



STAKEHOLDERS IDENTIFICATION AND IMPLEMENTATION OF ROAD INFRASTRUCTURE PROJECTS IN NAIROBI CITY COUNTY, KENYA

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Abstract

The construction industry is pivotal in realizing this vision, particularly road infrastructure development. Nairobi City County as the capital city experiences an influx of road projects to support its growth and development yet these projects often face challenges such as delays, cost overruns, and abandonment, which hinder the efficient realization of Kenya's development goals. Limited empirical evidence exists on the impact of stakeholder engagement on road project implementation in Nairobi City County, particularly regarding specific indicators and relevant theoretical frameworks. This study focused on how stakeholder identification affects the execution of road projects in Nairobi City County. The study utilized Stakeholder Theory as its primary theoretical framework. Using a descriptive design, data was collected from a proportionate stratified sample 224 participants from the 39 ongoing road construction projects within Nairobi City County was analyzed. This sample represented a population of 511 individuals including project managers, site engineers, community representatives, quantity surveyors, project engineers, material suppliers, contractors and subcontractors, project consultants, environmentalists, resident engineers, sociologists among others. Semi-structured

questionnaires were used to gather data, and inferential statistics and descriptive statistics were used for analysis. The results indicated that stakeholder identification significantly influences the success of roads project implementation. The study recommended the need sustain elaborate mechanisms for understanding specific stakeholder needs and interests including conducting objective analysis of the diverse stakeholder groups. It also underscored the role of technology in augmenting effective and efficient communication with the stakeholders while empowering them to bolster their contributions towards project success. The study also suggests further research replication in other city counties in Kenya to check for significant differences if any. Future studies could expand the geographical scope to include the entire Nairobi Metropolitan area which accounts for vast road networks that are interconnected to the city. Researchers may consider conducting comparative studies on the roads project implementation between projects commissioned by KURA and KERRA.

Keywords: Stakeholder, Stakeholder Engagement, Stakeholder Identification, Roads Infrastructure, Project Implementation

INTRODUCTION

Background of the Study

Both industrialized and developing countries profit greatly from road development projects, albeit the precise advantages may vary depending on the country. According to Soja et al. (2015), a high standard of living and economic efficiency in industrialized economies depend on well-maintained road infrastructure. Trade, business, and access to necessary services are all facilitated by effective transportation networks, which make it easier for people and commodities to travel freely. Upgraded roads reduce transportation costs and times, benefiting businesses and consumers alike. Additionally, well-planned road projects can contribute to urban renewal and regional development by connecting previously isolated areas and promoting economic activity.

There is a growing emphasis on collaborative engagement with various stakeholders in planning and delivery of sustainable infrastructure development projects. In the United states of America (USA), various methods of stakeholder engagement have enormous influence on the organizational outcomes, enhances accountability, reduces conflict and ensures the interests and expectations of the stakeholders are considered in key decision-making (Lucien & Amolo, 2025). In the United Kingdom (UK), public-private partnerships have been used for advancing multi-stakeholder engagement for privatization and implementation of infrastructure projects (Adetola, Goulding, & Liyanage, 2011). According to Widianingrum (2018) infrastructure needs

in Indonesia have been necessitated by increasing economic growth. Satisfying the infrastructure need requires active support and commitment from various stakeholders and enhanced by effective communication and proper management of stakeholder relationships.

Inadequate infrastructure development in Sub-Saharan Africa, however, has been characterised by few public-private-partnerships on transport resulting in slow infrastructure development in the continent, curtailed the entrepreneurial productivity and high business costs (Oguzie, Nwakanma, Ogbonna, & Udunwa, 2019). These concerns have necessitated stakeholder engagement through public-private sector collaboration in implementing infrastructure projects for sustainable development (Adetola, et. al, 2011). Successful implementation of transport infrastructure projects in rural areas in Nigeria has been attributed to effective stakeholder identification, engagement and proper management of stakeholder relations (Oguzie et. al, 2019). In Rwanda, Lucien and Amolo (2025) note a remarkable growth in construction project performance due to increased stakeholder engagement in project policy, planning, decision-making and project management. Whereas majority of the road construction projects in Kenya take longer than expected to complete with above budget costs, engaging various stakeholders from the onset through the project lifecycle significantly enhances implementation and successful infrastructure development (Ondiek, 2023). Involving the stakeholders from the start of every project, throughout the project implementation, oversight, monitoring and quality control helps eliminate obstacles, delays and budget overrun.

New roads connect rural communities to markets, healthcare facilities, and educational institutions, empowering them to participate more actively in the national economy. Improved transportation infrastructure unlocks agricultural potential by facilitating the movement of crops to markets, reduces post-harvest losses, and increases overall agricultural productivity. Road construction also creates employment opportunities during construction phases and fosters the development of related sectors like logistics and transportation services. By enhancing connectivity and economic activity, effective and efficient road construction projects pave the way for a brighter future in developing nations and improving economic activity (Adelowokan, Ajayi, Maku & Adesanya, 2019).

Involving stakeholders at every stage of a road project can significantly boost its success. Project teams can detect possible risks, foresee difficulties, and create efficient mitigation plans by incorporating stakeholders. Transparency and accountability are promoted through effective engagement, which encourages cooperation between public and private sectors, local communities, and other stakeholders. According to Freeman, Kujala, Sachs, and Stutz (2017) study, stakeholder engagement in road projects helps identify potential risks and challenges early on, facilitating proactive problem-solving and decision-making. This proactive approach minimizes project delays,

cost overruns, and conflicts, ultimately leading to smoother project implementation and improved outcomes for all involved parties. Stakeholder engagement is not only essential for the successful implementation of road infrastructure projects but also critical for fostering social cohesion, environmental sustainability, and economic development.

Road Project Implementation

Project implementation entails various procedures undertaken by organizations to organize change process and achieve the requisite compliance by utilizing available resources while involving the relevant stakeholders in executing and monitoring development projects (Maina, 2022). According to Kirui and Kitheka (2023), project implementation entails successful accomplishment of the project within its budget, scheduled time, and quality in terms of conformance to the technical and functional specifications. Implementation also covers the project completion time, cost, the quality delivered, safety, benefits and profitability. Moreover, project implementation is also conceptualized in terms of the product success towards satisfying the project goal, purpose and the project's stakeholders. Road infrastructure projects offer immense potential for economic growth and societal development. However, their successful implementation is hindered by various challenges including delays, cost overruns, and suboptimal outcomes. Several African countries, including Uganda, Kenya, South Africa, Botswana, and Nigeria, have experienced these issues. In Nigeria, inadequate budgeting, staffing, and inefficient resource allocation contribute to project delays and performance difficulties (Amusan, Dosunmu & Joshua, 2017). In Uganda, poor project management, poor stakeholder communication, lack of proper risk assessment, and resource mismanagement cause unnecessary project delays and cost overruns (Alinaitwe, Apolot, & Tindiwensi, 2013).

Kenya's road infrastructure sector faces substantial financial challenges, exacerbated by a lack of transparency in government procurement processes and prolonged project timelines (World Bank, 2020). These factors hinder private sector participation and delay project initiation. Skill mismatch in project management is a prevalent issue in many African nations, such as Botswana and South Africa (Mukuka, Aigbavboa & Thwala in 2015). This necessitates robust training programs and targeted recruitment strategies to develop a competent workforce. Despite significant investments in road infrastructure, Kenya's progress has been slower compared to South Africa and Singapore (Densford, James, and Ngugi, 2018). This highlights the need for a more strategic approach to project implementation, incorporating global best practices. Successful implementation of road infrastructure projects requires a holistic understanding of the factors that influence effective completion of construction projects and achieving project goals within defined timelines, budget and quality standards. It depends on

effective stakeholder involvement, cultivating close partnerships with all stakeholders including communities, contractors, government entities, and other pertinent parties. Risks can be reduced, disputes can be avoided, and project success enhanced by addressing stakeholder concerns, managing their expectations, and actively involving them in decision-making process. This study aims to examine how stakeholder engagement influences the implementation of road infrastructure projects in Nairobi City County, Kenya. It examines the experiences and challenges faced by various stakeholders, it will identify best practices and recommendations for enhancing stakeholder engagement and project outcomes.

Road Sector in Nairobi City County

Kenya aims to become an industrialized, middle-income nation by 2030. The roads infrastructure sector supports economic and social development of the country and significantly relies on road transport for cargo and passengers. The management and development of the roads sector is well defined in roads Act, 2007 which forms the basis for establishment and functioning of various road agencies (Mose, 2022). The agencies include: Kenya National Highways Authority (KENHA) which develops and maintains national highways; Kenya Urban Roads Authority (KURA) which develops and maintains roads in cities and urban areas in Kenya; Kenya Rural Roads Authority (KERRA) – maintains and develops rural roads in the country; Kenya Roads Board (KRB); National Transport and Safety Authority (NTSA) among others. Other players in the sector both local and international contractors, devolved government units, the private sector, development partners and the general public. With about 246,757 Km of all the road networks in the country, the national government is directly responsible for maintaining about 44,021 Km of the national trunk roads while the county governments maintain 118,034 Km of the county roads. Major roads infrastructure in Nairobi include the Thika superhighway, 27-Km expressway, Eastern bypass, Southern bypass, Nairobi-Nakuru-Mau summit highway among others (International Trade Administration, 2024).

The roads sector attracts colossal amounts of budgetary allocation through the ministry of transport towards infrastructure development and maintenance (Eshitera, Esho, & Njoroge, 2024). With a total road network of 2,968 Km, the County Government of Nairobi (2019) maintains 1,331.1 Km paved with bitumen, 1,133.6 Km having a ground surface, and 504.1 Km being gravel roads. Despite the notable increase in budgetary allocations for road projects since the financial year 2018/19 to-date, persistent challenges within the sector remain unaddressed. These projects are implemented by both local and international contractors. The local contractors make up more than 90% of Kenya's contracting industry and are mostly small and medium-sized enterprises (SMEs). These SMEs often struggle with rigorous roads standards

and design specifications, high project costs, and gaps in technical expertise limiting their effectiveness (Hassan and Guyo, 2017). To align with Vision 2030's objectives of sustainable development and improved living standards for all citizens, this study analyses both the obstacles and opportunities within Nairobi's road infrastructure to pinpoint how stakeholder engagement can enhance project execution.

Statement of the Problem

Nairobi City County, Kenya faces a critical challenge in effectively implementing road infrastructure projects. Despite significant investments and the strategic importance of these projects for economic growth and urban development, persistent delays, cost overruns, and project abandonment remain prevalent. According to the Kenya National Bureau of Statistics (KNBS, 2019), about 6,582 road building projects nationwide experience delays of about 6.7 months beyond the anticipated completion dates. Nairobi City County reflects this pattern, with 39 ongoing and 10 completed road projects managed by both local and international contractors. A notable instance of project delays and budget overruns is the Thika Superhighway, a major initiative undertaken by Chinese contractors. Despite their expertise, the project suffered considerable delays and cost surge from an initial budget of Kshs 26.44 billion, which eventually escalated to Kshs 34.45 billion, with the completion timeline extended from July 2011 to July 2013 (World Bank, 2014). Although earlier research has looked at a number of different facets of Kenya's construction sector (Gituro and Mwawasi, 2017; Ronoh, 2020), a crucial gap exists in understanding how stakeholder identification specifically impacts the implementation of road projects within the unique context of Nairobi City County. This knowledge gap has profound implications; substantial economic losses, high transportation costs, reduced business productivity, social disruptions, such as heightened traffic congestion and a decline in the quality of life for residents. Lack of evidence on how stakeholder identification influences road infrastructure points to insufficient understanding of stakeholder dynamics, further exacerbating the difficulties in road project implementation. By investigating the relationship between stakeholder identification and implementation of ongoing road infrastructure projects in Nairobi City County, this study aims to close this knowledge gap. The research aims to develop evidence-based strategies for enhancing participatory roads infrastructure project implementation and to provide insights for policy choices for better road infrastructure development in Kenya.

Research Objective

Ascertain the relationship between the success of road improvements in Nairobi City County, Kenya, and the efficiency of stakeholder identification.

Research Question

How does the success of road improvements in Nairobi City County, Kenya, depend on the identification of stakeholders?

Significance of the Study

Policymakers at the Ministry of Roads and Transport as well as Kenya Urban Roads Authority, Kenya National Highways Authority, and the Kenya Roads Board, may find value in this study findings. This study has the potential to enhance Kenya's road infrastructure development by offering evidence-based insights. The completion of high-quality road construction projects would be accelerated and cost overruns avoided if policymakers rely on the findings of this study to develop and oversee the application of pertinent policies. Regulations that promote effective road project management will be developed to enhance roads project performance. The roadbuilding sector was impacted practically by the study highlighting the rationale for inclusive stakeholder engagement. This research enables construction firms to improve project planning, execution, and monitoring. This ultimately leads to more efficient and effective road infrastructure development. Additionally, the findings benefit researchers who may want to further explore the complexities of stakeholder engagement in large-scale infrastructure projects.

LITERATURE REVIEW

Theoretical Review

Stakeholder's Theory

Developed by Edward Freeman (1984), this theory emphasizes the importance of taking into account the various interests of stakeholders, not just the shareholders, when making organisational decisions. To effectively engage with these stakeholders, it's crucial to identify their power, legitimacy, and urgency (Mitchell, Agle, & Wood, 1997). This idea is especially applicable to road infrastructure projects, where a variety of parties have a stake, including local people, contractors, government agencies, and environmental organisations. Project managers can modify engagement tactics to meet the unique requirements and concerns of every group by being aware of these characteristics. Donaldson and Preston (1995) further argue that stakeholder theory provides a useful structure for comprehending the intricate connections between organisations and their stakeholders. Road infrastructure projects can benefit from the use of key ideas from this theory, including stakeholder identification and salience, active communication and collaboration, and shared value creation. By identifying and prioritizing stakeholders based on their power, legitimacy, and urgency, project managers can effectively engage with them, address their concerns, and build strong relationships. Ultimately,

this can lead to more sustainable and socially responsible road infrastructure projects. Effective stakeholder engagement is essential for successful project implementation. By involving stakeholders in decision-making processes, project managers can enhance project planning, reduce conflicts, and improve public acceptance. Public consultations, focus groups, and negotiations are some of the strategies that can be used to foster meaningful engagement. Project managers may support the construction of more sustainable and civic-minded infrastructure by placing a high priority on stakeholder involvement. Improved community relations, lower project costs, and more project efficiency could all result from this strategy.

Stakeholder Identification on Project Implementation

Effective stakeholder identification and engagement are crucial for successful project implementation. Several studies have explored various methods and frameworks for identifying and engaging stakeholders. Dziadkiewicz, Sokolowska, and Jerzemowska (2022) studied the importance of stakeholder identification and prioritisation in projects implemented by sustainably oriented teams. The study entailed focus group interviews involving 48 respondents from various organizations implementing projects in Gdarisk. The results of the study revealed high predictive power of proper and comprehensive stakeholder identification on the project success. The study also underscored the need for intensive stakeholder outreach backed by effective policy for sustainable development across organizations implementing development projects. A study by Gregory, Atkins, Midgley, & Hodgson (2020) focussed on the sporadically researched issue of on the place of stakeholder identification and engagement in problem structuring interventions. Guided by social identity theory, the study followed the critical-systematic epistemology following a community based approach which revealed significant stakeholder learning about issues to be taken into account, those that need to be addressed and the probable courses of action to be considered for the successful implementation of the project. The study also proposed a framework for designing rigorous stakeholder identification and engagement for effective implementation of projects.

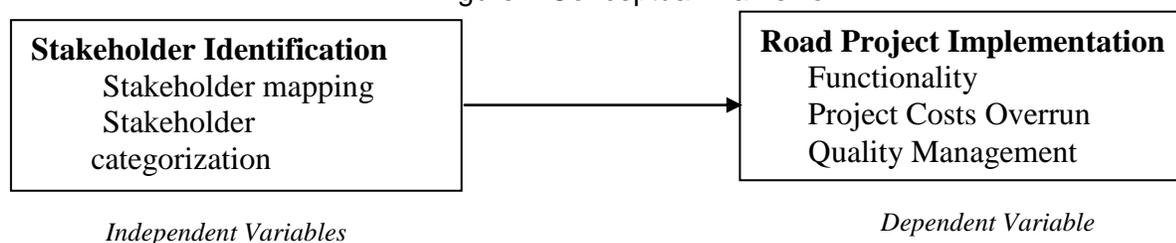
Egbetokun et al. (2018) looked at how private organisations in Nigeria identify their stakeholders and discovered that brainstorming is a popular strategy. To prevent missing important stakeholders, they did stress the value of a multi-method approach. Huemann, Matthew, and Turner (2017) proposed a framework for stakeholder identification in IT projects, categorising stakeholders into six groups: internal sponsors, internal users, external users, project team members, external vendors, and regulatory bodies. Preuss (2009) highlighted the dynamic nature of stakeholders and the importance of continuous identification and analysis throughout the project lifecycle. Power analysis was suggested as a tool to understand the

influence of different stakeholders. The importance of early stakeholder identification and ongoing engagement in guaranteeing the success of building projects was emphasized by Abudayyeh and El-Gohary (2017). They present various methods for getting feedback from stakeholders and adjusting engagement plans appropriately, including surveys, seminars, and interviews. According to Kerzner and Kerzner (2017), project managers can increase project effectiveness by incorporating stakeholders at every stage of the project lifecycle. This strategy fosters a greater sense of ownership and may result in observable advantages for all parties involved. Project managers may ensure that the varied interests and viewpoints of all stakeholders are taken into account and included in the project lifecycle by implementing these insights into their methodical approach to stakeholder identification and engagement.

According to Thomas and Iloka (2025) study on the influence of stakeholder identification on performance of healthcare projects in Machakos county, Kenya, a descriptive research design was deemed appropriate for studying 341 healthcare projects. The study relied on 184 participants who were sampled using a stratified random method in which eight sub-counties formed the strata. Both descriptive and inferential analyses were done with the help of SPSS and the results showed that most of the examined projects rarely prioritized stakeholder identification. It, underscored the need for effective stakeholder identification to help understand their unique interests and hence inform engagements in the projects.

Wanjala and Nyaberi (2024) examined the effect of stakeholder identification on the Project performance of donor-funded projects in Nakuru, Kenya. The study was anchored on stakeholder theory and adopted a survey involving project directors, project officers, project managers, coordinators, project quality officers from 50 donor funded projects, government officials and representatives of project beneficiaries. The said population was drawn from various sectors including environment, education and the agricultural sector in Kenya. Proportionate random sampling technique was used to select a sample from the population from which a research questionnaire was used to collect data. The study data was then analyzed both descriptively and inferentially and the results indicated stakeholder identification as a significant predictor of project performance in donor-funded projects in Nakuru County, Kenya. It also recommended elaborate stakeholder analysis for proper identification of the relevant stakeholders followed by adequate engagement with these stakeholders before implementation.

Figure 1 Conceptual Framework



RESEARCH METHODOLOGY

This study adopted a single-point-in-time descriptive study approach (Zikmund, 2003) employing a descriptive and inferential analysis techniques to determine how the variables relate. It focused on road infrastructure projects carried out between 2019 and 2023. A total of 39 ongoing road construction projects in Nairobi City County forming the unit of analysis with a population of 511 including 39 project managers, 39 contractors and subcontractors, 234 project consultants, 2 union officials, 39 suppliers, 39 community representatives, 39 engineers, 39 quantity surveyors, and 39 site engineers involved in these projects. To ensure the representativeness of the sample, appropriate sampling techniques and sample size are crucial (Kombo & Tromp, 2006). This study employed a stratified random sample of 224 respondents representing all relevant stakeholder groups. Primary data was gathered directly from the sampled respondents using a semi-structured questionnaire. The survey was conducted using the paper-pencil method, in which participants got the questionnaire and filled at their own pace. The filled-out questionnaires were picked up in person. The data was subjected to a rigorous cleaning procedure to eliminate mistakes and inconsistencies followed by coding and entry into SPSS. Descriptive statistics, such as measures of central tendency (mean, median, mode) and measures of dispersion, were used to interpret and summarize the findings. Multiple regression analysis and correlation analysis techniques were used to assess the relationships between study variables and to further test hypotheses. The direction and strength of the linear relationship between two continuous variables was determined using Pearson's correlation coefficient. The link between the variables was investigated using the regression model that follows:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon \dots \dots \dots (1)$$

Where; Y= road project implementation, β_0 = Constant (intercept), β_1 = Beta (predicted) coefficients of independent variables, X_1 = stakeholder identification, and ε = Error term

RESEARCH FINDINGS

Descriptive Results

The results presented in table 1 show that the respondents concurred (Mean = 4.21, SD = 0.846) to have had clear understanding of all the individuals and groups with interests in or who may be affected by the roads projects in Nairobi city county. This is in line with the Dziadkiewicz, *et. al* (2022) study which weighed in on the essence of conducting a comprehensive and effective stakeholder identification for successful project implementation. The respondents also strongly agreed (Mean = 4.29, SD = 0.830) that they categorized stakeholders into relevant groups based on their interests and potential impact on the project. In

concurrence with Thomas and Itoka (2025) study which underscored the need to understand specific stakeholder interests, the respondents in this study strongly agreed (Mean = 4.33, SD = 0.864) that they analyze the stakeholders to understand the specific interests, concerns, and level of influence of each stakeholder group. The study noted that the respondents further strongly agreed (Mean = 4.41, SD = 0.844) that they documented the identified stakeholders, their contact information, and their role/interest in the project. It was also agreed (Mean = 4.04, SD = 0.968) that there is a process in place to regularly update our stakeholder list as the project progresses.

Table 1 Descriptive results for stakeholder identification and project implementation

	N	Minimum	Maximum	Mean	Std. Dev
We have a clear understanding of all the individuals and groups who may be affected by or have an interest in this road project	146	1	5	4.21	.846
We have categorized stakeholders into relevant groups based on their interests and potential impact on the project	146	1	5	4.29	.830
We conducted an analysis to understand the specific interests, concerns, and level of influence of each stakeholder group	146	1	5	4.33	.864
We have documented the identified stakeholders, their contact information, and their role/interest in the project	146	1	5	4.41	.844
We have a process in place to regularly update our stakeholder list as the project progresses	146	1	5	4.04	.968

Inferential Results

This section details the results of inferential analysis of the relationship between each independent variable and the dependent variable. The study drew inferences from the results of correlation and regression analyses to address the stated research questions.

Correlation Analysis

The correlation analysis was considered to determine the nature, strength and direction of the relationship between each independent variable and the roads project implementation in Nairobi city county.

Table 2 Correlation Analysis Results

		Stakeholder Identification	Road Project Implementation
Stakeholder	Pearson Correlation	1	.784**
Identification	Sig. (2-tailed)		.000
	N	146	146

Table 2 shows strong and statistically significant relationship between each independent variable and the dependent variable. Particularly, the results indicate a strong, positive and statistically significant ($r=0.784$ and $P<0.01$) influence of stakeholder identification on road projects implementation in Nairobi city county. This result suggests that proper mechanisms for efficient identification of relevant stakeholders contributes greatly to constructive engagements with the stakeholders. As observed by Wanjala and Nyaberi (2024), this study also underscores the need to conduct an elaborate analysis of the stakeholders to aid in identification of the most relevant stakeholders who would be assets to the project team at every stage of the project' lifecycle. This study points to essential need to understand stakeholder interests, needs and capabilities that can be leveraged to enhance successful planning, coordination and execution of the roads projects in the county.

The results also reveal strong positive and statistically significant ($r=0.836$ and $P<0.01$) association between stakeholder communication and roads project implementation in Nairobi city county, Kenya. These findings align with Kalu and Rugami (2021) study which also revealed positive and statistically significant effect of communication on project implementation. These results further imply that effective communication enables organizations to build positive relationships with various stakeholders as observed by Lemlem, *et. al*, (2025) study which emphasizes the need to increase effectiveness in information sharing while enhanced proper feedback mechanisms. This study established that roads project implementation in Nairobi city county is strongly and significantly enhanced ($r=0.807$ and $P<0.01$) by effective stakeholder collaboration and partnerships. These results accentuate the essence of establishing effective collaborative relationships with various stakeholders by undertaking appropriate activities and following proper mechanisms for enhancing competitive capabilities for successful project execution. The results further conform with Ali and Haapasalo (2023) study which espouses collaboration in construction projects as a multi-level process by which multiple stakeholders can be engaged actively.

Moreover, this study underscores the role of stakeholder involvement in M&E in roads project implementation in Nairobi city county. The results presented in table 2 indicate strong, positive and statistically significant effect ($r=0.793$; $P<0.01$) of stakeholder monitoring and

evaluation on roads project implementation in the city county. These findings correspond with Mukakarisa and Njoroge (2024) findings that stakeholder involvement in project monitoring and evaluation activities improves the outcomes of construction projects. It also concurs with Issifu and Agyapong (2023) evaluation which attributes positive project outcomes to M&E activities. This study however contradicts Ndlovu's (2024) study which showed low external stakeholder involvement in M&E unlike the internal stakeholders who participate actively throughout the projects' lifecycles. Appropriate M&E mechanisms are imperative to boost stakeholder participation by way of awareness creation, incentivisation and training to support efficient and effective oversight to enhance project impact.

Regression Analysis

Table 3 Regression Analysis Results

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.894 ^a	.800	.794	.37954	

a. Predictors: (Constant), Stakeholder Monitoring and Evaluation, Stakeholder Identification, Stakeholder Communication, Stakeholder Collaboration and Partnerships

ANOVA^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	81.173	4	20.293	140.876	.000 ^b
Residual	20.311	141	.144		
Total	101.484	145			

a. Dependent Variable: Road Project Implementation
b. Predictors: (Constant), Stakeholder Monitoring and Evaluation, Stakeholder Identification, Stakeholder Communication, Stakeholder Collaboration and Partnerships

Coefficients^a						
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	-.123	.187			-.655	.514
Stakeholder Identification	.316	.066	.282		4.809	.000
Stakeholder Communication	.370	.068	.373		5.449	.000
Stakeholder Collaboration and Partnerships	.181	.075	.188		2.398	.018
Stakeholder Monitoring and Evaluation	.140	.073	.145		1.920	.057

a. Dependent Variable: Road Project Implementation

Table 3 shows a very strong positive correlation ($R = 0.894$) between stakeholder engagement and roads project implementation in Nairobi city county. In addition, the coefficient of determination ($R^2 = 0.80$) indicates that the model explains 80.0% variability in roads project implementation using the model $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \hat{\epsilon}$. This essentially implies that stakeholder engagement through stakeholder identification, stakeholder communication, stakeholder collaboration and partnerships and stakeholder M&E explains 80.0% change in roads project implementation.

According to the outcomes of the Analysis of Variance (ANOVA), the regression model is statistically significant ($F = 140.876$; $P\text{-value} < 0.01$), implying that the model fits the study data well and that stakeholder engagement effectively influences project implementation significantly. Further, the regression coefficients indicate positive effect of each independent variable on roads project implementation given a constant of -0.123 . Although the stakeholder engagement practices augment project implementation, the study shows that it is only through stakeholder identification ($p = 0.000$) that project implementation is significantly enriched. These factors, although positively associated, do not show strong statistical significance in this model. Assuming other factors, a unit increase in roads project implementation is caused by 0.316 (stakeholder identification).

CONCLUDING REMARKS

Summary

This study sought to ascertain the relationship between the success of roads project improvements and stakeholder identification in Nairobi City County, Kenya. The results indicated that the project teams had clear understanding of the stakeholders in the roads projects in Nairobi city county. Weighing in on the role of comprehensive and effective stakeholder identification for successful project implementation, the stakeholders were categorized into relevant groups based on their interests and potential impact on the project. By appreciating the need to understand specific stakeholder interests, the study indicated that project teams often analyze the stakeholders to understand the specific interests, concerns, and level of influence of each stakeholder group. Stakeholder particulars are captured and their role/interest in the project noted and regularly updated.

Conclusions

This study evaluated the relationship between the success of roads project improvements and stakeholder identification in Nairobi City County, Kenya. Stakeholder identification was noted to bear a strong, positive and statistically significant influence on road

projects implementation. This result suggests that proper mechanisms for efficient identification of relevant stakeholders contributes greatly to constructive engagements with the stakeholders. This study also underscores the need to conduct an elaborate analysis of the stakeholders to aid in identification of the most relevant stakeholders who would be assets to the project team at every stage of the project' lifecycle. Essentially, it is imperative to understand stakeholder interests, needs and capabilities that can be leveraged to enhance successful planning, coordination and execution of the roads projects in the county.

Recommendations

While the study argues that the effectiveness of stakeholder identification contributes greatly to the stakeholders' impact in roads project execution, there is need to sustain elaborate mechanisms to understand specific stakeholder needs and interests at the point of stakeholder mapping and identification. Objective analysis of the diverse stakeholders is critical to understanding their specific interests, concerns, needs in the projects, expectations and level of influence of each of the stakeholder group. This study also recommends leveraging technology to map out relevant stakeholders, regularly update the stakeholder database and to further enhance efficient and timely engagements with the stakeholders during the entire lifecycle of the project.

Scope for Further Studies

Further researches should replicate this study in other counties that have been accorded the city statuses (Kisumu, Eldoret, Nakuru, and Mombasa city counties) in order to check for significant differences if any. Future studies could expand the geographical scope to include the entire Nairobi Metropolitan area which accounts for vast road networks that are interconnected to the city. Researchers may also consider conducting comparative studies on the roads project implementation between projects commissioned by KURA and those done by KERRA. It may also suffice to extend this study to other counties in the upcountry to evaluate the success rates of stakeholder engagement and roads project implementation, especially, in rural roads projects that are financed by the county governments.

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