects in Nakuru County

This section highlights the descriptive and qualitative findings related to project communication and its impact on the implementation of REREC projects in Nakuru County. The descriptive statistics provided insights into how various aspects of project communication influenced project implementation. The constructs were on a 5 point likert scale from 1 strongly disagree to 5 strongly agree.

Table 8: Project Communication and Performance of Projects

Statements	SD 1	D 2	N 3	A 4	SA 5	Mean	SD
Updates on project milestones are sent out promptly and clearly.	6%	11%	10%	46%	27%	4.42	0.411
Regular sharing of monitoring reports with all pertinent parties	7%	14%	12%	41%	26%	4.18	0.486
Every stakeholder contributes to the participatory decision-making process.	28%	40%	13%	12%	7%	2.39	0.987
Information on environmental impacts is successfully shared with the community.	9%	16%	12%	37%	26%	3.88	0.836
Strategies for communicating risks are in place and are successfully conveyed to stakeholders.	16%	23%	13%	30%	18%	3.59	0.887
Composite mean and composite SD						3.69	0.721

N=130

The findings on project communication and the implementation of REREC projects in Nakuru County reveal critical insights into how different communication strategies influence project performance. Notably, updates on project milestones (mean = 4.42) and regular sharing of monitoring reports (mean = 4.18) received high ratings, indicating that communication in these areas is clear, timely, and effective. A high mean score in these aspects suggests that project teams prioritize transparency and accountability, fostering stakeholder confidence and ensuring smooth project execution. Qualitative responses reinforced this perspective, with respondents noting that clear milestone communication helps keep all parties informed and aligned. However, some interviewees mentioned occasional delays in updates, which sometimes led to uncertainties about project progress. This underscores the importance of maintaining consistent and real-time communication channels.

However, a major concern is the low mean score (2.39) for stakeholder participation in decision-making, highlighting significant gaps in inclusivity and engagement. This suggests that key stakeholders, particularly community members, may feel excluded from critical project decisions, leading to a lack of ownership and support for project initiatives. Qualitative findings supported this, as many respondents expressed frustration over being left out of discussions regarding project planning and execution. Some noted that decisions were made at higher administrative levels with little consultation, which occasionally resulted in resistance or misalignment with local needs. This lack of participatory decision-making could hinder the long-term sustainability of REREC projects. Strengthening engagement mechanisms through consultative forums and local representation in decision-making could address these concerns.

Environmental impact communication also scored moderately (mean = 3.88), indicating that while information is shared, gaps remain in ensuring that all affected parties are fully engaged. Limited awareness of environmental implications can lead to misunderstandings, opposition, or non-compliance with mitigation strategies. Thematic analysis of qualitative data revealed that some community members were aware of the environmental impacts of REREC projects, but others felt that the information was not adequately explained in layman's terms. Respondents suggested that using visual aids, community meetings, and simplified reports would improve their understanding of environmental concerns. Similarly, risk communication received a mean score of 3.59, suggesting that while some strategies exist, they may not be fully effective in preparing stakeholders for potential project risks. Some respondents emphasized that risk-related information was shared too late or not in enough detail to allow for proactive responses. This indicates a need for clearer and more structured risk communication strategies.

The overall composite mean score of 3.69 suggests that while project milestone communication and monitoring report sharing are strong, participatory decision-making and risk communication need improvement. This finding aligns with studies by Kihara et al. (2021), which emphasize that effective communication enhances project performance by fostering transparency and engagement. However, Munyua and Nyamweya (2022) caution that risk communication plays a crucial role in project stability, supporting the need for enhanced stakeholder training and proactive risk management strategies. Compared to international studies, such as Cheng et al. (2024), which highlight the benefits of digital tools in improving stakeholder participation, the findings suggest that REREC projects could benefit from integrating technology-driven engagement mechanisms.

In conclusion, the study indicates that while REREC projects in Nakuru County have strong mechanisms for milestone updates and monitoring report sharing, there is a need to improve stakeholder engagement, risk communication, and environmental awareness. The low mean score for participatory decision-making presents a challenge that could negatively affect project sustainability if not addressed. Qualitative responses reinforce these concerns, as many stakeholders feel excluded from critical discussions. Strengthening engagement frameworks, refining risk communication strategies, and leveraging digital tools for real-time stakeholder involvement could significantly enhance transparency and trust. By implementing these improvements, REREC projects can foster greater inclusivity, minimize resistance, and ensure the successful execution of renewable energy initiatives in Nakuru County.

4.7 Influence of Stakeholder Participation and Implementation of REREC Projects in Nakuru County

This section presents the descriptive statistics on the influence of stakeholder participation on the implementation of REREC projects in Nakuru County. It aims to provide insights into how effective stakeholder participation affect the implementation of the REREC Projects. Table 9 highlights the findings.

Table 9: Descriptive Statistics for Influence of Stakeholder Participation

Statements	SD 1	D 2	N 3	A 4	SA 5	Mean	SD
For REREC projects, a thorough stakeholder engagement plan is in place.	20%	44%	10%	16%	10%	2.32	0.971
The REREC projects are actively supported by the	7%	12%	9%	43%	29%	4.32	0.486

county government.							
Stakeholder contentment Regular surveys are carried out to get input on REREC initiatives.	20%	37%	13%	16%	14%	2.79	0.987
Planning and carrying out REREC projects involves extensive community participation.	19%	39%	17%	14%	11%	2.38	0.936
Composite mean and composite SD						2.95	0.845

N=130

N=130

The findings on stakeholder participation and the implementation of REREC projects in Nakuru County reveal significant disparities in engagement effectiveness. Notably, the mean score for the existence of a thorough stakeholder engagement plan was low (2.32), indicating that respondents perceived stakeholder engagement efforts as inadequate or poorly implemented. This suggests that while some level of engagement occurs, it may not be structured or comprehensive enough to ensure meaningful participation. In contrast, the county government's involvement in REREC projects received a high mean score (4.32), reflecting a strong perception that the government actively supports these initiatives. A high rating in this area implies that government backing plays a crucial role in sustaining project implementation, possibly through funding, policy support, or coordination with other stakeholders.

However, the relatively low mean score (2.79) on conducting regular stakeholder satisfaction surveys indicates a gap in feedback mechanisms. This suggests that REREC projects may not be systematically gathering input from stakeholders to assess their needs and expectations.

Without consistent feedback, it becomes difficult to make data-driven improvements to project implementation. Similarly, the mean score for community participation in planning and implementation (2.38) was low, highlighting concerns about limited grassroots involvement. When community members are not actively engaged in decision-making, there is a risk of resistance, misalignment with local needs, and reduced project ownership, which can negatively affect long-term sustainability. These findings align with previous studies, such as those by Nyaga et al. (2022), which emphasize the importance of participatory approaches in project success.

Qualitative insights reinforced these concerns, with many respondents expressing frustration over the top-down approach to stakeholder engagement. Some community members felt that engagement efforts were largely tokenistic, focusing on informing rather than genuinely involving them in decision-making. Several respondents suggested that REREC should establish structured forums for stakeholder consultations to enhance inclusivity. They also called for regular surveys and community meetings to track satisfaction levels and allow for real-time adjustments to project plans. Additionally, transparency emerged as a key concern, with many participants emphasizing the need for clearer communication on project timelines, funding allocations, and expected outcomes. These findings indicate that while stakeholder participation exists, it lacks depth and strategic execution, limiting its effectiveness in project implementation.

The overall composite mean (2.95) suggests that while some aspects of stakeholder participation, particularly government involvement, are strong, other critical elements, such as structured engagement plans, community participation, and feedback mechanisms, require significant improvement. Compared to international best practices, where stakeholder engagement frameworks incorporate digital platforms for real-time feedback (e.g., Cheng et

al., 2024), the findings highlight a need for REREC to modernize its engagement strategies. Implementing stakeholder management systems and community-led forums could enhance inclusivity, ensuring that projects align better with local priorities.

In conclusion, the study underscores the need for more structured and meaningful stakeholder participation in REREC projects in Nakuru County. While government support is strong, low engagement in decision-making and inadequate feedback mechanisms hinder effective implementation. Addressing these gaps through participatory frameworks, transparent communication, and regular stakeholder surveys could improve project acceptance and long-term sustainability. By fostering greater inclusivity, REREC can enhance trust, encourage local ownership, and ultimately improve the performance of its projects.

4.8 Organizational Monitoring and Evaluation and Implementation of REREC projects in Nakuru County

This section examined the impact of Organizational Monitoring and Evaluation on the implementation of REREC projects in Nakuru County. Five opinion statements were provided, and answers were recorded on a five-point scale range from strongly disagree (1) to strongly agree (5). Table 10 highlights the findings.

Table 10: Descriptive Statistics on Organizational Monitoring and Evaluation

Statements	1	2	3	4	5	Mean	SD
For REREC projects, the installation procedure is efficiently monitored.	4%	13%	14%	44%	25%	4.62	0.501
Electricity consumption trends are routinely observed and examined.	9%	13%	18%	40%	20%	4.31	0.586
Household connections are	7%	10%	16%	43%	24%	4.41	0.516

effectively monitored to guarantee precise and prompt deployment.							
During the project's implementation, errors are quickly found and fixed.	8%	13%	16%	35%	28%	3.86	0.883
Reporting systems are in place and work well to give timely updates on the status of the project.	11%	16%	10%	37%	26%	3.74	0.923
Composite mean and composite SD						4.19	0.682

N=130

The findings on organizational monitoring and evaluation in the implementation of REREC projects in Nakuru County suggest that the existing systems are generally perceived as effective. The highest-rated aspect was the monitoring of the installation process, with a mean score of 4.62, indicating that respondents strongly agreed that installation procedures were well-supervised. Additionally, the tracking of household electricity consumption trends (mean = 4.31) and household connections (mean = 4.41) were also rated positively. These findings suggest that monitoring mechanisms for technical aspects of project implementation are relatively strong, ensuring efficiency and accuracy in electricity deployment. However, areas related to error detection and correction (mean = 3.86) and reporting mechanisms (mean = 3.74) received lower ratings, implying potential gaps in responsiveness and transparency. The composite mean score of 4.19 reinforces the overall effectiveness of monitoring and evaluation while highlighting specific areas that require further enhancement.

Despite the generally positive perception of monitoring processes, qualitative findings indicate that stakeholders still perceive gaps in communication and responsiveness. Several respondents emphasized that while monitoring activities exist, their visibility and accessibility to the community remain limited. Some participants noted that local residents and beneficiaries should be more actively involved in the monitoring process to provide real-time feedback on implementation challenges. Others suggested that reporting mechanisms should be improved by ensuring that updates are more frequent, accessible, and tailored to the information needs of various stakeholders. These insights suggest that improving transparency and stakeholder inclusion in the monitoring process could strengthen the overall effectiveness of REREC's implementation strategy.

Additionally, respondents expressed concerns about the speed and efficiency of error correction during project execution. While monitoring mechanisms can detect issues, several participants noted that the response time in addressing errors and resolving inefficiencies was not always satisfactory. This aligns with the lower rating for error correction (mean = 3.86), suggesting that while issues are identified, corrective actions may not be taken promptly. Addressing this gap could involve streamlining reporting channels and ensuring that project managers have the necessary resources and authority to resolve issues as they arise. Lessons from best practices in project monitoring suggest that real-time data collection and digital reporting systems can enhance the speed of response, minimizing delays and inefficiencies.

Moreover, the slightly lower rating for reporting mechanisms (mean = 3.74) suggests a need to enhance information-sharing processes within REREC projects. Several respondents recommended adopting digital dashboards or periodic community forums to ensure that stakeholders remain informed about project progress. Strengthening these reporting frameworks could improve accountability and foster a greater sense of ownership among

local communities. Comparative studies, such as those by Mwangi & Otieno (2023), have shown that transparent reporting structures in public projects lead to improved trust and higher project success rates. Integrating these best practices into REREC's monitoring framework could enhance project performance and stakeholder satisfaction.

In conclusion, while the monitoring and evaluation of REREC projects in Nakuru County are largely effective, there are critical areas that require improvement. Strengthening transparency, incorporating community participation, and improving the speed of error correction could enhance project oversight. Additionally, refining reporting mechanisms to provide timely and accessible updates to all stakeholders would improve accountability and trust. By addressing these gaps, REREC can ensure that its projects are not only well-monitored but also more responsive to stakeholder needs, ultimately leading to more successful and sustainable project implementation.

4.9 Influence of Financial Management on Implementation of REREC projects in Nakuru County

This section highlights the descriptive statistics regarding the influence of financial management on implementation of REREC projects in Nakuru County. Four opinion statements were provided, and answers were recorded on a five-point scale range from strongly disagree (1) to strongly agree (5). Table 11 highlights the findings.

Table 11: Descriptive Statistics on Influence of Financial Management

Statements	1	2	3	4	5	Mean	SD
Effective budgetary control is in place for REREC initiatives.	13%	21%	10%	35%	21%	3.99	0.701
Allocating resources	11%	17%	18%	34%	20%	3.79	0.816

effectively satisfies the requirements of REREC projects.							
Mechanisms for tracking expenditures are in place and work well.	15%	24%	16%	30%	15%	3.41	0.976
To guarantee financial responsibility and transparency, audits are carried out on a regular basis.	8%	14%	14%	36%	28%	3.86	0.783
Composite mean and composite SD						3.76	0.819

The findings on the influence of financial management on the implementation of REREC projects in Nakuru County suggest that while financial controls are in place, there are notable areas for improvement. The highest-rated aspect was budgetary control, with a mean score of 3.99, indicating that respondents generally believe the budgeting process is well-managed. Resource allocation also received a moderately high rating (mean = 3.79), suggesting that funds are distributed in a manner that largely meets project requirements. However, the effectiveness of expenditure tracking mechanisms scored lower (mean = 3.41), signaling concerns about the efficiency and transparency of financial monitoring. Regular audits were seen as a relatively strong aspect of financial management, with a mean score of 3.86, reflecting confidence in accountability measures. The composite mean of 3.76 suggests that while financial management practices in REREC projects are functional, there is room for improvement, particularly in expenditure tracking and financial transparency.

Despite these generally positive findings, qualitative insights reveal key areas where financial management could be enhanced. Several respondents emphasized the need for greater transparency in the allocation and utilization of funds. Some suggested that financial reports

should be more detailed and made readily accessible to stakeholders, allowing for better oversight and accountability. This aligns with best practices in financial governance, where transparent reporting mechanisms contribute to improved trust and efficiency in public projects.

Another critical area identified for improvement is the monitoring of expenditures. Respondents expressed concerns that existing tracking mechanisms may not be robust enough to ensure optimal resource utilization. Some recommended the adoption of real-time expenditure tracking systems that would enhance visibility and allow for proactive financial decision-making. This finding is consistent with research indicating that digital financial management tools improve budget adherence and reduce financial inefficiencies in large-scale infrastructure projects.

The need for capacity-building among project staff also emerged as a recurring theme in the qualitative responses. Some participants suggested that regular financial training be provided to ensure that staff members possess the necessary skills to manage budgets effectively and track expenditures accurately. Studies by Wanjiru & Kimani (2023) indicate that financial literacy among project managers significantly influences the success of public projects, reinforcing the importance of continuous training in financial management best practices.

Additionally, respondents called for more rigorous audit processes to enhance financial accountability. While audits are already conducted, some suggested increasing their frequency and comprehensiveness to identify financial discrepancies early and address inefficiencies. This recommendation aligns with global best practices in project financial management, where frequent and detailed audits help to minimize financial mismanagement and improve overall project performance.

In conclusion, while financial management practices in REREC projects in Nakuru County are moderately effective, there are critical areas that require strengthening. Enhancing expenditure tracking mechanisms, improving financial transparency, investing in financial training for project staff, and strengthening audit processes would significantly improve financial oversight and ensure that project funds are utilized efficiently. By implementing these measures, REREC can optimize resource utilization, improve accountability, and ultimately enhance the success of its electrification projects.

4.10 Diagnostic Tests

4.10.1 Test for Autocorrelation

A test for autocorrelation examines whether residuals in a regression model are correlated over time, violating the assumption of independence. Detecting autocorrelation is crucial as it can affect the accuracy of statistical inferences.

Table 12: Test for Autocorrelation

lags *(p)*	chi2	df	Prob > chi2
1	3.553	1	0.423

Source: Researcher (2025) .

The results presented in Table 11 indicate the findings of the autocorrelation test conducted for the current study on the implementation of REREC projects in Nakuru County. The chi-squared value for the first lag (p=1) is 3.553, with 1 degree of freedom and a probability value (p-value) of 0.423. Since the p-value is greater than the commonly used significance level of 0.05, it can be concluded that there is no significant autocorrelation present in the data. This suggests that the residuals or errors from the model are not correlated over time, and the assumption of no autocorrelation holds for this study, ensuring the reliability of the

regression results used in analyzing the implementation of REREC projects in Nakuru County.

4.10.2 Heteroscedasticity

The Breusch-Pagan test was employed to detect heteroscedasticity, assessing whether the variance of the residuals remained constant across the model. Identifying heteroscedasticity is essential, as it can affect the accuracy of regression estimates and statistical inferences.

Table 13: Heteroscedasticity

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity		
chi2(1)	=	0.522
Prob > chi2	=	0.4712

The results presented in Table 12 show the outcome of the Breusch-Pagan / Cook-Weisberg test for heteroscedasticity conducted in this study on the implementation of REREC projects in Nakuru County. The chi-squared value is 0.522, with a corresponding p-value of 0.4712. Since the p-value exceeds the common significance threshold of 0.05, there is no evidence of heteroscedasticity in the data. This means that the variance of the errors is constant across observations, which supports the assumption of homoscedasticity in the regression model. As a result, the study's findings are considered reliable, as heteroscedasticity does not pose a threat to the validity of the statistical tests used in this analysis.

4.9.3 Multicollinearity

The multicollinearity was checked using Variance Inflation Factor (VIF) and tolerance tests. These tests determine the degree of linear relationship between a predictor set and the criterion, this can have an impact on the reliability of coefficient estimates and accuracy of the model.

Table 14: Multicollinearity

Collinearity Statistics		
Variables	**Tolerance**	**VIF**
Project Implementation	0.881	1.442
Project communication	0.868	1.325
Stakeholder participation	0.912	1.701
Monitoring and evaluation	0.877	1.364
Financial management	0.861	1.246

Source: Researcher (2025)

The results presented in Table 13 show the collinearity statistics for the variables in this study on the implementation of REREC projects in Nakuru County. The tolerance values range from 0.861 to 0.912, while the Variance Inflation Factor (VIF) values range from 1.246 to 1.701. Since tolerance values are above the threshold of 0.1 and the VIF values are well below the critical value of 10, these results suggest that there is no significant multicollinearity among the predictor variables. Therefore, the variables in the model are not highly correlated, and the study's regression analysis remains valid, allowing for reliable interpretation of the relationships between the factors influencing REREC project implementation in Nakuru County.

4.11 Correlation Results

Table 14 presents the correlation matrix for the study, which examines the relationships between key variables, including project performance, project communication, project communication, stakeholder participation, and monitoring and evaluation. Correlation analysis helps determine the strength and direction of the linear relationships between these variables. By examining the correlation coefficients, we can assess whether there are positive, negative, or no associations between the variables, providing insights into how each factor

interacts with the others in influencing the implementation of Rerec projects in Nakuru County.

Table 15: Correlation Results

		Project implementation	Project communication	Stakeholder participation	Monitoring and evaluation	Financial management
Project implementation	Pearson Correlation	1				
	Sig. (2-tailed)					
Project communication	Pearson Correlation	.632**	1			
	Sig. (2-tailed)	.000				
Stakeholder Participation	Pearson Correlation	.663*	.1302	1		
	Sig. (2-tailed)	.000	.390			
Monitoring and evaluation	Pearson Correlation	.569**	.444	.315	1	
	Sig. (2-tailed)	.000	.320	.196		
Financial management	Pearson Correlation	.721	.355	.231		
	Sig. (2-tailed)	.000	.438	.218	.487	

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
c. Listwise N=130

Source: Researcher (2025)

Table 15 presents the correlation results for the various factors influencing the implementation of REREC projects in Nakuru County. The analysis reveals significant positive correlations between several variables. For instance, project implementation has a strong positive correlation with project communication ($r = 0.632$, $p < 0.01$), stakeholder participation ($r = 0.663$, $p < 0.01$), monitoring and evaluation ($r = 0.569$, $p < 0.01$), and financial management ($r = 0.721$, $p < 0.01$). These findings suggest that as all the independent

variables improve, the overall implementation of REREC projects is also likely to improve. Notably, the correlation between financial management and project implementation is the strongest, indicating that effective financial management is crucial to the successful implementation of projects. Furthermore, while stakeholder participation shows a weaker correlation with project communication ($r = 0.1302$, $p > 0.05$), it is still significant at a 0.05 level, demonstrating a moderate relationship between these two factors.

The findings of Chepkosgei et al. (2020) and Pandu (2024) align closely with the correlations observed in the current study on REREC projects. In Chepkosgei et al.'s study, strategic communication significantly influenced the success of state corporations in Kenya. This supports the finding in the current study, where project communication is positively correlated with project implementation ($r = 0.632$, $p < 0.01$), emphasizing the importance of clear and strategic communication in enhancing project performance. Similarly, Pandu (2024) highlighted the importance of stakeholder engagement in water resources projects, noting that effective participation contributes to better project outcomes. In the current study, stakeholder participation also showed a positive correlation with project implementation ($r = 0.663$, $p < 0.01$), reinforcing the notion that active stakeholder involvement is crucial for successful project delivery.

Additionally, studies by Liu et al. (2024) and Kaithia et al. (2024) emphasize the critical role of monitoring, evaluation, and financial management in project performance. Liu et al. demonstrated the significance of effective monitoring and evaluation practices in the success of environmental projects, aligning with the positive correlation between monitoring and evaluation and project implementation ($r = 0.569$, $p < 0.01$) in the current study. Kaithia et al. found a strong positive correlation between budget planning and financial performance, supporting the positive relationship between financial management and project

implementation ($r = 0.721$, $p < 0.01$) observed in the current study. Both studies underscore the need for efficient financial management and continuous monitoring to achieve desired project outcomes, which is consistent with the findings on REREC projects in Nakuru County.

4.12 Regression Results

Table 16 presents the summary statistics for the regression model.

Table 16: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684[a]	.514	.399	.23452

a. Predictors: (Constant), Project communication, Stakeholder participation, monitoring and evaluation, Financial Management

Source: Researcher (2025)

Table 15 presents the model summary for the regression analysis, showing that the predictor variables (Project communication, Stakeholder participation, Monitoring and evaluation, and Financial management) collectively explain 51.4% of the variance in the dependent variable, as indicated by the R-square value of 0.514. The adjusted R-square value of 0.399 suggests that after accounting for the number of predictors, approximately 39.9% of the variation in the dependent variable is explained by the model, which is a good fit. The standard error of the estimate is 0.23452, indicating the average distance that data points fall from the regression line. This model indicates a moderate to strong relationship between the predictors and the dependent variable, highlighting the significance of these factors in explaining the performance of REREC projects in Nakuru County.

Table 17: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	113.94	1	113.94	127.132	.000[b]
	Residual	98.321	129	.541		
	Total	**212.261**	**130**			

a. **Dependent Variable:** Implementation of projects

b. **Predictors:** (Constant), Project communication, stakeholder participation, monitoring and evaluation, financial management

Table 17 presents the results of the Analysis of Variance (ANOVA) for the regression model used to predict the implementation of REREC projects in Nakuru County. The regression sum of squares is 113.94, with a mean square of 113.94, yielding an F-value of 127.132. This F-value is highly significant, with a p-value of 0.000, indicating that the overall regression model is statistically significant and that the predictor variables significantly explain variations in the implementation of REREC projects. The residual sum of squares is 98.321, with a mean square of 0.541, which represents the unexplained variation. The total sum of squares is 212.261, reflecting the total variation in the implementation of projects. This significant F-test supports the validity of the model in explaining the dependent variable.

Table 18: Regression Coefficients

Un-standardized Coefficients			Standardized Coefficients	t	Sig.
Model	B	Std. Error	Beta		
(Constant)	.644	0.429		1.218	0.000
Project communication	.613	0.471	.495	1.322	0.000
Stakeholder participation	.591	0.464	.303	1.139	0.001
Monitoring and evaluation	.584	0.520	.226	1.233	0.000
Financial management	.711	0.612	.216	1.341	0.000

a. Dependent variable: Implementation of projects

Source: Research Findings (2024)

Table 18 presents the regression coefficients for the predictors influencing the implementation of REREC projects. The constant value is 0.644, representing the baseline level of project implementation when all the predictor variables are zero. Among the predictors, project communication has a coefficient of 0.613, indicating that for every one-unit increase in project communication, project implementation improves by 0.613 units, with a standardized Beta of 0.495, showing a strong positive relationship. Stakeholder participation has a coefficient of 0.591, meaning that increased stakeholder involvement leads to a 0.591 unit increase in project implementation, with a moderate Beta of 0.303. Monitoring and evaluation shows a coefficient of 0.584, suggesting that better monitoring practices contribute to a 0.584 unit increase in implementation, with a Beta of 0.226, reflecting a moderate influence. The highest coefficient is for financial management, at 0.711, indicating that improved financial management practices result in a 0.711 unit increase in project implementation, with a Beta of 0.216, which suggests a significant, though moderate, effect.

All the predictor variables have a significant positive impact on project implementation, confirming their importance in enhancing the success of REREC projects.

The regression equation can be expressed as follows:

Project Implementation =0.644+0.613X1+0.591X2+0.584X3+0.711X4+ϵ

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND STUDY RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study's findings, conclusions made and the research recommendations.

5.2 Summary of Findings

The study examined the influence of institutional factors on the implementation of rural electrification and renewable energy projects in Nakuru County. Specifically, it sought to assess the impact of project communication, stakeholder participation, organizational monitoring and evaluation, and financial management on the success of these projects. The study's objectives included determining how effective project communication affects implementation, exploring the role of stakeholder participation, evaluating the contribution of monitoring and evaluation practices, and understanding how financial management influences project outcomes in the region.

5.2.1 Implementation of REREC Projects in Nakuru County

The findings indicate that REREC projects in Nakuru County have significantly improved electricity access and resource utilization. However, challenges persist in project timelines and budget adherence, with delays attributed to logistical constraints and financial inefficiencies. Qualitative insights revealed communication gaps among stakeholders and weak monitoring mechanisms as key barriers to smooth execution. While infrastructure expansion was praised, concerns over equitable distribution emerged. Respondents emphasized the need for enhanced community involvement to improve project sustainability. Overall, the findings highlight both successes and areas requiring strategic improvements in project management.

5.2.2 Project Communication and Project Implementation

The findings highlight the significant role of project communication in the implementation of REREC projects in Nakuru County. While milestone updates and monitoring report sharing were effective, stakeholder participation in decision-making was notably weak, indicating limited inclusivity. Qualitative responses reinforced concerns about exclusion and delayed risk communication, which affected project alignment with local needs. Gaps also emerged in environmental impact awareness.

5.2.3 Stakeholder Participation and Project Implementation

The findings highlight disparities in stakeholder participation in REREC projects in Nakuru County. While county government support is strong, inadequate engagement plans and minimal community involvement hinder implementation. Qualitative responses revealed that many stakeholders felt excluded from key decisions, with some viewing public meetings as mere formalities rather than genuine consultative forums. Others noted that technical project details were not communicated in accessible language, making it difficult for communities to contribute meaningfully.

5.2.4 Organizational Monitoring and Evaluation and Implementation of REREC Projects in Nakuru County

The findings indicate that REREC's monitoring and evaluation systems are effective, particularly in overseeing installation procedures and tracking household electricity connections. However, gaps remain in error correction and reporting mechanisms, suggesting areas needing improvement. Qualitative insights revealed concerns about slow issue resolution and limited stakeholder involvement. Some respondents felt excluded from the monitoring process, while others noted delays in addressing identified errors.

5.2.5 Financial Management and Project Implementation

Financial management in REREC projects is moderately effective, but improvements are needed in expenditure tracking and transparency. While budgetary control and resource allocation are functional, financial monitoring remains a concern. Respondents emphasized the need for greater transparency through accessible financial reports and real-time expenditure tracking. Capacity-building for project staff was also highlighted, with calls for regular financial training to enhance budgeting and monitoring skills.

5.3 Conclusion

The study concluded that the implementation of REREC projects in Nakuru County showed a mix of successes and challenges. While electricity connections and resource utilization were positively rated, there were delays in project completion and issues with budget adherence. Project communication was generally effective in milestone reporting, though decision-making and risk communication needed improvement. Stakeholder participation was limited, with insufficient community involvement and engagement plans. Monitoring and evaluation processes were mostly effective, but error correction and reporting mechanisms required enhancement. Financial management showed moderate effectiveness, with room for improvement in expenditure tracking and audits. Overall, key factors like communication, stakeholder participation, monitoring, and financial management significantly influenced project implementation.

5.4 Recommendations

The study's recommendations are as follows;

i. REREC should enhance community involvement by developing comprehensive stakeholder engagement plans and conducting regular satisfaction surveys to improve inclusiveness in project planning and implementation.

ii. The County Government of Nakuru should foster more participative decision-making processes, ensuring broader stakeholder involvement and transparency in rural electrification project execution.

iii. REREC should improve its communication strategies, particularly around risk and environmental impact, to ensure better stakeholder understanding and project success.

iv. The Ministry of Energy should strengthen financial management practices by improving expenditure tracking systems, ensuring real-time monitoring, and conducting more frequent REREC audits to enhance accountability.

5.5 Recommendations for Further Studies

More research on the following topics is suggested by the researcher;

Future studies could explore the impact of stakeholder engagement strategies on the sustainability of REREC projects in different counties to determine best practices for inclusive participation.

Research could investigate the role of digital technologies in enhancing project communication, monitoring, and financial management within REREC projects.

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APPENDICES

Appendix I: Consent Form

Dear Participant,

You are cordially invited to take part in a study called Influence of Institutional Factors on the Implementation of Rural Electrification and Renewable Energy Corporation Projects in Kenya's Nakuru County. It is a component of my Master's program in Project Management and Planning at Mount Kenya University. Responses will be anonymous and kept private, and participation is completely voluntary. The enclosed questionnaire takes half an hour to complete. For questions, reach out to Dr. Ruth Winnie Munene (0722835443), the supervisor, or the researcher, Stephen Kariuki Muhoho (0704452885). We appreciate your help with this crucial study.

CONSENT

I understand and voluntarily agree to participate in this study.

Participant's signature _____ Date _____

Investigator's signature ___  __ Date __15/11/2024_____

Appendix 11: Questionnaire

Section 1: Demographic Statistics

Gender

Male

Female

Age

15–24

25–35

36–45

46–55

56–60

Level of Education

No Education

Certificate

Diploma

Undergraduate

Master's

PhD

Section B: Implementation of REREC Projects in Nakuru County, Kenya

The purpose of the following questions is to gather quantitative information about the execution of REREC projects in Nakuru County. Please use the following scale to indicate how much you agree with each statement:

Strongly Disagree is represented by 1, Disagree by 2, Neutral by 3, Agree by 4, and Strongly Agree by 5.

	Statement	**1**	**2**	**3**	**4**	**5**
(a)	Projects for REREC are finished on schedule.					
(b)	The electrification projects are finished on time and within the budget.					
(c)	The number of electrical connections in Nakuru County has increased as a result of the execution of REREC projects.					
(d)	Throughout the project, resources—including money and materials—are used effectively.					

Qualitative Question: Regarding the execution of REREC projects in Nakuru County, kindly offer any further remarks or recommendations.

Section C: Project Communication

	Statement	5	4	3	2	1
(a)	Updates on project milestones are sent out promptly and clearly.					
(b)	All pertinent parties are routinely provided with monitoring reports.					
(c)	Every stakeholder contributes to the participatory decision-making process.					
(d)	Information on environmental impacts is successfully shared with the community.					
(e)	Strategies for communicating risks are in place and are successfully conveyed to stakeholders.					

Please provide any more thoughts or recommendations you may have about project communication for Nakuru County's REREC initiatives.

Section D: Stakeholder Participation

	Statement	5	4	3	2	1
(a)	A thorough plan for engaging stakeholders is in place for REREC projects.					
(b).	Nakuru County government supports REREC electrification projects.					
©	Feedback on REREC initiatives is periodically gathered through stakeholder satisfaction questionnaires.					
(d)	Planning and carrying out REREC projects involves exte nsive community participation.					

Please provide any other thoughts or recommendations you may have on the involvement of stakeholders in Nakuru County's REREC projects.

Section E: Organizational Monitoring and Evaluation

	Statement	5	4	3	2	1
(a)	The installation procedure for REREC projects is efficientl y monitored.					
(b).	Electricity consumption trends are routinely observed and examined.					
©	Household connections are effectively monitored to guar antee precise and prompt deployment.					
(d)	During the project's implementation, errors are quickly fo und and fixed.					
(e)	Reporting systems are in place and work well to give tim ely updates on the status of the project.					

Regarding the observation and assessment of REREC projects in Nakuru County, kindly offer any further remarks or recommendations.

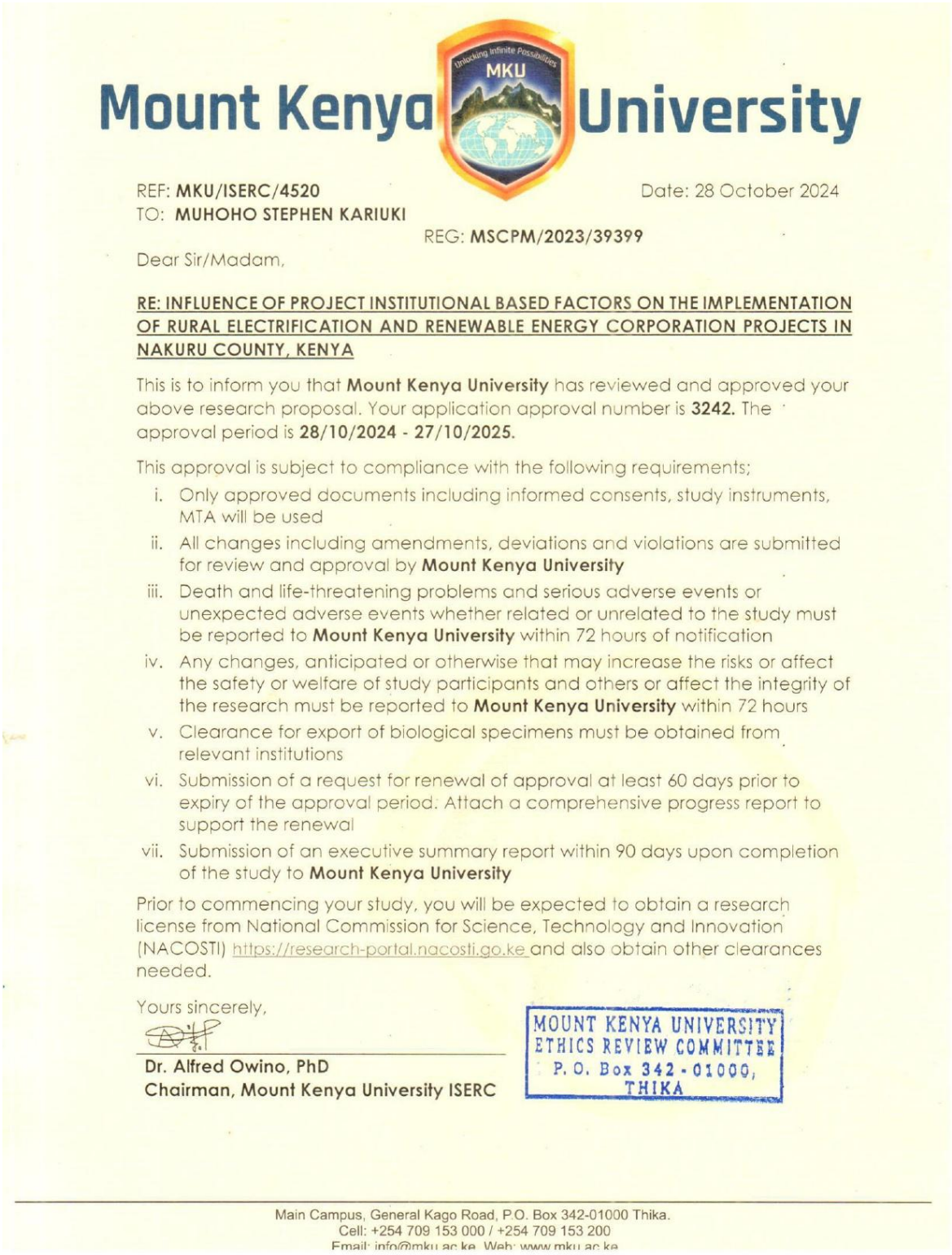
Section F: Financial Management

	Statement	5	4	3	2	1
(a)	Effective budgetary control is in place for REREC initiatives.					
(b).	Allocating resources effectively satisfies the requirements of REREC projects.					
©	Mechanisms for tracking expenditures are in place and work well.					
(d)	To guarantee financial responsibility and transparency, audits are carried out on a regular basis.					

Please share any other thoughts or recommendations you may have on the financial management of Nakuru County's REREC initiatives.

Thank you for your participation

Appendix III: ERC Clearance Certificate



Mount Kenya University

REF: **MKU/ISERC/4520** Date: 28 October 2024
TO: **MUHOHO STEPHEN KARIUKI**
REG: **MSCPM/2023/39399**

Dear Sir/Madam,

RE: INFLUENCE OF PROJECT INSTITUTIONAL BASED FACTORS ON THE IMPLEMENTATION OF RURAL ELECTRIFICATION AND RENEWABLE ENERGY CORPORATION PROJECTS IN NAKURU COUNTY, KENYA

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **3242.** The approval period is **28/10/2024 - 27/10/2025.**

This approval is subject to compliance with the following requirements;

i. Only approved documents including informed consents, study instruments, MTA will be used
ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
v. Clearance for export of biological specimens must be obtained from relevant institutions
vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://research-portal.nacosti.go.ke and also obtain other clearances needed.

Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

MOUNT KENYA UNIVERSITY
ETHICS REVIEW COMMITTEE
P. O. Box 342-01000,
THIKA

Main Campus, General Kago Road, P.O. Box 342-01000 Thika.
Cell: +254 709 153 000 / +254 709 153 200
Email: info@mku.ac.ke Web: www.mku.ac.ke

Appendix IV: MKU Research Authorization Letter

Mount Kenya University

DIRECTORATE OF GRADUATE STUDIES

MSCPM/2023/39399

7th November, 2024

National Commission for Science Technology & Innovation (NACOSTI)
Off Waiyaki Way, Upper Kabete,
P.O Box 30623- 00100
NAIROBI, KENYA

Dear Sir/Madam,

RE: MUHOHO STEPHEN KARIUKI – REGISTRATION NO. MSCPM/2023/39399

The purpose of this letter is to introduce the above named student who is pursuing **Master of Science in Project Management** in the **Department of Management** in the school of **Business and Economics.**

The title of the research is **"Influence of Project Institutional Based Factors on the Implementation of Rural Electrification and Renewable Energy Corporation Projects in Nakuru County, Kenya."** It has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **November, 2024 and January, 2025.**

Any assistance accorded to the student will be highly appreciated.

Thank you.

Mount Kenya University
P. O. Box 342 - 01000, THIKA
Office of the Director,
Graduate Studies

Dr. Samuel M. Karonga, Ph.D
Director, Graduate Studies
Enc.

Appendix V: NACOSTI Research Authorization Letter

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **358358**

Date of Issue: **26/November/2024**

RESEARCH LICENSE

This is to Certify that Mr.. Stephen Kariuki Muhoho of Mount Kenya University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nakuru on the topic: INFLUENCE OF PROJECT INSTITUTIONAL BASED FACTORS ON THE IMPLEMENTATION OF RURAL ELECTRIFICATION AND RENEWABLE ENERGY CORPORATION PROJECTS IN NAKURU COUNTY, KENYA for the period ending : 26/November/2025.

License No: **NACOSTI/P/24/414101**

358358

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

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See overleaf for conditions

PLAGIARISM REPORT

INFLUENCE OF PROJECT INSTITUTIONAL BASED FACTORS ON THE IMPLEMENTATION OF RURAL ELECTRIFICATION AND RENEWABLE ENERGY CORPORATION PROJECTS IN NAKURU COUNTY, KENYA

by Stephen Kariuki MUHOHO

Submission date: 21-Jan-2025 10:09AM (UTC+0300)
Submission ID: 2568154140
File name: Stephen_Kariuki_Final_Project-1.docx (175.34K)
Word count: 19377
Character count: 119119

INFLUENCE OF PROJECT INSTITUTIONAL BASED FACTORS ON THE IMPLEMENTATION OF RURAL ELECTRIFICATION AND RENEWABLE ENERGY CORPORATION PROJECTS IN NAKURU COUNTY, KENYA

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