PARTICIPATORY MONITORING AND EVALUATION AND PROJECT PERFORMANCE IN NAIROBI CITY COUNTY: A CASE OF ROAD PROJECTS IMPLEMENTED BY KENYA URBAN ROADS AUTHORITY

BY

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DECLARATION

This project is my original work and has not been presented for a degree in any other institution.

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This research has been submitted for examination with my approval as the student University Supervisor

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LIST OF ABBREVIATIONS AND ACRONYMS

KURA	Kenya Urban Roads Authority
M&E	Monitoring and Evaluation
NCA	National Construction Authority
NEMA	National Environment Management Authority
PM&E	Participatory Monitoring and Evaluation
SDGs	Sustainable Development Goals
SPSS	Statistical Package for the Social Sciences
UoN	University of Nairobi

CHAPTER ONE: INTRODUCTION

1.1 Background

Construction projects are intricate endeavours that demand the active engagement of diverse stakeholders, including contractors, government bodies, and local communities (Lin et al., 2019). These projects carry the weight of addressing the needs of beneficiaries while aligning with Sustainable Development Goals (SDGs). Central to achieving success in construction projects is the multifaceted concept of project performance, which encapsulates various critical constructs, namely, project quality, stakeholder satisfaction, sustainability, and data-driven decision-making (Ouko, 2022).

1.1.1 Participatory Monitoring and Evaluation

According to Rahman (2019), PM&E is a participatory approach that emphasises active stakeholder involvement in decision-making processes. PM&E promotes the active engagement of stakeholders to identify project objectives, expected performances, and indicators to measure project success. In the context of road construction projects, PM&E provides a framework for stakeholder participation, leading to better project performances and greater satisfaction among stakeholders. Theoretical frameworks such as the stakeholder theory provide a basis for getting the know-how of the importance of stakeholder involvement in management of project and the benefits that accrue from effective stakeholder engagement (Collinge, 2020).

Community participation, contractor involvement, donors' engagement, and environmental agencies' participation in PM&E are crucial variables to consider in assessing the performance of projects (Ouko, 2022; Agbenyo et al., 2021). The involvement of community stakeholders is vital in ensuring that project objectives align with the wants of the local population (Lin et al., 2019). Contractors, furthermore, play a fundamental part in implementation of construction projects, and their participation in the M&E process is significant for identifying potential issues early on (Agbenyo et al., 2021). External donors often provide funding and support for road construction projects, making their engagement in the monitoring and evaluation process critical (Rahman, 2019). Additionally, road construction projects have significant environmental implications, and compliance with environmental regulations is crucial for sustainable development goals (Ahmed, 2022).

1.1.2 Project Performance

Project performance is a nuanced and multidimensional concept, encompassing several key constructs that together gauge the effectiveness and efficiency of a construction project (Rahman, 2019). Project quality, for instance, goes beyond mere functionality; it entails assessing the overall workmanship, the project's adherence to specifications, and the use of high-quality materials (Akanbang & Abdallah, 2021). Stakeholder satisfaction represents the level of contentment and fulfillment experienced by various project stakeholders, including communities, government agencies, contractors, and donors (Agbenyo et al., 2021). When stakeholders are content, it often translates to smoother project execution, reduced conflicts, and increased cooperation. Sustainability, in the context of project performance, delves into the long-term implications and environmental consequences of construction projects (Ahmed, 2022).

1.1.3 Road Projects Implemented by KURA in Nairobi City County

The Nairobi City County government has initiated several road construction projects aimed at improving the road network and reducing traffic congestion. One of the recent road construction projects is the construction of the Nairobi Expressway, a 27.1-kilometer motorway that connects Jomo Kenyatta International Airport to the Westlands area in Nairobi. There is also the dualling of Ngong Road, a major arterial road that links the central business district to the Ngong area (Nairobi City County, 2019). These road construction projects provide an excellent opportunity to explore the effect of PM&E on construction project performances in the Nairobi City County context.

Projects of road construction are crucial in Nairobi City County due to the high demand for efficient transportation systems. However, the industry faces several challenges, including inadequate resource allocation, poor project management, and limited stakeholder involvement (Beldinne & Gachengo, 2022). These challenges have resulted in delayed project completion, poor quality performances, and stakeholder dissatisfaction. To address these challenges, the concept of PM&E may enhance stakeholder involvement and improve project performances. This study aimed to assess how community participation, contractor involvement, donors' engagement, and environmental agencies' involvement affect the performance of KURA road construction projects in Nairobi City County.

1.2 Research Problem

The construction industry's slow adoption of Participatory Monitoring and Evaluation (PM&E) approaches has contributed to suboptimal project performance, marked by delays, cost overruns, and quality issues (Aina et al., 2019). This issue is particularly evident in Nairobi City County, which has experienced rapid urbanization, resulting in a pressing need for efficient transportation systems. However, road construction projects in the county have been plagued by challenges such as corruption, insufficient stakeholder engagement, and a lack of transparency (Gichamba & Kithinji, 2019). While past studies have explored the advantages of PM&E in diverse contexts (Ouko, 2022; Agbenyo et al., 2021; Akanbang et al., 2021; Ahmed, 2022), there is a distinct gap in the literature concerning its impact on road construction project performance in Nairobi City County.

Based on these studies, the gap in the existing literature becomes apparent. While previous research has explored the benefits of PM&E in various contexts, there is limited research on the influence of PM&E on road construction project performances in Nairobi City County, Kenya. The studies stated in the previous paragraph have not extensively examined this particular context and the specific variables of community participation, contractor involvement, donors' engagement, and environmental agencies' participation in PM&E. Therefore, this research aimed to fill this gap by examining the influence of PM&E on KURA road construction project performances in Nairobi City County.

1.3 Research Objective

The main objective of this study was to investigate the influence of PM&E on KURA road construction project performances in Nairobi City County, Kenya.

1.3.1 Specific Research Objectives

This study was focused on the below objectives;

i. To determine the influence of community participation in monitoring and evaluation on KURA road construction project performance in Nairobi City County.
ii. To examine the influence of contractor involvement in participatory monitoring and evaluation on KURA road construction project performance in Nairobi City County.

iii. To investigate the influence of donors engagement in participatory monitoring and evaluation on KURA road construction project performance in Nairobi City County.

iv. To evaluate the influence of environmental agencies in participatory monitoring and evaluation on KURA road construction project performance in Nairobi City County.

1.4 Value of the Study

The research has important value for both theory and practical application. Theoretically, this research leads to the growing body of literature on PM&E in the construction industry. The study builds on existing knowledge by exploring the influence of PM&E in the context of road construction projects. The study also provides insight into how stakeholder engagement through PM&E can improve project performances, thereby contributing to the development of stakeholder theory.

In terms of practical implications, the results of this research are beneficial to policy makers, project managers and staff, and all other stakeholders involved in road construction. This study highlights the importance of stakeholder assignation in the design and implementation of road construction projects. This research also provides evidence-based insights into the benefits of PM&E, such as improved project performances, increased transparency, and accountability. This information is useful for project managers and staff as it informs decision-making processes, resource allocation, and overall project management.

The study is also valuable for communities and other stakeholders affected by road construction projects in Nairobi City County. By including stakeholders in the project process of making decision, the research demonstrates the importance of their input in the development of infrastructure that meets their needs and preferences. The study also provides insight into how PM&E can ensure that construction projects are more sustainable and better aligned with the United Nations Sustainable Development Goals.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter illustrates a complete evaluation of the current literature associated to PM&E in the context of road construction projects. The literature review is structured around the specific objectives of the study, focusing on theories and empirical studies that provide insights into the study. The existing literature review delves into empirical studies that have explored PM&E in various development projects.

2.2 Theoretical Framework

This study adopted a theoretical framework that combines two theories; the stakeholder theory and the resource dependency theory.

2.2.1 Stakeholder Theory

This theory was initially proposed by Edward Freeman in the 1980s, and has increased its substantial consideration in the field of management and organizational studies. The theory has evolved over time with contributions from various scholars, including Donaldson and Preston (1995), Mitchell and Cohen (2006), and Atkin and Skitmore (2008), among others. Central to stakeholder theory are the concepts of salience, identification and stakeholder engagement. Identification involves recognizing persons who are interested, claim, or stake in the project. Salience is the extent whereby participants are considered important or relevant based on their power, legitimacy, and urgency. Actively incorporating stakeholders in decision-making processes and soliciting their input and feedback are key components of stakeholder engagement.

In the context of the current study, stakeholder theory gives a theoretical lens to know the importance of community involvement, contractor participation, donors' engagement, and environmental agencies' involvement in construction projects. By adopting a stakeholder perspective, the study recognizes the significance of considering the welfares and needs of various stakeholders in the project management process. It acknowledges the potential influence of stakeholders on project performance and aims to explore how stakeholder engagement through PM&E contributes to the overall success of construction projects.

2.2.2 Resource Dependence Theory

This theory by Pfeffer and Salancik in 1978 (Hillman, Withers & Collins, 2009), focuses on the relationship between organizations and their external environment, particularly the dependence of organizations on external resources for their survival and success. The theory recognizes that organizations rely on various resources, such as financial capital, technology, information, and legitimacy, which are often acquired from external sources. The theory argues that organizations seek to minimize their dependence on external resources by adopting strategies such as resource acquisition, resource control, and resource interdependence.

In this study, this theory provides a theoretical framework to understand the relationships between KURA and its stakeholders, including communities, contractors, donors, and environmental agencies. The theory acknowledges the interdependencies and resource exchanges that exist among these stakeholders in the road construction projects. It emphasizes the need for effective communication, collaboration, and resource management to minimize resource dependence and enhance project performance. The theory therefore offers provides a lens to analyze the strategies employed by KURA to manage resource dependencies and achieve project objectives.

2.3 Empirical Studies

This section involves a complete evaluation of the associated literature to explore the various aspects of PM&E in the context of construction projects. The review aims to shed light on the advantage of community involvement, contractor contribution, donors' engagement, and the role of environmental agencies in ensuring the success of such projects. This review also seeks to identify gaps in the current knowledge and provide a solid foundation for the conceptual framework and research design of the current study.

2.3.1 Community Participation in Monitoring and Evaluation and Project Performance

Mougiakou and Karimali (2023) examined public participation for projects in the Greek Island Gavdos. The researchers used a survey research design utilizing both questionnaires and interviews with community members living along the project areas to assess their level of participation and satisfaction with project progress. The research illustrated that active community contribution in M&E goings-on positively influenced

performance of project. Communities that were actively engaged provided valuable feedback on project progress, leading to timely adjustments and improved outcomes. It was concluded that involving communities in M&E activities enhances project effectiveness and promotes a sense of possession amongst members of community.

De Medici, Marchiano and Pinto (2023) looked at participatory for projects in the social housing community using a descriptive research design. The researchers conducted a structured questionnaire survey among residents living near construction sites. The study found that community satisfaction with project performance was significantly influenced by the quality of infrastructure, adherence to project timelines, and the degree of community participation in the process of making decision. Communities that were actively involved and had their concerns addressed reported higher levels of gratification with the project outcomes. The study finalized that community satisfaction is closely linked to the level of community involvement in construction projects.

Pirity and Kissfazekas (2023) examined participatory projects in Hungary using a mixed-method research design, combining surveys and document analysis to assess the frequency and quality of community feedback on project progress. The study found that the frequency of community feedback varied across different construction projects. Communities that had established channels for feedback and regular interaction with project managers provided more frequent feedback. The quality of feedback was influenced by the level of community knowledge about the project, their ability to articulate concerns and suggestions, and the responsiveness of project managers in addressing the feedback.

Adepoju and Obademi (2023) assessed stakeholder involvement and borehole water projects delivery in Nigeria using a case study research design. The researchers conducted interviews with community members, project managers, and local authorities to identify the barriers and challenges faced in promoting community involvement. The study identified several challenges, including limited awareness among community members about their role in project decision-making, inadequate communication channels, and lack of trust between communities and project managers. These factors resulted in limited community participation and minimal feedback provision. The study concluded that addressing the challenges of community involvement is crucial for enhancing project performance.

The study by Kieya (2016) on the elements affecting community involvement in the application of road projects in Nyamira used a mixed-method research design, combining surveys, interviews, and document analysis to scrutinize the extent of community contribution and its impact on project performance. The research illustrated that active community contribution in M&E activities significantly contributed to project success. Communities that were actively involved in M&E processes provided valuable insights, identified potential issues, and contributed to project decision-making, resulting in improved project outcomes.

2.3.2 Contractor Involvement in Participatory Monitoring and Evaluation and Project Performance

Bhattarai (2023) measured the delays in projects in Nepal using a qualitative research design. The research illustrated that there were instances of delays and inaccuracies in the reports provided by contractors. This hindered effective M&E of project progress and performance. Contractors often faced challenges in meeting reporting deadlines and ensuring the accuracy of the information provided. The research concluded that delays and inaccuracies in contractor reports can lead to miscommunication, delayed decision-making, and potential deviations from project specifications and standards.

Setiani, Saputra and Jusi (2023) assessed the factors behind delays of material supply in Siak Regency. The study used a descriptive survey research design and found that the degree of collaboration between contractors and other stakeholders varied across projects. In some cases, there was a lack of effective communication channels and coordination mechanisms, leading to delays, conflicts, and inefficiencies. However, in other instances, successful collaboration was observed, resulting in improved project performance. The study concluded that a high level of collaboration between contractors and other stakeholders is essential for successful road construction projects.

Masoetsa (2021) assessed the construction constraints on project performance in South Africa. The researchers used a case study design and conducted on-site inspections and reviewed project documents to evaluate the quality of construction work in relation to the specified standards. They also conducted interviews with contractors and project managers to gather insights into the factors influencing adherence. The study found that while contractors generally had a good understanding of project specifications, there were instances of non-compliance with standards. Factors such as inadequate

supervision, resource constraints, and subcontracting practices were identified as potential reasons for deviations from the specifications. The study highlighted the importance of effective supervision and monitoring mechanisms to detect and address deviations promptly.

Ishtiaque, Andersen and Klakegg (2022) analyzed the reports submitted by contractors and compared them with project milestones and actual performance data using a case study design. The researchers analyzed project data, including cost estimates, actual expenditure, and change orders, to assess the financial performance of construction projects. The research illustrated that the level of contractor involvement significantly influenced project cost control. Projects with high contractor involvement demonstrated better cost control practices, such as accurate cost estimation, effective budget allocation, and proactive identification of cost-saving opportunities.

Rahmani (2021) analyzed the opportunities and challenges in implementing early contractor involvement using a survey research design and found that there were variations in the timeliness and accuracy of contractor reports. Some contractors provided comprehensive and timely reports, enabling effective monitoring and evaluation. However, others faced challenges in meeting reporting deadlines and ensuring accuracy, which hindered project performance assessment. The study emphasized the need for clear reporting guidelines and expectations, as well as improved communication and feedback mechanisms between contractors and regulators.

2.3.3 Donors Engagement in Participatory Monitoring and Evaluation and Project Performance

Jimmy-Akinpitan (2023) analyzed project documentation, including financial reports and budget allocations, to assess the level of financial support from donors using a case study design. The research illustrated that donor contributions played a crucial role in financing construction projects. However, there were variations in the amount and timing of financial resources provided by different donors. Delays in fund disbursement and fluctuating funding levels posed challenges for project implementation and cash flow management. The study concluded that establishing effective communication and coordination mechanisms with donors ensure timely and adequate financial support.

Hofisi and Chizimba (2013) in Malawi did surveys with project managers, donor representatives, and project staff to assess the level of communication and coordination using a survey research design. They also reviewed project documents and reports to identify the extent of donor involvement in M&E activities. The study found that there were challenges in communication and coordination between project staff and donors' M&E activities. Lack of regular feedback exchange, limited involvement of donors in monitoring visits, and inadequate sharing of M&E findings were identified as key issues.

Ahsan and Kumar (2018) looked at the issues in donor-funded international development projects using project documents, reports, and interviews with donors and other project stakeholders by adopting a case study research design. They examined the extent to which project outcomes aligned with the intended objectives set by donors. The study found that factors such as changes in project scope, unforeseen challenges, and varying stakeholder interests influenced the degree of alignment. The study concluded that achieving complete alignment between donor objectives and project outcomes can be challenging due to the active nature of construction projects.

Kimweli (2013) used a qualitative research design and conducted interviews and surveys with project managers, representatives from bilateral aid agencies, and project staff to gather insights into the involvement of bilateral aid agencies. They analyzed project papers, including funding contracts and project reports, to assess the extent of their contributions. The study found that bilateral aid agencies played a significant role in financing projects. They provided financial resources, technical expertise, and project management support. The study also identified challenges related to bureaucracy, delays in fund disbursement, and differing priorities between the bilateral aid agencies and project implementers.

Kuria and Wanyoike (2016) evaluated the elements affecting sustainability of donor funded projects using a descriptive research design. The investigators did focus group discussions and interviews with community members, project managers, and representatives from donor organizations to scrutinize the level of community participation and the influence of donors. The study found that donors' emphasis on transparency, accountability, and community engagement practices created an enabling environment for active community involvement. Donor support for capacity-building

initiatives and awareness campaigns enhanced the communities' understanding of their roles and responsibilities. The study concluded that donor involvement can positively impact community participation in donor-funded projects.

2.3.4 Environmental Agencies in Participatory Monitoring and Evaluation and Project Performance

Kihuha (2018) used a case study research design and argues that environmental agencies play a crucial role in enforcing environmental regulations in construction projects. They conduct environmental impact assessments, provide guidance on mitigating adverse environmental impacts, and monitor compliance during the construction phase. The study identified challenges related to inadequate resources and capacity constraints within environmental agencies, which affect their effectiveness in oversight. The study concluded that environmental agencies' involvement is vital for ensuring environmental compliance in construction projects. It highlighted the need for increased resources and capacity building within environmental agencies to enhance their effectiveness.

Kissi et al. (2019) also used a a case study research design and found that environmental agencies played an active role in construction projects in conducting environmental impact assessments, issuing permits, and monitoring compliance. However, challenges such as inadequate resources and capacity limitations hindered effective oversight. The study concluded that environmental agencies' involvement was vital for ensuring environmental sustainability in construction projects. It emphasized the need for increased resources and capacity building within these agencies to enhance their ability to enforce environmental regulations effectively.

Callistus and Clinton (2018) adopted a desk review design and found that construction projects had varying degrees of environmental impacts, including soil erosion, water pollution, and habitat destruction. Environmental agencies played a critical role in conducting environmental assessments, providing guidance on mitigation measures, and monitoring compliance. However, challenges such as limited resources and inadequate project monitoring hindered effective environmental management. The study concluded that their involvement was essential for promoting sustainable practices in construction projects. It emphasized the need for increased resources and capacity building within institutions to strengthen environmental oversight.

2.4 Summary of Literature Review/Gaps Identified

Table 2.1: Literature Summary and Gaps

Author and Year	Study Focus	Sector/Area of Study	Methodology Applied (Data Analysis)	Summary of Findings	Research Gaps Identified	Study Contribution
Mougiakou and Karimali (2023)	Community participation in M&E and project performance	Greek Island Gavdos	Surveys, Interviews	Active community involvement in M&E positively influences project performance. Involving communities enhances effectiveness, promotes ownership.	Different context, only 1 independent variable covered	Recommends engaging communities through effective communication, meetings, feedback.
De Medici, Marchiano and Pinto (2023)	Community involvement in social housing projects	Social housing	Structured Questionnaire Survey	Active community involvement leads to higher satisfaction and project success. Community satisfaction linked to involvement and decision-making.	Different location and sector	Calls for transparency, accountability to build community trust.
Kieya (2016)	Community involvement in road projects	Nyamira, Kenya	Surveys, Interviews, Document Analysis	Active community involvement contributes to identifying and addressing project challenges. Improves outcomes and meets community needs.	Different local context and variables	Focuses on meaningful community participation and outcomes.
Bhattarai (2023)	Contractor reporting impact on M&E and project monitoring	Nepal	Secondary data research approach,	Contractor reporting delays and inaccuracies hinder effective project monitoring and evaluation.	Limited in scope and methodologies	Stresses importance of accurate and timely contractor reporting.
Setiani, Saputra and Jusi (2023)	Collaboration between contractors and stakeholders	Siak Regency, Indonesia	Use of questionnaires	Effective collaboration crucial for successful road projects. Communication, coordination enhance decision-making, project outcomes.	Different local context and variables	Highlights collaboration, communication for better outcomes.
Masoetsa (2021)	Adherence to project specifications by contractors	South Africa	On-site inspections, Interviews	Contractors' non-compliance factors: inadequate supervision, resource constraints. Adherence vital for quality and longevity.	Different methods and location	Stresses adherence to specifications for project quality.

Ishtiaque, Andersen and Klakegg (2022)	Contractor involvement in cost control	Infrastructure projects	Theoretical analysis	Active contractor involvement in cost control leads to better practices, cost optimization, fewer overruns.	Different methods and variables	Highlights contractor's role in cost control and optimization.
Jimmy-Akinpitan (2023)	Donor financial support impact on project execution	Developing Countries	Report Analysis	Effective communication and coordination with donors needed for support.	Different methods	Highlights donor's role in financing and coordination.
Hofisi and Chizimba (2013)	Donor involvement in M&E activities	Malawi	Surveys, Document Review	Lack of coordination between project staff and donors in M&E activities. Calls for regular meetings, joint monitoring, transparency.	Different location and sector.	Emphasizes coordination between donors and project staff.
Kuria and Wanyoike (2016)	Donor influence on community participation	Donor-funded projects	Focus Group Discussions, Interviews	Donor support impacts community involvement. Trust, collaboration crucial for enhancing participation.	The study used different methods	Highlights donor's impact on community participation.
Kihuha (2018)	Environmental agencies' role in project compliance	Construction Projects	Survey	Environmental agencies enforce regulations. Resource constraints hinder effectiveness. Calls for increased resources and capacity building.	Different variables	Focuses on environmental agencies' role and limitations.
Kissi et al. (2019)	Environmental agencies' role in project oversight	Construction Projects	Structured questionnaires and structural equation modeling analysis	Environmental agencies conduct assessments, monitor compliance. Inadequate resources impact effectiveness.	Different context	Stresses need for collaboration, capacity-building in agencies.
Callistus and Clinton (2018)	Environmental impacts and agency role	Construction Projects	Extensive desk review approach	Environmental agencies conduct assessments, face challenges in oversight.	Different context and methods	Stresses importance of environmental assessments

2.5 Conceptual Framework

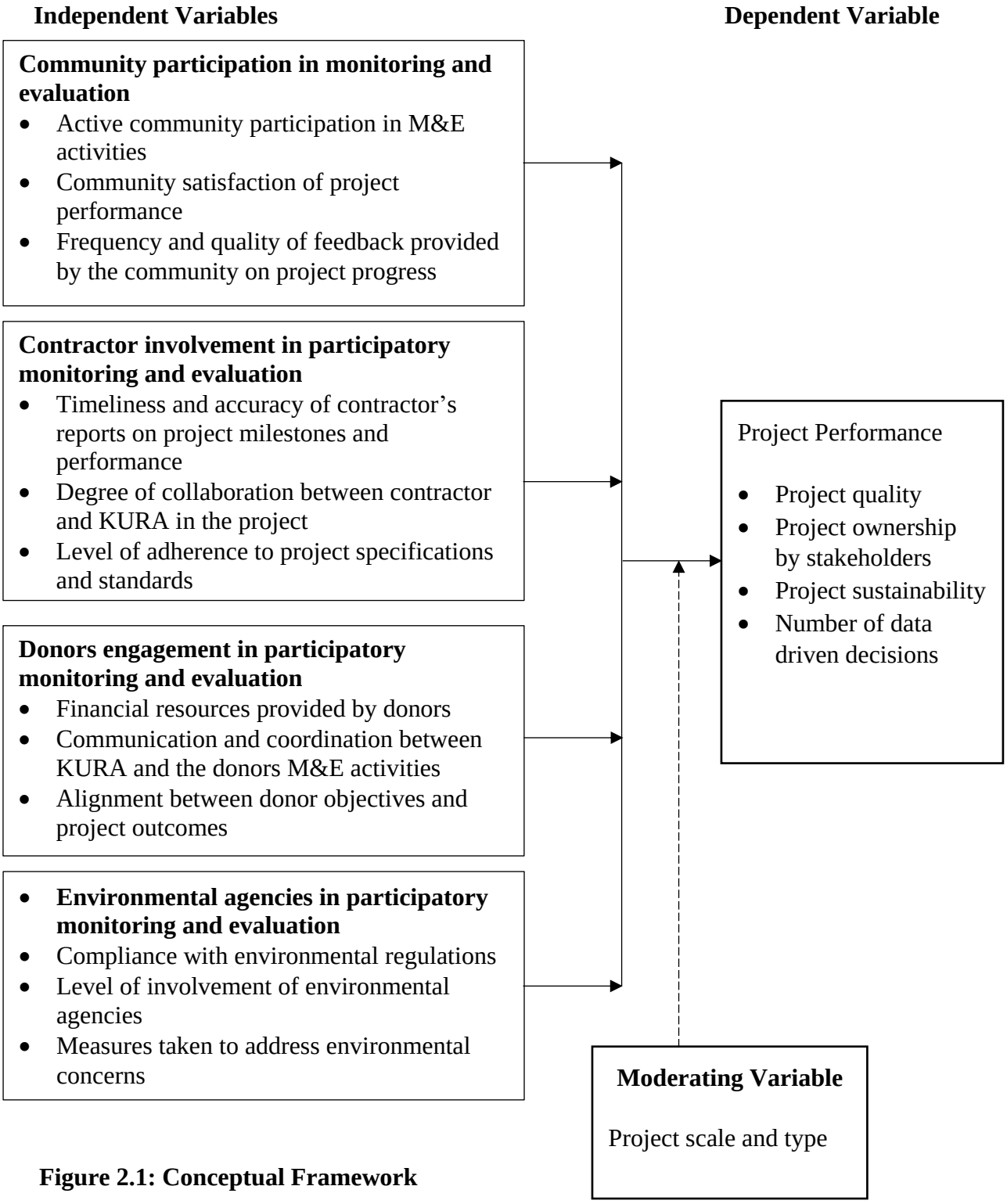

Figure 2.1: Conceptual Framework

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter starts with an introduction to the research methodology that was employed in this study. It then proceeds to discuss the research design, sampling size, target population and sampling techniques that guided the investigation. The chapter proceeds with data collection instruments, data collection procedure and data analysis techniques. The chapter concludes by providing a comprehensive overview of the methodology framework that guided the investigation.

3.2 Research Design

A cross-sectional survey research design was used for this investigation. A cross-sectional survey research design involves collecting data from a diverse group of participants at a single point in time (Wang & Cheng, 2020). With this approach, data is gathered all at once or over a condensed period of time. The basic considerations of the cross-sectional survey research design involve selecting a sample representative of the target population, collecting data through questionnaires, and analyzing the data to examine relationships and patterns.

Some scholars (such as Joslin & Muller, 2015) have utilized the cross-sectional survey research design in the context of project management and evaluation. These studies have employed survey questionnaires and statistical analysis techniques to examine the relationships between variables. The strengths of this research design lie in its efficiency and practicality. It enables the gathering of data from a sizable sample in a relatively brief period, presenting a cost-efficient method for exploring research inquiries. The cross-sectional survey research design has limitations; it does not allow for the examination of changes over time. The design relies on self-reporting, which may be in regard to recall biases or social desirability biases. Nonetheless, despite its limitations, this design enabled the research to scrutinize the relationships amongst variables, such as community participation, contractor involvement, donors' engagement, environmental agencies' participation, and project performance.

3.3 Population of the Study

The participants in this research to whom the results were generalized included individuals and stakeholders involved in road construction projects in Nairobi City County, Kenya. This included 722 representatives from contractors engaged in the

construction projects, 151 representatives from donor organizations providing funding or support, and 258 representatives from environmental agencies responsible for overseeing compliance with environmental regulations. This made a total target population of 1131 (Table 3.1). These participants answered questions on all the four objectives. For community participation in monitoring and evaluation and project performance, document analysis was further be used to assess their level of involvement.

Table 3.1: Target Population

Group	Population	Source
Contractors in the construction projects	722	National Construction Authority, 2023
Donor organizations representatives	151	Ministry of Infrastructure, Kenya, 2023
Environmental agencies representatives	258	National Environmental Management Authority (NEMA), Kenya, 2023
Total	1131	

3.4 Sample Size and Sampling Procedure

The sample size for the research was determined using the formula. This approach ensures that the sample is representative of the population and that the study's findings are both accurate and dependable. To achieve the required sample for the population, the researcher employed the formula proposed by Yamane (1967).

$$n = \frac{N}{1 + (d)(d)}$$

N = 1131

n = required sample

d = 0.05

$$n = \frac{1131}{1 + 1131\ (0.05)(0.05)}$$

n = 295.4931417

Therefore, the sample size for the research was 295 respondents.

The sampling procedure for this research involved stratified random sampling, stratified based on the type of population. The target population was divided into three strata or groups, including contractors, donor organizations, and environmental

agencies. Within each stratum, participants were selected using simple random sampling to ensure representation from each group. Simple random sampling allows for a more targeted and representative sample by ensuring that participants from each category are included in the study. Sample determination was determined using proportionate random allocation as shown in Table 3.2.

Table 3.2: Sample Size Determination

	Target	Calculation	Sample Size
Contractors in the construction projects	722	722/1131*295	188
Donor organizations representatives	151	151/1131*295	40
Environmental agencies representatives	258	258/1131*295	67
Total	1131	1131/1131*295	295

3.5 Data Collection

The primary tool utilized for data collection in this study was a questionnaire, which was triangulated using document analysis. The questionnaire was structured into different sections based on the study's objectives, including both independent and dependent variables, as well as a section for collecting demographic data from all respondents. Section A of the questionnaire focused on gathering demographic data. It included questions related to age, gender, occupation, and level of education. Following the demographic section, the questionnaire was organized into parts based on the specific research's objectives. For example, Section B was dedicated to Objective 1, which focused on community involvement. Subsequent sections of the questionnaire were aligned with the other objectives of the study, such as contractor involvement, donors' engagement, participation of environmental agencies, and the dependent variable, project performance.

The questionnaire was developed for all respondents involved in the road construction projects in Nairobi City County, including contractors, donor organizations, and personnel from environmental agencies. The questionnaire was suitable for this study because it allows for efficient data collection from a large number of respondents involved in the road construction projects. The structured format with sections aligned to the objectives ensures that the relevant information is systematically collected (Surucu & Maslakci, 2020).

In addition to the questionnaire, the research conducted a thorough analysis of relevant documents, reports, and records related to road construction projects in Nairobi City County using document analysis guide. These documents included project reports, monitoring and evaluation records, contracts, and other relevant materials. Document analysis offered additional context and background information on the projects, the level of stakeholder involvement, and the overall project performance.

Data collection procedure involved several steps to ensure efficient and accurate data collection. First, before collection of data, an introductory letter was obtained from the University of Nairobi (UoN). This letter served as an official introduction from the research institution, providing credibility and legitimacy to the study. The investigator visited the road construction sites in Nairobi City County to create rapport with the participants and key stakeholders. This involved meeting with project managers, contractors, and environmental agency officials.

The purpose of field visits was to explain the study objectives, seek their cooperation, and address any concerns or questions they had. The researcher then trained two research assistants, who were recruited and trained on how to conduct collection of data. The research assistants underwent comprehensive training on the study objectives, ethical considerations, and the administration of the questionnaire. The questionnaire was administered using both online and face-to-face methods. Online administration was facilitated through Google Forms.

3.6 Operationalization of Variables

Table 3.3: Operationalization of variables

Objectives	Type of Variable	Indicators	Measurement Scale	Method of Data Collection	Instrument	Data Analysis Technique
Objective 1	Community involvement – Independent variable	Active community participation Community satisfaction of project performance Frequency and quality of feedback provided by the community	Interval	Administering questionnaires	Questionnaire	Standard deviations, frequencies, means, and percentages; correlation analysis
	Project performance – Dependent variable	Project quality Project ownership Data driven decisions	Interval	Administering questionnaires	Questionnaire	
Objective 2	Contractor involvement - Independent variable	Timeliness and accuracy of contractor's reports Degree of collaboration between contractor and KURA in the project Level of adherence to project specifications	Interval	Administering questionnaires	Questionnaire	Standard deviations, frequencies, means, and percentages; correlation analysis
Objective 3	Donors involvement - Independent variable	Financial resources Communication and coordination Alignment between donor objectives and project performance	Interval	Administering questionnaires	Questionnaire	Standard deviations, frequencies, means, and percentages; correlation analysis
Objective 4	Environmental agencies involvement- Independent variable	Compliance with environmental regulations Level of involvement of environmental agencies Measures taken to address environmental concerns	Interval	Administering questionnaires	Questionnaire	Standard deviations, frequencies, means, and percentages; correlation analysis

3.7 Data Analysis

Data was analyzed using Statistical Package for the Social Sciences (SPSS) version 27. The initial analysis involved descriptive statistics to summarize and present the demographic data, as well as the responses to the questionnaire items. Descriptive statistics such as means, percentages and frequencies were employed to give a comprehensive outline of the data and to identify any patterns or trends. Inferential statistics were also employed, specifically correlation analysis. Correlation analysis was used to examine the relationships between the independent variables and the dependent variable.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter provides the study findings and their interpretation. It begins by examining the response rate, providing insights into the demographic characteristics of the respondents through tables representation. The chapter subsequently explores the influence of PM&E on KURA road construction project performance across various dimensions. These dimensions encompass community participation in monitoring and evaluation, contractor involvement in PM&E, donors' engagement in PM&E, and the role of environmental agencies in PM&E. Quantitative data, along with document analysis, are employed to comprehensively dissect these aspects. The chapter will then provide a detailed and insightful discussion of the findings with the existing literature.

4.2 Response Rate

In the pursuit of comprehensive data for this study, an extensive outreach was made to 295 stakeholders involved in KURA road construction projects in Nairobi City County, Kenya. This involved contractors engaged in these projects, representatives from donor organizations, and environmental agencies. Table 4.1 shows the response rate within each stakeholder group, underscoring the levels of participation. Among the contractors involved in construction projects, a substantial 162 (86.2%) responded, indicating a robust involvement and interest in this research. Similarly, representatives of donor organizations exhibited a commendable response rate of 34 (85.0%). Lastly, environmental agencies' representatives demonstrated a 51 (76.1%) response rate. Collectively, these response rates culminate in an overall rate of 247 (83.7%). This response rate was considered good to warrant interpretation of the results obtained, as response rates of 75% or more are recommended in literature.

Table 4.1: Response rate

	Sample Size	Response Rate
Contractors in the construction projects	188	162 (86.2%)
Donor organizations representatives	40	34 (85.0%)
Environmental agencies representatives	67	51 (76.1%)
Total	295	247 (83.7%)

4.3 Demographic Characteristics of the Respondents

This section represents the demographic characteristics of the respondents. The characteristics of the respondents that were examined in this study included gender, age, highest level of education attained and experience as a stakeholder in construction projects. In this regard, the study first sought to obtain the gender of the study participants. As shown in Table 4.2, of the 247 participants, 141 (57.1%) were male, while 106 (42.9%) were female. These findings reveal that there was a higher representation of males among the study participants. These demographic results therefore suggest potential gender disparities within the stakeholder groups involved in KURA road construction projects in Nairobi County.

Table 4.2: Gender of Respondents

	Frequency	Percent
Male	141	57.1
Female	106	42.9
Total	247	100.0

The study examined the age distribution of the 247 respondents participating in the research. Findings reveal a diverse range of ages among the participants. The highest proportion was within the age bracket of 36 – 45 years, with 102 (41.3%) of the total respondents. This was followed by those aged 26 – 35 years, with 56 (22.7%) respondents. Meanwhile, 45 (18.2%) respondents fell between the ages of 46 – 55 years, and 22 (8.9%) respondents were above 55 years. Lastly, 22 (8.9%) respondents were below 25 years of age. These age-related findings indicate a broad representation of different age groups among the stakeholders involved in KURA road construction projects. The diversity in age groups suggests a mix of experiences, perspectives, and expertise, with majority being those in the 36 – 45 age bracket (Table 4.3).

Table 4.3: Age of Respondents

	Frequency	Percent
Below 25 years	22	8.9
26 – 35 years	56	22.7
36 – 45 years	102	41.3
46 – 55 years	45	18.2
Above 55 years	22	8.9
Total	247	100.0

The study also delved into the highest level of education attained by the 247 respondents who participated. The findings demonstrate a spectrum of educational backgrounds among the stakeholders involved in KURA road construction projects. A significant proportion, 149 (60.3%) respondents, held a degree as their highest level of education, indicating a well-educated group of participants. Additionally, 65 (26.3%) respondents had attained a master's degree, while 29 (11.7%) respondents had completed a diploma. There were 3 (1.2%) respondents who held a doctorate, and 1 (0.5%) respondent had a certificate as their highest level of education. A majority of respondents having at least a degree education background signifies a solid understanding of complex project management concepts and monitoring and evaluation techniques (Table 4.4).

Table 4.4: Highest Level of Education Attained by Respondents

	Frequency	Percent
Certificate	1	.5
Diploma	29	11.7
Degree	149	60.3
Masters	65	26.3
Doctorate	3	1.2
Total	247	100.0

The study also examined the experience levels of the 247 participants in construction projects. The findings reveal that a notable portion, 119 (48.2%), had 6-10 years of experience, making it the most prevalent category. Additionally, 63 (25.5%) participants had less than 5 years of experience, 43 (17.4%) had 11-15 years, and 22 (8.9%) had more than 15 years of experience. The findings suggest a diverse range of experience levels among the stakeholders, with the majority having between 6-10 years of experience (Table 4.5).

Table 4.5: Experience as a Stakeholder in Construction Projects

	Frequency	Percent
Less than 5 years	63	25.5
6 – 10 years	119	48.2
11 – 15 years	43	17.4
More than 15 years	22	8.9
Total	247	100.0

4.4 Influence of PM&E on KURA Road Construction Project Performances

This section presents the findings on PM&E and its multifaceted influence on the performance of KURA road construction projects. This section is subdivided into five distinct areas of investigation. The study first starts with a presentation of findings in project performance, then examines how community participation in monitoring and evaluation processes influences project performance, role of contractor involvement in participatory monitoring and evaluation, influence of donor engagement in PM&E on project outcomes and involvement of environmental agencies in these processes contributes to project performance.

4.4.1 Project Performance

The study found that a significant portion of respondents either strongly disagreed, 69 (27.9%) or disagreed, 65 (26.3%) that the road construction projects fell short of expected standards. This suggests that there are few concerns and dissatisfaction among stakeholders regarding the quality and standards of these projects. The mean for this statement indicates an overall disagreement to the statement (Mean = 2.47, Standard Deviation = 1.236). On the other hand, respondents generally expressed less satisfaction with the overall quality of the road construction projects. A noteworthy proportion either strongly disagreed, 46 (18.8%), or disagreed, 114 (46.2%), that the projects met their expected standards, indicating a low level of contentment with project quality (Mean = 2.52, Standard Deviation = 1.259).

A vast majority of respondents either agreed, 91 (36.8%), or strongly agreed, 69 (27.9%), that stakeholders felt a sense of ownership in the road construction projects. This suggests that many respondents perceived a strong sense of ownership among stakeholders (Mean = 3.93, Standard Deviation = 0.793). A substantial proportion of respondents either strongly disagreed, 89 (36.0%), or disagreed, 37 (15.0%), that stakeholders were excluded from decision-making processes. This indicates that many respondents believed that stakeholders were actively involved in decision-making processes (Mean = 2.27, Standard Deviation = 1.128).

The study found that a significant proportion either agreed, 105 (42.5%), or strongly agreed, 48 (19.4%), that all stakeholders took pride in their involvement and contributions to the road construction projects. This suggests that many respondents perceived a high level of pride among stakeholders (Mean = 3.64, Standard Deviation

= 1.018). A significant portion of respondents either strongly agreed, 76 (30.8%), or agreed, 76 (30.8%), that decisions were not consistently based on data in project management. This indicates that many respondents believed that data-based decision-making was not consistent in project management (Mean = 3.36, Standard Deviation = 1.455).

The study found that a significant proportion either agreed, 106 (42.9%), or strongly agreed, 48 (19.4%), that the performance of the road construction projects aligns with the intended objectives. This suggests that many respondents perceived alignment with project objectives (Mean = 3.45, Standard Deviation = 1.314). A significant portion of respondents either agreed, 78 (31.6%), or strongly agreed, 41 (16.6%), that the projects contribute to the overall development of the community. This indicates that many respondents believed in the positive contribution of the projects to the community (Mean = 3.38, Standard Deviation = 1.148).

The study found that a considerable proportion either agreed, 115 (46.6%), or strongly agreed, 31 (12.6%), that the projects are completed within the defined scope. This suggests that many respondents believed that projects adhered to defined scopes (Mean = 3.25, Standard Deviation = 1.266). A significant portion of respondents agreed, 76 (30.8%) that projects consistently exceeded the defined budget. This indicates that many respondents did not perceive consistent budget overruns (Mean = 2.68, Standard Deviation = 1.171).

The study found that a substantial proportion either agreed, 103 (41.7%), or strongly agreed, 26 (10.5%), that the projects are completed within the timeline. This suggests that many respondents believed that projects adhered to defined timelines (Mean = 3.39, Standard Deviation = 0.997). The study further that a significant proportion of respondents either agreed, 129 (52.2%), or strongly agreed, 39 (15.8%), that sustainable practices and technologies are not prioritized in projects. This indicates that many respondents believed that these practices and technologies were not prioritized (Mean = 3.60, Standard Deviation = 1.111).

A substantial proportion either agreed, 81 (32.8%), or strongly agreed, 34 (13.8%), that measures are in place to ensure the long-term maintenance and upkeep of the road infrastructure. This suggests that many respondents perceived the presence of such measures (Mean = 2.97, Standard Deviation = 1.463). The study found that a significant

proportion either agreed, 69 (27.9%), or strongly agreed, 27 (10.9%), that the management of road construction projects is characterized by evidence-based decision-making, considering relevant data and information. This suggests that many respondents perceived a data-driven approach in project management (Mean = 2.87, Standard Deviation = 1.336).

A substantial portion of respondents either strongly disagreed, 40.5%, or disagreed, 8.9%, that monitoring and evaluation processes have little impact on outcomes. This indicates that many respondents believed that these processes had a significant impact (Mean = 2.49, Standard Deviation = 1.358). Lastly, the composite mean and standard deviation for these statements stood at 3.08 and 0.334, respectively, indicating an overall agreement among respondents with the presented statements.The findings are shown in Table 4.6.

Table 4.6: Descriptive Statistics on Project Performance

		SD	D	N	A	SA	Mean	Std. Dev.
The road construction projects fall short of expected standards	f	69	65	55	43	15	2.47	1.236
	%	27.9%	26.3%	22.3%	17.4%	6.1%		
All stakeholders express satisfaction with the overall quality of the road construction projects	f	46	114	31	25	31	2.52	1.259
	%	18.6%	46.2%	12.6%	10.1%	12.6%		
Stakeholders feels a sense of ownership in the road construction projects	f	0	0	87	91	69	3.93	.793
	%	0.0%	0.0%	35.2%	36.8%	27.9%		
Stakeholders are excluded from decision-making processes	f	89	37	94	19	8	2.27	1.128
	%	36.0%	15.0%	38.1%	7.7%	3.2%		
All stakeholders take pride in their involvement and contributions to the road construction projects	f	8	27	59	105	48	3.64	1.018
	%	3.2%	10.9%	23.9%	42.5%	19.4%		
Decisions are not consistently based on data in project management	f	43	27	52	49	76	3.36	1.455
	%	17.4%	10.9%	21.1%	19.8%	30.8%		
The performance of the road construction projects align with the intended objectives	f	42	8	43	106	48	3.45	1.314
	%	17.0%	3.2%	17.4%	42.9%	19.4%		
The projects contribute to the overall development of the community	f	25	17	86	78	41	3.38	1.148
	%	10.1%	6.9%	34.8%	31.6%	16.6%		
The projects are completed within the defined scope	f	28	59	14	115	31	3.25	1.266
	%	11.3%	23.9%	5.7%	46.6%	12.6%		
Projects consistently exceed the defined budget	f	66	22	83	76	0	2.68	1.171
	%	26.7%	8.9%	33.6%	30.8%	0.0%		
The projects are completed within the timeline	f	8	43	67	103	26	3.39	.997
	%	3.2%	17.4%	27.1%	41.7%	10.5%		
Sustainable practices and technologies are not prioritized in projects	f	23	14	42	129	39	3.60	1.111
	%	9.3%	5.7%	17.0%	52.2%	15.8%		
Measures are in place to ensure the long-term maintenance and upkeep of the road infrastructure.	f	77	2	53	81	34	2.97	1.463
	%	31.2%	0.8%	21.5%	32.8%	13.8%		
The management of road construction projects is characterized by evidence-based decision-making, considering relevant data and information.	f	56	42	53	69	27	2.87	1.336
	%	22.7%	17.0%	21.5%	27.9%	10.9%		
Monitoring and evaluation processes have little impact on outcomes	f	100	22	29	96	0	2.49	1.358
	%	40.5%	8.9%	11.7%	38.9%	0.0%		
Composite Mean and Std. Dev.							3.08	.334

Key: SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree

4.4.2 Community Participation in Monitoring and Evaluation and Project Performance

The study found that a substantial proportion of respondents either strongly disagreed, 50 (20.2%), or disagreed, 52 (21.1%), that community members are hesitant to participate in the M&E activities of road construction projects. This suggests that many respondents believed that community members actively participated in M&E activities (Mean = 2.97, Standard Deviation = 1.270). The study also found that a considerable proportion, 94 (38.1%) disagreed, while 56 (22.7%) strongly agreed that community members proactively contribute to data collection and monitoring efforts, enhancing the effectiveness of M&E processes. This implies that many respondents perceived proactive participation in data collection (Mean = 3.42, Standard Deviation = 1.210).

A significant proportion of respondents either agreed, 74 (30.0%), or strongly agreed, 34 (13.8%), that the community members provide timely feedback on the progress of the road construction projects. This suggests that many respondents believed in the timeliness of feedback (Mean = 3.46, Standard Deviation = 0.868). The study found that a substantial proportion either strongly disagreed, 68 (27.5%), or disagreed, 68 (27.5%) that the community members are slow to provide feedback on the progress of the road construction projects. This indicates that many respondents perceived prompt feedback from the community (Mean = 2.38, Standard Deviation = 1.105).

A significant proportion either agreed, 70 (28.3%), or strongly agreed, 34 (13.8%), that there is a high level of collaboration between the community members and contractors involved in road construction projects. This suggests that many respondents perceived a high level of collaboration (Mean = 3.35, Standard Deviation = 1.032). A substantial proportion of respondents either strongly disagreed, 89 (36.0%), or disagreed, 55 (22.3%), that there is a low level of cooperation between the community members and other stakeholders. This indicates that many respondents perceived high cooperation levels (Mean = 2.12, Standard Deviation = 0.980).

The study found that a significant proportion either agreed, 89 (36.0%), or strongly agreed, 34 (13.8%), that the community members lack the ability to contribute to or influence the implementation of road construction projects. This suggests that many respondents perceived limitations in community involvement (Mean = 3.37, Standard Deviation = 1.023). However, a substantial proportion either agreed, 43 (17.4%), or

strongly agreed, 86 (34.8%), that community members feel that their needs/preferences are taken into account, leading to satisfactory project outcomes. This indicates that many respondents perceived a positive influence of community preferences (Mean = 3.75, Standard Deviation = 1.059).

The study found that a significant proportion strongly disagreed, 72 (29.1%), while others agreed, 86 (34.8%), that the community members provide valuable feedback on the progress of the road construction projects. This suggests that many respondents did not perceive limited feedback value (Mean = 3.17, Standard Deviation = 1.559). A significant proportion either disagreed, 60 (24.3%), or strongly disagreed, 45 (18.2%), that community members are excluded from discussions/decisions about project planning and execution. This implies that many respondents believed in community inclusion in discussions (Mean = 2.74, Standard Deviation = 1.184).

The study found that a substantial proportion either agreed, 95 (38.5%), or strongly agreed, 55 (22.3%), that the community's inputs/preferences significantly influence decisions made during the road construction projects. This indicates that many respondents perceived a high influence of community inputs (Mean = 3.56, Standard Deviation = 1.113). A significant proportion either strongly disagreed, 72 (29.1%), or disagreed, 45 (18.2%), that the community members feel empowered to voice their opinions, contributing to project improvements and innovations. This suggests that many respondents perceived limited empowerment of community members (Mean = 2.67, Standard Deviation = 1.295).

The study found that a significant proportion either strongly disagreed, 55 (22.3%), or disagreed, 67 (27.1%), that stakeholders neglect to support community empowerment, overlooking its potential impact on project success. This implies that many respondents believed that stakeholders did not support community empowerment (Mean = 2.57, Standard Deviation = 1.130). The composite mean for all questions is 3.04 with a standard deviation of 0.444, showing a slight overall agreement to the statements postulated to the respondents (Table 4.7).

Table 4.7: Descriptive Statistics on Community Participation in Monitoring and Evaluation

		SD	D	N	A	SA	Mean	Std. Dev.
Community members are hesitant to participate in the M&E activities of road construction projects	f	50	52	0	145	0	2.97	1.270
	%	20.2%	21.1%	0.0%	58.7%	0.0%		
Community members proactively contribute to data collection and monitoring efforts, enhancing the effectiveness of M&E processes	f	0	94	12	85	56	3.42	1.210
	%	0.0%	38.1%	4.9%	34.4%	22.7%		
The community members provide timely feedback on the progress of the road construction projects	f	0	28	111	74	34	3.46	.868
	%	0.0%	11.3%	44.9%	30.0%	13.8%		
The community members are slow to provide feedback on the progress of the road construction projects	f	68	68	60	50	1	2.38	1.105
	%	27.5%	27.5%	24.3%	20.2%	0.4%		
There is a high level of collaboration between the community members and contractors involved in road construction projects	f	17	18	108	70	34	3.35	1.032
	%	6.9%	7.3%	43.7%	28.3%	13.8%		
There is a low level of cooperation between the community members and other stakeholders	f	89	55	87	16	0	2.12	.980
	%	36.0%	22.3%	35.2%	6.5%	0.0%		
The community members lack the ability to contribute to or influence the implementation of road construction projects	f	0	66	58	89	34	3.37	1.023
	%	0.0%	26.7%	23.5%	36.0%	13.8%		
Community members feel that their needs/preferences are taken into account, leading to satisfactory project outcomes	f	0	29	89	43	86	3.75	1.059
	%	0.0%	11.7%	36.0%	17.4%	34.8%		
The community members provide valuable feedback on the progress of the road construction projects	f	72	11	23	86	55	3.17	1.559
	%	29.1%	4.5%	9.3%	34.8%	22.3%		
Community members are excluded from discussions/decisions about project planning and execution.	f	45	60	72	53	17	2.74	1.184
	%	18.2%	24.3%	29.1%	21.5%	6.9%		
The community's inputs/preferences significantly influence decisions made during the road construction projects	f	0	67	30	95	55	3.56	1.113
	%	0.0%	27.1%	12.1%	38.5%	22.3%		
The community members feel empowered to voice their opinions, contributing to project improvements and innovations.	f	72	45	23	107	0	2.67	1.295
	%	29.1%	18.2%	9.3%	43.3%	0.0%		
Stakeholders neglect to support community empowerment, overlooking its potential impact on project success	f	55	67	53	72	0	2.57	1.130
	%	22.3%	27.1%	21.5%	29.1%	0.0%		
Composite Mean and Std. Dev.							3.04	.444

Based on document analysis, the analysis of minutes from community meetings related to road construction projects revealed a significant level of community involvement and participation. Discussions often revolved around various aspects of the projects, including feedback on progress, project decisions, and community input. In addition, community meetings frequently included discussions about community involvement in project activities, feedback mechanisms, and decision-making processes. Community members actively expressed their opinions and concerns during these meetings. Further, surveys and feedback forms collected from community members consistently demonstrated their active participation and engagement. These documents often contained valuable insights, suggestions, and feedback related to the road construction projects.

The document analysis also indicated high levels of community satisfaction and engagement. Community members expressed satisfaction with the consideration of their needs and preferences in project planning and execution. They also provided valuable suggestions for project improvement. Communication plans outlined effective strategies for engaging communities in the road construction projects. These plans emphasized regular and transparent communication with community members, encouraging their active involvement. The effectiveness of communication channels and frequency was evident in the documents. Community members had access to various communication channels that facilitated their engagement in project activities. The frequency of communication, though not very consistent was responsive to community needs. Finally, the assessment of capacity-building initiatives' impact on community involvement in road construction projects showed a remarkable transformation in community participation. Before these initiatives, community engagement was limited, with minimal involvement in project activities.

The study also carried out correlation analysis between community participation in monitoring and evaluation and project performance. The findings in Table 4.8 demonstrates a strong positive relationship between project performance and community participation in monitoring and evaluation. The Pearson Correlation coefficient is 0.594, and this correlation is statistically significant ($p < 0.05$). This result suggests that as community participation in monitoring and evaluation of road construction projects increases, project performance also tends to improve.

Table 4.8: Correlation between Community Participation in Monitoring and Evaluation and Project Performance

		Project performance	Community participation in monitoring and evaluation
Project performance	Pearson Correlation	1	.594**
	Sig. (2-tailed)		.000
Community participation in monitoring and evaluation	Pearson Correlation	.594**	1
	Sig. (2-tailed)	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

4.4.3 Contractor Involvement in Participatory Monitoring and Evaluation and Project Performance

The study found that none of the respondents disagreed or strongly disagreed, and a significant proportion strongly agreed, 106 (42.9%), that the contractor provides timely reports on project milestones and performance. This suggests that most respondents perceived prompt reporting (Mean = 4.43, Standard Deviation = 0.496). A substantial proportion either disagreed, 97 (39.3%), or strongly disagreed, 77 (31.2%), that there is a lack of cooperation between the contractor and KURA in the road construction projects. This indicates that many respondents did not perceive a lack of cooperation (Mean = 2.28, Standard Deviation = 1.192).

A significant proportion either strongly agreed, 130 (52.6%), or agreed, 23 (9.3%), that the contractor follows project specifications/standards during the road construction project. This implies that most respondents believed in adherence to project standards (Mean = 3.56, Standard Deviation = 1.749). A substantial proportion either strongly disagreed 78 (31.6%) that the contractor lacks attention to workmanship and uses subpar materials in the road construction project. This suggests that many respondents did not perceive such issues (Mean = 2.37, Standard Deviation = 0.936). In addition, a significant proportion either agreed, 74 (30.0%), or strongly agreed, 56 (22.7%), that there is effective communication between the contractor and other stakeholders involved in the road construction project. This indicates that many respondents believed in effective communication (Mean = 3.75, Standard Deviation = 0.801).

A significant proportion either agreed, 75 (30.4%), or strongly agreed, 55 (22.3%), that the contractor promptly addresses any issues or challenges that arise during the road construction project. This implies that many respondents perceived prompt issue resolution (Mean = 3.57, Standard Deviation = 1.029). A significant proportion either disagreed, 107 (43.3%) while others agreed, 72 (29.1%), that the contractor's reports on project milestones and performance often contain inaccuracies. This suggests that many respondents perceived inaccuracies in reports (Mean = 2.87, Standard Deviation = 0.852). Further, a significant proportion agreed, 101 (40.9%) that the contractor consistently submits reports on project milestones and performance within the specified timeframes. This indicates that many respondents believed in consistent, timely reporting (Mean = 3.41, Standard Deviation = 0.493).

A significant proportion either agreed, 98 (39.7%), or strongly agreed, 55 (22.3%), that there is a high level of collaboration between the contractor and KURA in the road construction project. This implies that many respondents perceived a high level of collaboration (Mean = 3.84, Standard Deviation = 0.762). A substantial proportion agreed 95 (38.5%), that the contractor often falls short of meeting the required quality benchmarks, compromising project success, while 22.3% strongly disagreed. This suggests that many respondents did not perceive frequent quality issues (Mean = 2.95, Standard Deviation = 1.138).

A significant proportion either strongly disagreed, 55 (22.3%), or disagreed, 23 (9.3%), that the materials used by the contractor do not meet the required quality standards, affecting the durability of the road construction project. This indicates that many respondents did not perceive significant material quality issues (Mean = 2.76, Standard Deviation = 1.107). A significant proportion either agreed, 102 (41.3%), or strongly agreed, 52 (21.1%), that the contractor actively seeks solutions to resolve issues in a timely manner. This implies that many respondents perceived proactive issue resolution (Mean = 3.53, Standard Deviation = 1.133). The composite mean for all questions is 3.28 with a standard deviation of 0.230 (Table 4.9).

Table 4.9: Descriptive Statistics on Contractor Involvement in Participatory Monitoring and Evaluation

		SD	D	N	A	SA	Mean	Std. Dev.
The contractor provides timely reports on project milestones and performance	f	0	0	0	141	106	4.43	.496
	%	0.0%	0.0%	0.0%	57.1%	42.9%		
There is a lack of cooperation between the contractor and KURA in the road construction projects	f	77	97	0	73	0	2.28	1.192
	%	31.2%	39.3%	0.0%	29.6%	0.0%		
The contractor follows project specifications/standards during the road construction project	f	72	0	22	23	130	3.56	1.749
	%	29.1%	0.0%	8.9%	9.3%	52.6%		
The contractor lacks attention to workmanship and uses subpar materials in the road construction project	f	78	0	168	1	0	2.37	.936
	%	31.6%	0.0%	68.0%	0.4%	0.0%		
There is effective communication between the contractor and other stakeholders involved in the road construction project	f	0	0	117	74	56	3.75	.801
	%	0.0%	0.0%	47.4%	30.0%	22.7%		
The contractor promptly addresses any issues or challenges that arise during the road construction project	f	0	45	72	75	55	3.57	1.029
	%	0.0%	18.2%	29.1%	30.4%	22.3%		
The contractor's reports on project milestones and performance often contain inaccuracies	f	0	107	67	72	1	2.87	.852
	%	0.0%	43.3%	27.1%	29.1%	0.4%		
The contractor consistently submits reports on project milestones and performance within the specified timeframes.	f	0	0	146	101	0	3.41	.493
	%	0.0%	0.0%	59.1%	40.9%	0.0%		
There is a high level of collaboration between the contractor and KURA in the road construction project	f	0	0	94	98	55	3.84	.762
	%	0.0%	0.0%	38.1%	39.7%	22.3%		
The contractor often falls short of meeting the required quality benchmarks, compromising project success	f	55	0	96	95	1	2.95	1.138
	%	22.3%	0.0%	38.9%	38.5%	0.4%		
The materials used by the contractor do not meet the required quality standards, affecting the durability of the road construction project	f	55	23	96	73	0	2.76	1.107
	%	22.3%	9.3%	38.9%	29.6%	0.0%		
The contractor actively seeks solutions to resolve issues in a timely manner	f	0	75	18	102	52	3.53	1.133
	%	0.0%	30.4%	7.3%	41.3%	21.1%		
Composite Mean and Std. Dev.							3.28	.230

The documents, including reports submitted by contractors, were found to be a valuable source of information for monitoring and evaluating project milestones and progress. These reports included details on completed tasks, ongoing activities, and any potential delays or issues. The evaluation of contractor-provided reports indicated a generally positive performance regarding the accuracy, consistency, and timeliness of reporting. Contractors appeared to provide reports that were reliable, consistent in format, and submitted within specified timeframes. Reviewing communication records such as memos between KURA and contractors demonstrated a robust exchange of information. Effective communication channels were maintained to discuss project updates, resolve issues, and coordinate efforts between stakeholders.

Documents related to quality control measures revealed that contractors were actively engaged in ensuring workmanship and materials met the required standards. These measures included regular inspections, quality checks, and compliance with project specifications. The analysis of documents also highlighted that contractors generally adhered to project specifications and standards. Compliance with workmanship requirements and the use of quality materials were documented, suggesting a commitment to project quality. The examination of contractual agreements provided a comprehensive understanding of the obligations and responsibilities of contractors in the project scope.

The correlation analysis in Table 4.10 shows a very strong positive relationship between project performance and contractor involvement in participatory monitoring and evaluation. The Pearson Correlation coefficient is 0.828, and this correlation is statistically significant at the 0.05 level (2-tailed). This result indicates that as contractor involvement in participatory monitoring and evaluation of road construction projects increases, project performance also significantly improves. When contractors actively engage in monitoring and evaluation activities, the projects are much more likely to achieve better performance outcomes.

Table 4.10: Correlation between Contractor Involvement in Participatory Monitoring and Evaluation and Project Performance

		Project performance	Contractor involvement in participatory monitoring and evaluation
Project performance	Pearson Correlation	1	.828**
	Sig. (2-tailed)		.000
Contractor involvement in participatory monitoring and evaluation	Pearson Correlation	.828**	1
	Sig. (2-tailed)	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

4.4.4 Donors Engagement in Participatory Monitoring and Evaluation and Project Performance

The study found that a significant proportion agreed, 95 (38.5%), that the financial resources provided by the donors fall short of meeting the funding requirements of the road construction projects. This suggests that many respondents perceived a lack of sufficient funding (Mean = 3.49, Standard Deviation = 0.936). A substantial proportion either disagreed, 60 (24.3%), or strongly disagreed, 54 (21.9%), that the donors consistently fulfill their financial commitments, ensuring that funds are available as per the project's needs. This indicates that many respondents did not perceive consistent fulfillment (Mean = 2.60, Standard Deviation = 1.195). In addition, a significant proportion agreed, 85 (34.4%), that communication gaps exist between KURA and the donors regarding monitoring and evaluation activities. This suggests that many respondents perceived communication gaps (Mean = 3.96, Standard Deviation = 0.943).

A significant proportion either strongly disagreed, 51 (20.6%), or disagreed, 26 (10.5%), that regular exchanges of information between KURA and the donors enhance collaboration and joint decision-making in monitoring and evaluation (M&E). This implies that many respondents did not perceive enhanced collaboration (Mean = 2.96, Standard Deviation = 1.318). A substantial proportion either agreed, 78 (31.6%), or strongly agreed, 34 (13.8%), that the objectives set by the donors align with the desired

performance and outcomes of the road construction projects. This suggests that many respondents perceived alignment (Mean = 3.27, Standard Deviation = 1.123).

A significant proportion either strongly agreed, 89 (36.0%), or agreed, 53 (21.5%), that the road construction projects are strategically aligned with the donors' broader development goals and objectives. This indicates that many respondents perceive this kind of alignment (Mean = 3.80, Standard Deviation = 1.078). It was found that a significant proportion strongly disagreed, 71 (28.7%), while others agreed, 120 (48.6%), that the donors disburse funds in a timely manner, allowing for smooth implementation of the road construction projects without delays. This suggests that many respondents perceived timely fund disbursement (Mean = 3.19, Standard Deviation = 1.470).

A significant proportion either agreed, 79 (32.0%), or strongly agreed, 75 (30.4%), that delayed fund disbursement disrupts project management and resource allocation throughout the project duration. This implies that many respondents agreed to the statement (Mean = 3.58, Standard Deviation = 1.350). None of the respondents disagreed or strongly disagreed, and a significant proportion strongly agreed, 129 (52.2%), that the donors actively engage in decision-making processes related to road construction projects, contributing valuable insights and perspectives. This suggests that most respondents perceived active donor engagement (Mean = 4.14, Standard Deviation = 0.941).

None of the respondents disagreed or strongly disagreed, and a significant proportion strongly agreed, 129 (52.2%), that donors' participation in decision-making fosters a collaborative approach and a shared sense of responsibility for project success (Mean = 4.14, Standard Deviation = 0.941). A significant proportion either strongly disagreed, 55 (22.3%), or disagreed, 45 (18.2%), that donors do not offer support to overcome challenges or issues that arise during the road construction projects. This indicates that many respondents did not perceive a lack of support (Mean = 2.49, Standard Deviation = 0.971). None of the respondents disagreed or strongly disagreed, and a significant proportion strongly agreed, 101 (40.9%), that the involvement of donors in resolving challenges demonstrates their commitment to project success and sustainability (Mean = 4.41, Standard Deviation = 0.493). The composite mean for all questions was 3.50 with a standard deviation of 0.354 (Table 4.11).

Table 4.11: Descriptive Statistics on Donors Engagement in Participatory Monitoring and Evaluation

		SD	D	N	A	SA	Mean	Std. Dev.
The financial resources provided by the donors fall short of meeting the funding requirements of the road construction projects.	f	0	43	75	95	34	3.49	.936
	%	0.0%	17.4%	30.4%	38.5%	13.8%		
The donors consistently fulfil their financial commitments, ensuring that funds are available as per the project's needs.	f	54	60	89	20	24	2.60	1.195
	%	21.9%	24.3%	36.0%	8.1%	9.7%		
Communication gaps exist between KURA and the donors regarding monitoring and evaluation activities.	f	0	19	57	85	86	3.96	.943
	%	0.0%	7.7%	23.1%	34.4%	34.8%		
Regular exchanges of information between KURA and the donors enhance collaboration and joint decision-making in M&E.	f	51	26	92	38	40	2.96	1.318
	%	20.6%	10.5%	37.2%	15.4%	16.2%		
The objectives set by the donors do not align with the desired performance and outcomes of the road construction projects.	f	17	46	72	78	34	3.27	1.123
	%	6.9%	18.6%	29.1%	31.6%	13.8%		
The road construction projects are strategically aligned with the donors' broader development goals and objectives.	f	0	34	71	53	89	3.80	1.078
	%	0.0%	13.8%	28.7%	21.5%	36.0%		
The donors disburse funds in a timely manner, allowing for smooth implementation of the road construction projects without delays.	f	71	0	22	120	34	3.19	1.470
	%	28.7%	0.0%	8.9%	48.6%	13.8%		
Delayed fund disbursement disrupts project management and resource allocation throughout the project duration.	f	34	17	42	79	75	3.58	1.350
	%	13.8%	6.9%	17.0%	32.0%	30.4%		
The donors actively engage in decision-making processes related to road construction projects, contributing valuable insights and perspectives.	f	0	0	94	24	129	4.14	.941
	%	0.0%	0.0%	38.1%	9.7%	52.2%		
Donors' participation in decision-making fosters a collaborative approach and a shared sense of responsibility for project success	f	0	0	94	24	129	4.14	.941
	%	0.0%	0.0%	38.1%	9.7%	52.2%		
Donors do not offer support to overcome challenges or issues that arise during the road construction projects.	f	55	45	117	30	0	2.49	.971
	%	22.3%	18.2%	47.4%	12.1%	0.0%		
The involvement of donors in resolving challenges demonstrates their commitment to project success and sustainability.	f	0	0	0	146	101	4.41	.493
	%	0.0%	0.0%	0.0%	59.1%	40.9%		
Composite Mean and Std. Dev.							3.50	.354

The analysis of documents related to donors' engagement in participatory monitoring and evaluation revealed a clear commitment to providing funding for road construction projects. These agreements outlined the terms, conditions, and expected outcomes associated with the financial support. The evaluation of financial support agreements indicated a strong alignment between the funding provided by donors and the project requirements and objectives. Donors' support was in line with the goals of the road construction projects. The study of letters, memos and other communications exchanged with donors demonstrated active and ongoing engagement between KURA and donors. These communications served as a means of reporting project progress, discussing challenges, and seeking guidance or support when necessary.

Analysis of reports submitted to donors showed that KURA was diligent in providing updates on project progress and outcomes. These reports included details on milestones achieved, challenges faced, and the impact of donor funding. The documents highlighted a generally positive alignment between KURA's assessments and the assessments of donors regarding project progress and outcomes. This alignment suggested a shared understanding of project performance. A comparison of proposed project objectives with actual project performance indicated that, in most cases, the projects were on track to achieve the stated objectives. This alignment underscored effective project management and donor support.

Table 4.12 presents the correlation analysis results between project performance and donors' engagement in participatory monitoring and evaluation. The Pearson Correlation coefficient is 0.561, and this correlation is statistically significant at the 0.05 level (2-tailed). The analysis shows a strong positive relationship between project performance and donors' engagement in participatory monitoring and evaluation. This indicates that when donors actively participate in the monitoring and evaluation processes of road construction projects, project performance is significantly enhanced.

Table 4.12: Correlation between Donors Engagement in Participatory Monitoring And Evaluation and Project Performance

		Project performance	Donors engagement in participatory monitoring and evaluation
Project performance	Pearson Correlation	1	.561**
	Sig. (2-tailed)		.000
Donors engagement in participatory monitoring and evaluation	Pearson Correlation	.561**	1
	Sig. (2-tailed)	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

4.4.5 Environmental Agencies in Participatory Monitoring and Evaluation and Project Performance

The study determined that a significant proportion of the respondents either agreed, 118 (47.8%), or strongly agreed, 55 (22.3%), that the environmental agencies effectively enforce adherence to environmental regulations and guidelines during road construction projects. This suggests that many respondents perceived effective enforcement (Mean = 3.53, Standard Deviation = 1.287). A substantial proportion either agreed, 100 (40.5%), or strongly agreed, 66 (36.7%), that road construction projects under the oversight of environmental agencies often deviate from environmental regulations and standards. This indicates that many respondents perceived frequent deviations (Mean = 3.61, Standard Deviation = 1.257).

A substantial proportion either agreed, 109 (44.1%), or strongly agreed, 48 (19.4%), that environmental agencies show limited engagement in monitoring and evaluating the environmental impact of road construction projects. This implies that many respondents perceived limited engagement (Mean = 3.69, Standard Deviation = 1.009). A significant proportion either disagreed, 74 (30.0%), strongly disagreed, 33 (13.4%), and 70 (28.3%) agreed that environmental agencies play a significant role in decision-making processes related to environmental concerns and project sustainability. This suggests that many respondents perceived a significant role (Mean = 3.06, Standard Deviation = 1.342).

None of the respondents disagreed or strongly disagreed, and a significant proportion agreed, 81 (32.8%), that environmental agencies take prompt/appropriate measures to address any environmental concerns that arise during road construction projects. This suggests that most respondents perceived prompt actions (Mean = 3.64, Standard Deviation = 1.091). A significant proportion either agreed, 38 (15.4%), or strongly agreed, 76 (30.8%), that the actions taken by environmental agencies demonstrate their commitment to minimizing negative environmental impacts. This implies that many respondents perceived a strong commitment (Mean = 3.36, Standard Deviation = 1.402). None of the respondents disagreed or strongly disagreed, and a significant proportion agreed, 82 (33.2%), that environmental agencies maintain effective collaboration/cooperation with other stakeholders involved in road construction projects. This suggests that most respondents perceived effective collaboration (Mean = 3.62, Standard Deviation = 1.105). A significant proportion either agreed, 61 (24.7%), or strongly agreed, 47 (19.0%), that collaborative efforts between environmental agencies and stakeholders have limited impact on integrating environmental considerations into project planning. This indicates that many respondents perceived limited impact (Mean = 3.29, Standard Deviation = 1.211).

A significant proportion either agreed, 110 (44.5%), or strongly agreed, 55 (22.3%), that environmental agencies provide valuable support to implement sustainable practices in road construction projects. This suggests that many respondents perceived valuable support (Mean = 3.47, Standard Deviation = 1.379). In addition, a significant proportion either agreed, 57 (23.1%), or strongly agreed, 43 (17.4%), that the involvement of environmental agencies fosters the adoption of eco-friendly technologies and practices to enhance project sustainability. This indicates that many respondents perceived such fostering (Mean = 3.10, Standard Deviation = 1.335). A substantial proportion either disagreed, 107 (43.3%), or strongly disagreed, 117 (47.4%), that the active involvement of environmental agencies has limited contribution to the achievement of objectives set for road construction projects. This suggests that many respondents did not perceive limited contribution (Mean = 1.62, Standard Deviation = 0.663). None of the respondents disagreed or strongly disagreed, and a significant proportion strongly agreed, 129 (52.2%), that environmental agencies' engagement enhances the overall environmental performance and positive outcomes of

the road construction projects. This implies that most respondents perceived positive enhancement (Mean = 3.56, Standard Deviation = 1.747) (Table 4.13).

Table 4.13: Descriptive Statistics on Environmental Agencies in Participatory Monitoring and Evaluation

		SD	D	N	A	SA	Mean	Std. Dev.
The environmental agencies effectively enforce adherence to environmental regulations and guidelines during road construction projects.	f	22	52	0	118	55	3.53	1.287
	%	8.9%	21.1%	0.0%	47.8%	22.3%		
Road construction projects under the oversight of environmental agencies often deviate from environmental regulations and standards.	f	17	48	16	100	66	3.61	1.257
	%	6.9%	19.4%	6.5%	40.5%	26.7%		
Environmental agencies show limited engagement in monitoring and evaluating the environmental impact of road construction projects.	f	17	0	73	109	48	3.69	1.009
	%	6.9%	0.0%	29.6%	44.1%	19.4%		
Environmental agencies play a significant role in decision-making processes related to environmental concerns and project sustainability.	f	33	74	28	70	42	3.06	1.342
	%	13.4%	30.0%	11.3%	28.3%	17.0%		
Environmental agencies take prompt/appropriate measures to address any environmental concerns that arise during road construction projects.	f	0	53	48	81	65	3.64	1.091
	%	0.0%	21.5%	19.4%	32.8%	26.3%		
The actions taken by environmental agencies demonstrate their commitment to minimizing negative environmental impacts	f	37	26	70	38	76	3.36	1.402
	%	15.0%	10.5%	28.3%	15.4%	30.8%		
Environmental agencies maintain effective collaboration/cooperation with other stakeholders involved in road construction projects	f	0	57	44	82	64	3.62	1.105
	%	0.0%	23.1%	17.8%	33.2%	25.9%		
Collaborative efforts between environmental agencies and stakeholders have limited impact on integrating environmental considerations into project planning	f	25	33	81	61	47	3.29	1.211
	%	10.1%	13.4%	32.8%	24.7%	19.0%		
Environmental agencies provide valuable support to implement sustainable practices in road construction projects.	f	44	16	22	110	55	3.47	1.379
	%	17.8%	6.5%	8.9%	44.5%	22.3%		
The involvement of environmental agencies fosters the adoption of eco-friendly technologies and practices to enhance project sustainability.	f	47	24	76	57	43	3.10	1.335
	%	19.0%	9.7%	30.8%	23.1%	17.4%		
The active involvement of environmental agencies has limited contribution to the achievement of objectives set for road construction projects.	f	117	107	22	1	0	1.62	.663
	%	47.4%	43.3%	8.9%	0.4%	0.0%		
Environmental agencies' engagement enhances the overall environmental performance and positive outcomes of the road construction projects.	f	72	0	22	24	129	3.56	1.747
	%	29.1%	0.0%	8.9%	9.7%	52.2%		
Composite Mean and Std. Dev.							3.29	.445

The analysis of documents related to environmental agencies' involvement in participatory monitoring and evaluation indicated the existing reports documented the potential environmental consequences and mitigation measures. Records documenting adherence to environmental regulations showed that environmental agencies played a crucial role in ensuring compliance. These documents included evidence of inspections, compliance checks, and adherence to environmental guidelines. The evaluation of instances of non-compliance and the actions taken to address them revealed that environmental agencies were proactive in addressing violations. Timely corrective actions and measures were taken to rectify any non-compliance with environmental regulations.

The study of agreements outlining the roles and responsibilities of environmental agencies highlighted the clear delineation of duties. These agreements specified the responsibilities of both KURA and the environmental agencies in monitoring and ensuring environmental compliance. The assessment of the level of coordination and communication between environmental agencies and KURA indicated effective collaboration. Communication channels were well-established, and regular coordination efforts ensured that environmental concerns were addressed promptly. In addition, the examination of reports submitted by environmental agencies on project monitoring showed that these agencies actively monitored the environmental impact of road construction projects. The reports included data on environmental performance, compliance status, and recommended actions for improvement.

Table 4.14 displays the correlation analysis results between project performance and environmental agencies' involvement in participatory monitoring and evaluation. The Pearson Correlation coefficient is 0.483, and this correlation is statistically significant at the 0.05 level (2-tailed). The analysis indicates a positive relationship between project performance and environmental agencies' participation in monitoring and evaluation. This suggests that when environmental agencies actively engage in the monitoring and evaluation of road construction projects, project performance tends to improve.

Table 4.14: Correlation between Environmental Agencies in Participatory Monitoring and Evaluation and Project Performance

		Project performance	Environmental agencies in participatory monitoring and evaluation
Project performance	Pearson Correlation	1	.483**
	Sig. (2-tailed)		.000
Environmental agencies in participatory monitoring and evaluation	Pearson Correlation	.483**	1
	Sig. (2-tailed)	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

4.5 Discussion of Findings

4.5.1 Community Participation in Monitoring and Evaluation and Project Performance

The findings of this study on community participation in monitoring and evaluation and its influence on project performance are in line with existing studies in several respects. Research conducted by Mougiakou and Karimali (2023) and De Medici et al. (2023) in social housing projects found that active community involvement had a positive influence on project performance. These studies emphasized that involving communities in monitoring and evaluation activities enhances project effectiveness and promotes a sense of ownership among community members. Additionally, the findings of this study are consistent with those of De Medici et al. (2023) in highlighting the importance of timely feedback from the community.

The current study suggests that timely feedback from the community can lead to timely adjustments and improved project outcomes. This alignment with Setiani et al. (2023) is supported by studies that emphasize the value of real-time feedback from community members in construction projects. Furthermore, Adepoju and Obademi (2023) underscores the significance of community empowerment in project success. The study found that when community members feel empowered to voice their opinions, it contributes to project improvements and innovations. Adepoju and Obademi (2023) identified community empowerment as crucial for enhancing project performance.

However, the study found that many respondents believed that community members actively participated in monitoring and evaluation activities, which contrasts with Kuria and Wanyoike (2016), suggesting that communities might hesitate to participate due to factors like lack of awareness or limited channels for engagement. Additionally, the current study indicated that many respondents believed in community inclusion in discussions about project planning and execution. This differs with Adepoju and Obademi (2023) where community exclusion is a problem. The degree of community inclusion can vary significantly based on local dynamics and project management.

4.5.2 Contractor Involvement in Participatory Monitoring and Evaluation and Project Performance

The findings of this study concerning contractor involvement in participatory monitoring and evaluation and its impact on project performance are consistent with some aspects of the existing studies while also revealing some variations. Notably, the study highlights that most respondents perceived contractors as providing timely and reliable reports on project milestones and performance. This synchronization is supported by Bhattarai (2023) and Rahmani (2021) who both underscore the significance of accurate and timely reporting by contractors in construction projects. Contractors' ability to provide such reports can significantly contribute to effective monitoring and evaluation.

The study also found that many respondents perceived a high level of collaboration between contractors and other stakeholders involved in road construction projects. This concurs with Setiani et al. (2023), who emphasizes that successful projects often require effective collaboration among stakeholders. Effective communication and collaboration between contractors and other project participants can facilitate smooth project execution and enhance performance. However, the current research revealed that many respondents did not perceive issues related to workmanship or materials used by contractors. This differs from Bhattarai (2023) who identifies concerns regarding contractors' adherence to project specifications and standards. The variation could be attributed to differences in the studied projects or regions.

This study also indicated that contractors actively seek solutions to resolve issues in a timely manner, which is aligned with Ishtiaque et al. (2022) emphasis on the importance of prompt issue resolution. However, some scholars highlight instances where

contractors face challenges in meeting reporting deadlines and ensuring the accuracy of the information provided (Bhattarai, 2023; Rahmani, 2021). This indicates that while prompt issue resolution is important, challenges in reporting accuracy are a concern in some cases.

4.5.3 Donors Engagement in Participatory Monitoring and Evaluation and Project Performance

The findings of this study on donors' engagement in participatory monitoring and evaluation and its impact on project performance are in line the existing studies. For instance, the study found that many respondents perceived insufficient funding for road construction projects, which corresponds with the findings of Jimmy-Akinpitan (2023) highlighting the role of adequate funding in project success. The study also revealed that some respondents did not perceive consistent fulfillment of financial commitments by donors. In contrast, Jimmy-Akinpitan (2023) discusses challenges related to the timing and amount of funding provided by donors, which can hinder project implementation.

Moreover, the present study underscores that communication gaps exist between KURA and donors regarding monitoring and evaluation activities. This finding aligns with Hofisi and Chizimba (2013) who identified issues related to communication and coordination between project staff and donors' M&E activities. Effective communication and coordination mechanisms are crucial to ensure timely and adequate financial support, as also noted by Jimmy-Akinpitan (2023).

However, there are areas of divergence. The current study found that many respondents did not perceive regular exchanges of information between KURA and donors enhancing collaboration and joint decision-making in M&E. In contrast, Hofisi and Chizimba (2013) found the challenges in communication and coordination between project staff and donors' M&E activities. Regarding alignment between donors' objectives and project outcomes, the current study aligns with Ahsan and Kumar (2018) who acknowledges the challenges in achieving complete alignment. Factors such as changes in project scope and varying stakeholder interests were identified in both the current study and Ahsan and Kumar (2018) as influencing the degree of alignment.

The current study also emphasizes the strategic alignment of road construction projects with donors' broader development goals and objectives. This aligns with Kimweli

(2013) who recognizes the role of donors in providing not only financial resources but also technical expertise and project management support. However, the present study found some challenges related to bureaucracy and differing priorities between bilateral aid agencies and project implementers, which was not explicitly mentioned in Kimweli (2013) study. The strong positive relationship between project performance and donors' engagement in participatory monitoring and evaluation, as indicated by the correlation analysis, is supported by Kuria and Wanyoike (2016) suggesting that effective donor involvement can positively impact community participation and project sustainability.

4.5.4 Environmental Agencies in Participatory Monitoring and Evaluation and Project Performance

The findings of the study on the role of environmental agencies in participatory monitoring and evaluation and its influence on project performance indicate that the respondents perceived the effectiveness of environmental agencies in enforcing adherence to environmental regulations and guidelines during road construction projects. This aligns with Kihuha (2018) and Kissi et al. (2019) who both emphasize the crucial role of environmental agencies in ensuring compliance with environmental regulations and guidelines. However, the study also found that many respondents perceived frequent deviations from environmental regulations and standards in road construction projects under the oversight of environmental agencies. This presents a divergence from Kihuha (2018) and Kissi et al. (2019), who emphasize the importance of environmental agencies in enforcing compliance.

The current study also indicates that many respondents perceived limited engagement of environmental agencies in monitoring and evaluating the environmental impact of road construction projects. This is contrary to Kihuha (2018) who stresses the active role of environmental agencies in conducting environmental assessments and monitoring compliance. A significant proportion of respondents perceived a significant role for environmental agencies in decision-making processes related to environmental concerns and project sustainability. In contrast, Callistus and Clinton (2018) identifies challenges related to limited resources and capacity constraints within environmental agencies that affect their effectiveness. These constraints may hinder their active involvement in decision-making processes.

Regarding the promptness of actions taken by environmental agencies to address environmental concerns, the current study aligns with the findings of Kissi et al. (2019) in suggesting that environmental agencies are proactive in addressing violations and taking corrective actions. The perception of a strong commitment by environmental agencies to minimizing negative environmental impacts corresponds with the authors' emphasis on the role of environmental agencies in providing guidance on mitigating adverse environmental impacts. The current study also indicates that most respondents perceived effective collaboration and cooperation between environmental agencies and other stakeholders involved in road construction projects. This corresponds with Kissi et al. (2019) recognition of the essential role of environmental agencies in promoting sustainable practices and environmental sustainability in construction projects.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a comprehensive summary of the research findings and extracts meaningful conclusions from the analyzed data. It begins with a brief overview of the key findings derived from the research analysis. Subsequently, the chapter provides clear and concise conclusions drawn from the research, offering practical recommendations for future actions. Furthermore, it identifies areas for additional research to enhance the current understanding of the topic and address any remaining questions or gaps in knowledge.

5.2 Summary of Findings

5.2.1 Community Participation in Monitoring and Evaluation and Project Performance

The study's findings regarding community participation in monitoring and evaluating KURA road construction projects in Nairobi City County indicate that community members actively engage in these activities. Respondents largely agreed that community members are not hesitant to participate and proactively contribute to data collection and monitoring, which enhances the effectiveness of the processes. They also believe that the community provides timely feedback on project progress, and there is a high level of collaboration with contractors. Additionally, the study found that community inputs significantly influence project decisions and that community members feel their needs and preferences are taken into account. Furthermore, the study revealed a strong and statistically significant positive relationship between community participation in monitoring and evaluation and project performance. As community participation increases, project performance tends to improve, underscoring the importance of involving communities in road construction projects for better outcomes.

5.2.2 Contractor Involvement in Participatory Monitoring and Evaluation and Project Performance

The findings regarding contractor involvement in participatory monitoring and evaluation for KURA road construction projects in Nairobi City County show that contractors are actively engaged in these activities. Respondents strongly agreed that

contractors provide timely and accurate reports on project milestones and performance, demonstrating a high level of professionalism. The study also revealed that there is a high level of cooperation between the contractors and KURA, which contributes to effective project communication. Most respondents believe that contractors follow project specifications and standards, ensuring quality workmanship and materials. This commitment to quality is reflected in the high level of collaboration between contractors and KURA. In fact, there is a very strong and statistically significant positive relationship between contractor involvement in participatory monitoring and evaluation and project performance. As contractors actively participate in these activities, project performance significantly improves, highlighting the pivotal role of contractors in achieving successful project outcomes.

5.2.3 Donors Engagement in Participatory Monitoring and Evaluation and Project Performance

The study on donors' engagement in participatory monitoring and evaluation for KURA road construction projects revealed several significant findings. Respondents expressed concerns about the adequacy of financial resources provided by donors, citing a lack of sufficient funding and inconsistent fulfillment of financial commitments. Communication gaps between KURA and donors were identified as a potential hindrance to effective collaboration and information exchange. However, respondents recognized the alignment of road construction projects with donors' broader development goals. Concerns were raised about the timely disbursement of funds and its impact on project management and resource allocation. Nevertheless, donors were perceived as actively engaged in decision-making processes, fostering a collaborative approach and shared responsibility for project success. Respondents generally disagreed with the notion that donors do not offer support to overcome project challenges, emphasizing their commitment to project success and sustainability. Correlation analysis revealed a strong positive relationship between donors' engagement in monitoring and evaluation and project performance, highlighting the significance of donor involvement in achieving successful project outcomes.

5.2.4 Environmental Agencies in Participatory Monitoring and Evaluation and Project Performance

The study on environmental agencies' participation in participatory monitoring and evaluation of KURA road construction projects unveiled several significant findings. Respondents generally acknowledged the effectiveness of environmental agencies in enforcing environmental regulations, but they also expressed concerns about frequent deviations from these standards in road construction projects under environmental agency oversight. Limited engagement of environmental agencies in monitoring and evaluating environmental impacts was perceived, and their role in decision-making related to environmental concerns was questioned by many respondents. However, they recognized prompt actions taken by environmental agencies to address environmental concerns and considered these actions as demonstrating a commitment to minimizing negative environmental impacts. Yet, respondents believed that environmental agencies played a significant role in ensuring sustainable practices in road construction and fostering the adoption of eco-friendly technologies. Correlation analysis revealed a positive relationship between environmental agencies' involvement in monitoring and evaluation and project performance, indicating the significance of their participation in achieving better project outcomes.

5.3 Conclusions of the Study

5.3.1 Community Participation in Monitoring and Evaluation and Project Performance

The study concludes that community participation in monitoring and evaluating KURA road construction projects in Nairobi City County is robust. Community members provide valuable contributions and timely feedback. Notably, there is a strong and statistically significant positive relationship between community participation and project performance, underscoring the vital role of community involvement for project success.

5.3.2 Contractor Involvement in Participatory Monitoring and Evaluation and Project Performance

The study also concludes that contractors play a pivotal role in ensuring the success of KURA road construction projects in Nairobi City County. They consistently provide

accurate reports, follow project specifications, and maintain high-quality standards. The strong cooperation between contractors and KURA significantly contributes to effective project communication and successful outcomes. The study demonstrates a very strong and statistically significant positive relationship between contractor involvement and project performance.

5.3.3 Donors Engagement in Participatory Monitoring and Evaluation and Project Performance

The study concludes that donors' engagement in monitoring and evaluation of road construction projects is multifaceted. While concerns regarding the adequacy of financial resources and communication gaps exist, the alignment of projects with donors' development goals and active donor involvement in decision-making are positive aspects. Notably, the study reveals a strong and statistically significant positive relationship between donors' engagement and project performance, emphasizing the significance of donor participation in achieving project success.

5.3.4 Environmental Agencies in Participatory Monitoring and Evaluation and Project Performance

The study concludes that the involvement of environmental agencies in monitoring and evaluating road construction projects is crucial for ensuring adherence to environmental regulations and minimizing negative environmental impacts. While challenges related to deviations from standards and limited engagement exist, the prompt actions taken by environmental agencies and their commitment to sustainability are notable. The study confirms a positive relationship between environmental agency involvement and project performance, highlighting the importance of their participation in achieving better project outcomes.

5.4 Recommendations

Based on the conclusions of the study, the study recommends the following:

i. Establishing ongoing communication channels and feedback mechanisms is crucial. These include community meetings, digital platforms, and suggestion boxes that empower community members to provide timely feedback. Additionally, providing training and capacity-building programs to enhance the community's understanding of monitoring and evaluation processes is essential. This investment can lead to

more informed and constructive contributions from the community. To further strengthen community influence, there is need to include community representatives or liaisons in project decision-making processes, ensuring that their voices are consistently heard and considered.

ii. The study also recommends standardized reporting procedures and formats to ensure that project performance is well-documented and consistently tracked. Promoting knowledge sharing and best practices among contractors can further enhance the quality of workmanship and the adherence to project specifications. Also, strengthening the cooperation between contractors and KURA is vital. Regular meetings, collaboration initiatives, and an open dialogue can facilitate an even more productive partnership.

iii. The study recommends exploring diversified funding sources and financial models is essential. This will ensure that the funding requirements of road construction projects are consistently met. Improved communication and information exchange channels between KURA and donors are equally important. This can enhance collaboration and lead to greater consistency in fulfilling financial commitments. Maintaining and strengthening the alignment of projects with donors' broader development goals and objectives is crucial. Encouraging donors to actively participate in decision-making processes is also recommended, fostering a collaborative approach that enhances overall project success.

iv. The study finally recommends joint training programs and the establishment of clearer guidelines. Moreover, enhancing the engagement of environmental agencies in monitoring and evaluating environmental impacts should be a priority. This can be achieved by elevating their role in these aspects and acknowledging their prompt actions and support for eco-friendly practices. To foster closer cooperation between environmental agencies and other stakeholders, more integration of environmental considerations into project planning and execution is needed. This can be achieved through regular meetings, collaboration initiatives, and the sharing of best practices.

5.5 Suggestions for Further Studies

i. Future research in the field of participatory monitoring and evaluation of road construction projects should consider conducting longitudinal studies to assess

the enduring impact of community engagement, contractor involvement, donor engagement, and environmental agency participation.

ii. Comparative analyses across diverse regions and countries can provide valuable insights into contextual variations and best practices.

iii. Qualitative research methodologies, such as in-depth interviews and focus group discussions, can help delve deeper into the motivations and experiences of key stakeholders.

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APPENDICES

Appendix 1: Letter of Introduction

Dear Participant,

RE: REQUEST FOR PARTICIPATION IN RESEARCH STUDY

I am writing to introduce myself as a researcher and to seek your participation in a study titled "PARTICIPATORY MONITORING AND EVALUATION AND PROJECT PERFORMANCE: A CASE OF KENYA URBAN ROADS AUTHORITY." I am currently a student pursuing a master's degree at the University of Nairobi, and this research forms an integral part of my academic requirements.

As an important stakeholder involved in road construction projects, your insights and experiences are invaluable in contributing to the success of this study. Your participation will involve completing a questionnaire that explores your perspectives and experiences regarding PM&E in road construction projects. The questionnaire will cover various aspects, including community involvement, contractor engagement, donor participation, and environmental agency collaboration. Your responses will be treated with the utmost confidentiality.

Your participation will be greatly appreciated, and your insights will make a significant contribution to the success of this research.

Sincerely,

DENNIS OLOO

Appendix 2: Questionnaire for Contractors, Donors and Environmental Agencies

Instructions

This survey would take you 10-20minutes to complete. Kindly read through the questions and answer by either marking with a √ or with an X in the check boxes provided, i.e. marking [X] or [√].

1. What is your gender?
    a. Male [ ]
    b. Female [ ]

2. What is your age bracket?
    a. Below 25 years [ ]
    b. 26 – 35 years [ ]
    c. 36 – 45 years [ ]
    d. 46 – 55 years [ ]
    e. Above 55 years [ ]

3. What is your highest level of education?
    a. Certificate [ ]
    b. Diploma [ ]
    c. Degree [ ]
    d. Masters [ ]
    e. Doctorate [ ]

4. Type of respondent
    a. Contractors in the construction projects [ ]
    b. Donor organization representative [ ]
    c. Environmental agency representative [ ]

5. Experience as a stakeholder in construction projects
    a. Less than 5 years [ ]
    b. 6 – 10 years [ ]
    c. 11 – 15 years [ ]
    d. More than 15 years [ ]

Section B: Project performance

To what extent do you agree with the following aspects of project performance? Use a scale of SD - Strongly Disagree; D - Disagree; N - Neutral; A- Agree; SA - Strongly Agree

		SD	D	N	A	SA
1	The road construction projects fall short of expected standards					
2	All stakeholders express satisfaction with the overall quality of the road construction projects					
3	Stakeholders feels a sense of ownership in the road construction projects					
4	Stakeholders are excluded from decision-making processes					
5	All stakeholders take pride in their involvement and contributions to the road construction projects					
6	Decisions are not consistently based on data in project management					
7	The performance of the road construction projects align with the intended objectives					
8	The projects contribute to the overall development of the community					
9	The projects are completed within the defined scope					
10	Projects consistently exceed the defined budget					
11	The projects are completed within the timeline					
12	Sustainable practices and technologies are not prioritized in projects					
13	Measures are in place to ensure the long-term maintenance and upkeep of the road infrastructure.					
14	The management of road construction projects is characterized by evidence-based decision-making, considering relevant data and information.					
15	Monitoring and evaluation processes have little impact on outcomes					

Section C: Community participation in monitoring and evaluation

To what extent do you agree with the following aspects of community involvement?

Community involvement		SD	D	N	A	SA
1	Community members are hesitant to participate in the M&E activities of road construction projects					
2	Community members proactively contribute to data collection and monitoring efforts, enhancing the effectiveness of M&E processes					
3	The community members provide timely feedback on the progress of the road construction projects					
4	The community members are slow to provide feedback on the progress of the road construction projects					
5	There is a high level of collaboration between the community members and contractors involved in road construction projects					
6	There is a high level of cooperation between the community members and other stakeholders					
7	The community members lack the ability to contribute to or influence the implementation of road construction projects					
8	Community members feel that their needs/preferences are taken into account, leading to satisfactory project outcomes					
9	The community members provide valuable feedback on the progress of the road construction projects					
10	Community members are excluded from discussions/decisions about project planning and execution.					
11	The community's inputs/preferences significantly influence decisions made during the road construction projects					
12	The community members feel empowered to voice their opinions, contributing to project improvements and innovations.					
13	Stakeholders neglect to support community empowerment, overlooking its potential impact on project success					

Section D: Contractor involvement in participatory monitoring and evaluation

To what extent do you agree with the following aspects of contractor involvement?

		SD	D	N	A	SA
1	The contractor provides timely reports on project milestones and performance					
2	There is a lack of cooperation between the contractor and KURA in the road construction projects					
3	The contractor follows project specifications/standards during the road construction project					
4	The contractor lacks attention to workmanship and uses subpar materials in the road construction project					
5	There is effective communication between the contractor and other stakeholders involved in the road construction project					
6	The contractor promptly addresses any issues or challenges that arise during the road construction project					
7	The contractor's reports on project milestones and performance often contain inaccuracies					
8	The contractor consistently submits reports on project milestones and performance within the specified timeframes.					
9	There is a high level of collaboration between the contractor and KURA in the road construction project					
10	The contractor often falls short of meeting the required quality benchmarks, compromising project success					
11	The materials used by the contractor do not meet the required quality standards, affecting the durability of the road construction project					
12	The contractor actively seeks solutions to resolve issues in a timely manner					

Section E: Donors engagement in participatory monitoring and evaluation

To what extent do you agree with the following aspects of donors involvement?

		SD	D	N	A	SA
1	The financial resources provided by the donors fall short of meeting the funding requirements of the road construction projects.					
2	The donors consistently fulfil their financial commitments, ensuring that funds are available as per the project's needs.					
3	Communication gaps exist between KURA and the donors regarding monitoring and evaluation activities.					
4	Regular exchanges of information between KURA and the donors enhance collaboration and joint decision-making in M&E.					
5	The objectives set by the donors do not align with the desired performance and outcomes of the road construction projects.					
6	The road construction projects are strategically aligned with the donors' broader development goals and objectives.					
7	The donors disburse funds in a timely manner, allowing for smooth implementation of the road construction projects without delays.					
8	Delayed fund disbursement disrupts project management and resource allocation throughout the project duration.					
9	The donors actively engage in decision-making processes related to road construction projects, contributing valuable insights and perspectives.					
10	Donors' participation in decision-making fosters a collaborative approach and a shared sense of responsibility for project success					
11	Donors do not offer support to overcome challenges or issues that arise during the road construction projects.					
12	The involvement of donors in resolving challenges demonstrates their commitment to project success and sustainability.					

Section F: Environmental agencies in participatory monitoring and evaluation

To what extent do you agree with the following aspects of environmental agencies involvement?

		SD	D	N	A	SA
1	The environmental agencies effectively enforce adherence to environmental regulations and guidelines during road construction projects.					
2	Road construction projects under the oversight of environmental agencies often deviate from environmental regulations and standards.					
3	Environmental agencies show limited engagement in monitoring and evaluating the environmental impact of road construction projects.					
4	Environmental agencies play a significant role in decision-making processes related to environmental concerns and project sustainability.					
5	Environmental agencies take prompt/appropriate measures to address any environmental concerns that arise during road construction projects.					
6	The actions taken by environmental agencies demonstrate their commitment to minimizing negative environmental impacts					
7	Environmental agencies maintain effective collaboration/cooperation with other stakeholders involved in road construction projects					
8	Collaborative efforts between environmental agencies and stakeholders have limited impact on integrating environmental considerations into project planning					
9	Environmental agencies provide valuable support to implement sustainable practices in road construction projects.					
10	The involvement of environmental agencies fosters the adoption of eco-friendly technologies and practices to enhance project sustainability.					
11	The active involvement of environmental agencies has limited contribution to the achievement of objectives set for road construction projects.					
12	Environmental agencies' engagement enhances the overall environmental performance and positive outcomes of the road construction projects.					

Thank you for your response.

Appendix 3: Document Analysis Guide

Community Participation in Monitoring and Evaluation

- Review minutes from community meetings related to road construction projects.
- Identify discussions about community involvement, feedback, and decision-making.
- Analyze surveys and feedback forms collected from community members.
- Look for indications of community satisfaction, engagement, and suggestions.
- Examine communication plans outlining strategies for engaging communities.
- Evaluate the effectiveness of communication channels and frequency.
- Assess the impact of capacity-building initiatives on community involvement.

Contractor Involvement in Participatory Monitoring and Evaluation

- Analyze contractor-provided reports on project milestones and progress.
- Evaluate the accuracy, consistency, and timeliness of reporting.
- Review communication records (emails, memos, etc.) between KURA and contractors.
- Examine documents related to quality control measures taken by contractors.
- Assess adherence to project specifications, standards, and workmanship.
- Analyze contractual agreements to understand contractors' obligations.
- Compare planned timelines with actual progress to identify delays or deviations.

Donors Engagement in Participatory Monitoring and Evaluation

- Review agreements detailing financial support from donors.
- Evaluate the alignment of funding with project requirements and objectives.
- Study letters, emails, or other communications exchanged with donors.
- Analyze reports submitted to donors on project progress and outcomes.

- Identify areas of alignment or discrepancies between KURA's and donors' assessments.
- Compare proposed objectives with actual project performance.

Environmental Agencies Involvement in Participatory Monitoring and Evaluation

- Review reports assessing the environmental impact of road construction projects.
- Analyze records documenting adherence to environmental regulations.
- Evaluate instances of non-compliance and actions taken to address them.
- Study agreements outlining the roles and responsibilities of environmental agencies.
- Assess the level of coordination and communication between agencies and KURA.
- Examine reports submitted by environmental agencies on project monitoring.