Assessing the Effectiveness of Monitoring and Evaluation Frameworks in Enhancing Performance of Public Housing Construction Projects in Nairobi City County, Kenya

Otieno Eric Onyango*[1], Lucy Ngugi[2]

*[1,2] Department of Management Science, School of Business, Economics and Tourism, Kenyatta University

Abstract: **Effective Monitoring and Evaluation (M&E) practices are essential for enhancing project performance and achieving successful outcomes. In Kenya, the State Department for Housing and Urban Development (SDHUD) manages large-scale housing projects aimed at addressing the national housing deficit, yet persistent performance challenges, including budgetary inefficiencies and delayed implementation, have been reported. This study examined the influence of M&E practices including planning, staff expertise, data usage, and financing on the performance of government housing construction projects in Nairobi City County. Guided by Campbell's performance theory and the Resource-Based View theory, the research adopted a descriptive design targeting 70 housing projects implemented between FY 2019/2020 and 2023/2024. Using stratified random sampling, 64 respondents directly involved in project execution provided primary data through structured questionnaires. Instrument validity was assessed via criterion-oriented validity, while reliability was confirmed through Cronbach's alpha. Qualitative data were analyzed thematically, and quantitative data were subjected to descriptive and inferential statistics using STATA 19.0. Findings revealed significant positive associations between M&E planning, staff expertise, financing, data utilization, and project performance. The study recommends that SDHUD enhance M&E planning, stakeholder engagement, and risk mitigation; invest in skilled personnel, modern tools, and capacity-building initiatives; and institutionalize data-driven decision-making. Aligning M&E financing with project objectives and documenting lessons learned are further advised to promote transparency, accountability, and sustained improvements in housing project outcomes.**

Keywords: **Monitoring and Evaluation (M&E), State Department for Housing and Urban Development (SDHUD), government housing construction projects.**

1. INTRODUCTION

Project implementation plays a central role in socio-economic development, with effective project management contributing to national growth, improved living standards, and sustainable development (Kariuki, 2013; Brown & Smith, 2022; Green & Taylor, 2023; Murigi & Mutuku, 2022). Project performance is commonly assessed through adherence to time, cost, scope, and quality parameters, alongside stakeholder satisfaction and long-term sustainability outcomes (Johnsen, 2020; Lee, 2023; Kumar, 2024). However, global evidence shows that construction projects, particularly public housing frequently experience delays, cost overruns, scope creep, and quality deficiencies.

International experiences from Spain, the United Kingdom, Germany, and France demonstrate recurring challenges such as regulatory changes, procurement inefficiencies, stakeholder coordination problems, corruption, and financial mismanagement (Gómez, 2020; Smith & Brown, 2020; Weber et al., 2023; Lefevre & Dupont, 2024). Similar performance constraints have been observed in Africa, including South Africa, Nigeria, Uganda, and Kenya, where weak planning, inadequate funding, bureaucratic inefficiencies, and limited technical capacity continue to undermine public infrastructure and housing delivery (Smith, 2020; Adebayo, 2021; Nakimuli, 2023; Kamau, 2024).

In Kenya, persistent project performance challenges such as financial mismanagement, procurement delays, political interference, and poor stakeholder coordination have affected public housing initiatives (Karanja, 2020; Mwangi, 2021; Njoroge, 2023). These challenges are particularly evident in projects implemented by the State Department for Housing and Urban Development (SDHUD), which is mandated to oversee affordable housing delivery in Nairobi City County and across the country. Government reports, including the Controller of Budget (2023) and FY 2023/24 Monitoring and Evaluation reports, highlight concerns related to weak monitoring systems, delayed fund disbursement, cost escalations, and accountability gaps within SDHUD-managed projects.

Monitoring and Evaluation (M&E) frameworks have been widely recognized as critical tools for improving project performance. Effective M&E planning establishes clear objectives, performance indicators, data collection mechanisms, defined responsibilities, and timelines, thereby enhancing timely decision-making and corrective action (Kamau & Mohamed, 2020; Njenga & Njiru, 2021). Competent M&E personnel, adequate financing, and effective utilization of M&E data further strengthen transparency, accountability, and resource optimization (Ochieng & Mutua, 2022; Nambuta et al., 2023). Empirical evidence from housing projects in Kenya and other countries shows that structured M&E systems reduce delays, control costs, and improve quality outcomes (Otieno & Mutua, 2023; Mkenda & Mbise, 2023).

Despite extensive literature on construction project challenges, there remains a notable gap regarding the comprehensive assessment of M&E frameworks and their direct influence on the performance of public housing construction projects under the SDHUD, particularly in Nairobi City County. Most studies emphasize managerial, financial, and regulatory constraints while giving limited attention to how integrated M&E practices—such as planning, staff capacity, data utilization, and financing—can enhance efficiency, accountability, and overall project outcomes.

Therefore, this study seeks to assess the effectiveness of Monitoring and Evaluation frameworks in enhancing the performance of public housing construction projects in Nairobi City County. By examining how M&E practices influence cost control, timely completion, quality standards, and stakeholder satisfaction, the study aims to generate evidence-based recommendations for strengthening project delivery within Kenya's public housing sector.

2. LITERATURE REVIEW

This review synthesizes theoretical and empirical perspectives on monitoring and evaluation (M&E) practices and project performance, highlighting key debates and research gaps relevant to government housing construction projects in Nairobi City County.

2.1 Theoretical Review

Campbell's Theory of Performance (Campbell, 1990; Campbell et al., 1993) conceptualizes performance as a function of declarative knowledge, procedural knowledge and skills, and motivation. The theory underscores the importance of staff competence and capacity development in enhancing organizational outcomes. While critics argue that it underemphasizes contextual and dynamic influences such as organizational culture and environmental change (Jiang et al., 2020; Tett & Burnett, 2020), subsequent refinements demonstrate its adaptability and ability to incorporate contextual moderators (Campbell & Wiernik, 2021; Viswesvaran & Ones, 2020). In the context of M&E, the theory supports the proposition that well-trained and motivated M&E personnel contribute significantly to improved project performance.

Resource-Based Theory (RBT) (Wernerfelt, 1984; Barney, 1991) posits that organizational performance depends on valuable, rare, inimitable, and non-substitutable resources. Applied to M&E, financial resources, skilled personnel, and data systems constitute strategic assets that enhance project outcomes. Although RBT has been criticized for its limited attention to dynamic capabilities and contextual volatility (Kraaijenbrink et al., 2020; Priem & Butler, 2022), scholars affirm its utility in explaining how internal resource endowments, including M&E financing and expertise, drive performance (Barney, 2020; Wernerfelt, 2020).

Together, these theories provide a foundation for examining how M&E planning, staff expertise, financing, and data utilization influence public project performance.

2.2 Empirical Review

Empirical studies across Kenya consistently demonstrate a positive relationship between M&E practices and project performance. Studies in Nairobi, Kiambu, Tharaka Nithi, Embu, and Samburu counties report that structured M&E planning comprising frameworks, resource allocation, and lifecycle integration significantly enhances project implementation and sustainability (Elizabeth, 2020; Kaluai, 2020; Dalmas, 2021; Eric, 2021; Leariwala, 2021). Evidence indicates that projects with clear M&E plans experience improved timeliness, coordination, and outcome achievement.

Research highlights the importance of capacity building, merit-based recruitment, and technical competence in strengthening project outcomes (Yussuf, 2020; Omeka & Chege, 2021; Abdallah, 2022). Training and staff development were found to significantly influence the effectiveness of development initiatives, including those implemented in Nairobi County (Ndothya & Chege, 2024). Additonally, adequate and timely allocation of M&E funds is strongly associated with improved monitoring processes, sustainability, and overall project success (Beatrice, 2018; Mathenge, 2020; Geoffrey, 2020; Christopher, 2022; Phyllis, 2023, Karuga, Mutuku & Sang, 2024). Findings show that budgetary support enhances frequency of monitoring, data management, and corrective action mechanisms.

Further, studies emphasize that effective use of M&E data including baseline information, reporting systems, and stakeholder communication improves decision-making and project effectiveness (Cyrus, 2019; Sinigi, 2021; Amina, 2022; Anthony, 2023; Kihiu, 2023). Regression analyses across multiple counties confirm that data-driven management significantly predicts project success.

3. RESEARCH METHODOLOGY

This study employed a **descriptive research design** to examine the relationship between Monitoring and Evaluation (M&E) practices and the performance of government housing construction projects implemented by the State Department for Housing and Urban Development in Nairobi City County. The design enabled the collection of both quantitative and qualitative data to establish associations among key study variables.

The target population comprised seventy (70) completed housing projects implemented between FY 2019/2020 and FY 2023/2024, involving 307 project stakeholders, including clerks of works, project managers, M&E officers, contractors, and technical personnel. Stratified random sampling was used to ensure proportional representation across respondent categories, yielding a sample of 64 participants. Primary data were collected using a structured questionnaire containing both Likert-scale and open-ended items. The instrument was pilot-tested to enhance clarity and validity. Reliability was assessed using Cronbach's alpha, which yielded a coefficient of 0.966, indicating excellent internal consistency. Project performance (dependent variable) was measured using indicators such as timeliness, cost control, quality standards, and stakeholder satisfaction. Independent variables included M&E planning, M&E financing, M&E staff expertise, and use of M&E data. Data were analyzed using descriptive statistics, Pearson correlation, and multiple linear regression in STATA version 19.0, guided by the model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon.$$

Diagnostic tests for linearity, normality, homoscedasticity, and multicollinearity were conducted to validate regression assumptions. Ethical approval was obtained from relevant authorities, and confidentiality and informed consent were upheld throughout the study.

4. RESEARCH FINDINGS AND DISCUSSIONS

4.1 Descriptive Analysis Results

4.1.1 M&E Planning

To gauge their degree of agreement, the respondents were also given a series of statements outlining M&E plans. Table 4.1 displays the descriptive outcomes on M&E planning.

Table 4.1: M&E Planning

STATEMENTS	A %	D %	N %	SA %	SD %	Mean	S. Dev
The M&E plan is clear, comprehensive, and aligns with project objectives.	31.3	3.1	15.6	48.4	1.6	4.22	0.934
M&E activities are integrated into the project's work plan from the inception stage.	34.4	6.2	7.8	51.6	-	4.31	0.871
The M&E plan is regularly reviewed and updated throughout the project lifecycle to reflect project changes.	31.3	6.2	3.1	56.3	3.1	4.31	1.022
The M&E plan includes clear indicators for measuring project performance.	32.8	4.7	15.6	46.9	-	4.22	0.881

STATEMENTS	A	D	N	SA	SD	Mean	S. Dev
	%	%	%	%	%		
M&E plans are developed in consultation with all relevant stakeholders.	50.0	7.8	7.8	32.8	1.6	4.05	0.933
The M&E planning process anticipates potential risks and mitigation strategies.	31.3	7.8	3.1	57.8	-	4.39	0.884
Timelines for M&E activities are realistic and feasible.	31.3	4.6	6.3	54.7	3.1	4.30	1.003
The project planning phase includes comprehensive M&E frameworks.	29.7	9.4	15.6	45.3	-	4.11	0.994
Aggregate Score	**34**	**6.2**	**9.4**	**49.2**	**1.2**	**4.24**	**0.94**

Source: Research Data (2025)

The descriptive analysis of Monitoring and Evaluation (M&E) planning revealed a strong consensus among respondents regarding the effectiveness of planning practices in government housing projects implemented by the State Department for Housing and Urban Development. Respondents agreed that M&E plans are clear, comprehensive, and well-aligned with project objectives (M = 4.22, SD = 0.934), and that M&E activities are integrated into the project work plan from the inception stage (M = 4.31, SD = 0.871). They also indicated that M&E plans are regularly reviewed and updated throughout the project lifecycle to reflect emerging changes (M = 4.31, SD = 1.022), include clear performance indicators (M = 4.22, SD = 0.881), and are developed in consultation with relevant stakeholders (M = 4.05, SD = 0.933). Additionally, respondents highlighted that M&E planning anticipates potential risks and mitigation strategies (M = 4.39, SD = 0.884), sets realistic and feasible timelines for activities (M = 4.30, SD = 1.003), and incorporates comprehensive M&E frameworks during the project planning phase (M = 4.11, SD = 0.994).

The overall mean of 4.24 with a standard deviation of 0.94 reflects a generally positive perception of M&E planning, indicating strong agreement that planning practices are robust, well-structured, and aligned with project goals. The moderate variability in responses suggests that while most respondents recognized effective planning practices, some differences in perception may exist, potentially due to variations in implementation across projects or departments.

These findings align with prior research. Okafor (2021), in a study on M&E systems in Nigerian projects, reported a consistent association between well-developed M&E plans and project success, emphasizing that clearly defined performance indicators and structured data collection frameworks are critical for monitoring progress and achieving project objectives. Overall, the results suggest that effective M&E planning forms a foundation for systematic project monitoring and contributes significantly to project performance.

4.1.2 M&E Staff expertise

Statements detailing M&E Staff expertise to assess level of agreement were presented to respondents. The descriptive results regarding the expertise of M&E staff are shown in Table 4.2.

Table 4.2: M&E Staff expertise

STATEMENTS	A	D	N	SA	SD	Mean	S. Dev
	%	%	%	%	%		
M&E staff possess and demonstrate the necessary technical skills and knowledge for their roles.	45.3	-	7.8	46.9	-	4.39	0.633
M&E staff have adequate experience in conducting monitoring and evaluation activities.	39.1	3.1	1.6	53.1	3.1	4.36	0.915
M&E staff M&E staff are proactive in identifying potential issues and proposing solutions.	42.2	3.1	1.6	46.9	6.2	4.2	1.702
M&E staff are equipped with the necessary tools and technology to support their work.	15.6	23.4	15.6	14.1	31.3	2.58	1.434
M&E staff collaborate effectively with other project team members.	42.2	15.6	4.7	31.3	6.2	3.77	1.231

STATEMENTS	A %	D %	N %	SA %	SD %	Mean	S. Dev
M&E staff have opportunities for continuous professional development.	15.6	3.1	3.1	46.9	31.3	3.44	1.781
M&E staff are adequately trained in data collection and analysis techniques and are able to effectively communicate findings and recommendations to stakeholders.	31.3	15.6	15.6	21.9	15.6	3.28	1.386
The expertise of M&E staff contributes significantly to project decision-making.	42.2	1.6	1.5	54.7	-	4.5	0.617
Continuous professional development opportunities are available for M&E staff.	17.2	23.4	10.9	34.4	14.1	3.34	1.504
Aggregate Score	**32.3**	**9.9**	**6.9**	**38.9**	**12.0**	**3.76**	**1.24**

Source: Research Data (2025)

he descriptive analysis of M&E staff expertise indicated that respondents generally perceive the M&E team as competent and influential in project performance. Respondents strongly agreed that the expertise of M&E staff contributes significantly to project decision-making (M = 4.5, SD = 0.617) and agreed that staff possess the technical skills and knowledge required for their roles (M = 4.39, SD = 0.633) and have sufficient experience in conducting monitoring and evaluation activities (M = 4.36, SD = 0.915). Additionally, M&E staff were recognized as proactive in identifying potential issues and proposing solutions (M = 4.2, SD = 1.072) and for collaborating effectively with other project team members (M = 3.77, SD = 1.231).

However, respondents were neutral on statements regarding continuous professional development opportunities (M = 3.34, SD = 1.504), adequacy of training in data collection and analysis, and the ability to communicate findings effectively (M = 3.28, SD = 1.386). Further, there was agreement on moderate opportunities for professional growth (M = 3.44, SD = 1.781), but a lower perception regarding the availability of necessary tools and technology to support their work (M = 2.58, SD = 1.434). The overall mean score of 3.76 (SD = 1.24) reflects a generally positive perception of M&E staff expertise, highlighting their technical skills, experience, proactive problem-solving, and contribution to decision-making. The relatively higher standard deviation indicates some variability in responses, suggesting differences in perceptions that could arise from departmental exposure or individual staff performance.

These findings are consistent with Macharia and Bowa (2021), who reported that the capacity of M&E teams in Nairobi County, Kenya, significantly predicted project performance, accounting for 19.4% of observed changes. Their study emphasizes the importance of continuous skill development and institutional support to optimize the contribution of M&E staff to project outcomes.

4.1.3 Use of M&E data

The respondents were presented with a series of statements regarding the usage of M&E data to assess their level of agreement. The descriptive results of their responses are summarized in Table 4.3, providing a detailed breakdown of perceptions and attitudes toward the application of M&E data in the construction of government housing construction projects.

Table 4.3: Use of M&E data

STATEMENTS	A %	D %	N %	SA %	SD %	Mean	S. Dev
M&E data is collected accurately, consistently, and timely.	32.8	25.0	15.5	23.5	3.2	3.48	1.195
M&E data is analyzed effectively and presented in a clear and actionable format to inform decision-making.	31.3	18.8	23.4	10.9	15.6	3.03	1.259

STATEMENTS	A %	D %	N %	SA %	SD %	Mean	S. Dev
M&E data is used to track project progress against target to promptly identify challenges and areas for improvement.	45.3	6.3	15.6	32.8	-	4.05	0.862
M&E data is shared with relevant stakeholders to promote accountability.	48.4	1.6	3.1	46.9	-	4.41	0.635
M&E data is used to measure project impact and outcomes thereby leading to improvements in project outcomes.	46.9	-	3.1	50.0	-	4.47	0.563
M&E data is used to make evidence-based adjustments to the project plan and adapt project activities based on emerging needs.	32.8	4.7	12.5	46.9	3.1	4.16	1.027
M&E data is utilized to identify lessons learned and best practices.	29.7	-	7.8	62.5	-	4.55	0.641
M&E data is used to inform future project planning and design.	31.3	15.6	10.9	42.2	-	4.0	1.084
Aggregate Score	**37.31**	**9.0**	**11.5**	**39.5**	**2.7**	**4.02**	**0.91**

Source: Research Data (2025)

The descriptive analysis indicates a generally positive perception regarding the use of Monitoring and Evaluation (M&E) data in government housing construction projects implemented by the State Department for Housing and Urban Development in Nairobi City County. Respondents strongly agreed that M&E data are used to identify lessons learned and best practices (M = 4.55; SD = 0.641) and to measure project impact and outcomes, thereby improving overall results (M = 4.47; SD = 0.563). They also agreed that M&E data are shared with stakeholders to promote accountability (M = 4.41; SD = 0.635), support evidence-based adjustments to project plans based on emerging needs (M = 4.16; SD = 1.027), inform future project planning and design (M = 4.00; SD = 1.084), and facilitate tracking of progress against targets for early identification of challenges (M = 4.05; SD = 0.862).

However, responses were comparatively neutral regarding whether M&E data are collected accurately, consistently, and in a timely manner (M = 3.48; SD = 1.195), and whether the data are analyzed effectively and presented in a clear, actionable format to guide decision-making (M = 3.03; SD = 1.259). These findings suggest potential weaknesses in data quality assurance and analytical capacity despite strong agreement on the application of M&E findings.

The aggregate mean score of 4.02 (SD = 0.91) indicates an overall high level of agreement on the effective utilization of M&E data during project implementation, with moderate variability in perceptions. While most respondents acknowledged that M&E data support accountability, adaptive management, performance tracking, and strategic planning, the relatively lower means for data accuracy and analytical clarity highlight areas requiring institutional strengthening.

These findings are consistent with prior empirical evidence. Thambura et al. (2023) found a significant positive relationship between effective M&E data collection practices and performance of livelihood programs at Caritas Meru in Kenya, emphasizing the importance of reliable and timely data for informed decision-making. Similarly, Mutune and Gatobu (2021) established that integration of M&E findings into decision-making significantly improves performance and sustainability of county-funded education projects in Machakos County. Collectively, these studies reinforce the conclusion that systematic and high-quality use of M&E data enhances project effectiveness and accountability.

4.1.4 M&E financing

The respondents were presented with a series of statements regarding M&E financing to evaluate their level of agreement. The descriptive results of their responses are summarized in Table 4.4, offering a detailed breakdown of their perceptions and attitudes toward the influence of M&E financing on the performance of government housing construction projects. These results provide insights into the extent to which M&E financing is perceived to impact project outcomes.

Table 4.4: M&E financing

STATEMENTS	A %	D %	N %	SA %	SD %	Mean	S. Dev
Adequate funding is allocated for M&E activities throughout the project cycle.	9.4	46.9	15.6	4.7	23.4	2.25	1.069
M&E funding allows for the use of appropriate technology and tools.	15.6	31.3	23.4	14.1	15.6	2.81	1.283
M&E funding supports capacity building for M&E staff.	7.8	45.3	15.6	9.4	21.9	2.38	1.189
M&E funding is used efficiently and effectively.	26.6	15.6	18.7	31.3	7.8	3.58	1.295
There is transparency and accountability in the management of M&E funds.	15.6	28.1	26.6	9.4	20.3	2.66	1.237
M&E funding is aligned with project objectives and priorities.	10.9	35.9	9.4	14.1	29.7	2.44	1.390
M&E funding is sufficient to ensure sustainability of M&E activities.	7.8	48.4	10.9	1.6	31.3	2.0	0.943
There are no delays in disbursing funds for M&E activities.	1.6	45.3	-	3.1	50.0	1.63	0.845
The funding for M&E activities is reviewed and adjusted as necessary.	7.8	45.3	3.1	9.4	34.4	2.13	1.241
Aggregate Score	**11.5**	**38**	**13.7**	**10.8**	**26**	**2.4**	**1.2**

Source: Research Data (2025)

T The descriptive analysis of Monitoring and Evaluation (M&E) financing revealed generally moderate to negative perceptions regarding the adequacy, effectiveness, and sustainability of funding for M&E activities in government housing construction projects implemented by the State Department for Housing and Urban Development. Respondents agreed that available M&E funds are utilized efficiently and effectively (M = 3.58; SD = 1.295), but were largely neutral on the transparency and accountability in fund management (M = 2.66; SD = 1.237) and the use of appropriate technologies and tools supported by M&E financing (M = 2.81; SD = 1.283).

Disagreement was reported for several critical aspects, including the adequacy of funding across the project cycle (M = 2.25; SD = 1.069), support for capacity building of M&E staff (M = 2.38; SD = 1.189), alignment of funds with project objectives and priorities (M = 2.44; SD = 1.390), sufficiency for sustaining M&E activities (M = 1.63; SD = 0.845), support for ongoing M&E tasks (M = 2.0; SD = 0.943), and regular review and adjustment of M&E budgets (M = 2.13; SD = 1.241). The overall mean score of 2.4 (SD = 1.2) reflects a moderately negative perception, indicating that respondents were generally concerned about inadequacies in funding, limited alignment with project priorities, insufficient capacity-building support, and weak sustainability of M&E efforts. The moderate standard deviation suggests some variation in perceptions, pointing to inconsistencies in funding experiences across projects or departments.

These findings underscore critical gaps in M&E financing that could undermine the effectiveness of project monitoring and evaluation. Evidence from related studies supports this conclusion. Muchiri et al. (2021) found a strong positive relationship between M&E financing and the performance of public health facility construction projects in Kirinyaga County, Kenya, highlighting the importance of adequate funding for project success. Similarly, Ouma and Nyang'au (2021) demonstrated that proper budgeting for M&E in humanitarian organizations in Nairobi City County, Kenya, significantly enhances project performance, emphasizing that financial support for M&E is crucial to achieving intended outcomes. Overall, the results indicate that while some efficient use of funds occurs, systemic challenges in M&E financing remain a key barrier to optimal project performance.

4.1.5 Performance of housing construction projects

The respondents were presented with a series of statements regarding how housing construction projects perform to assess their level of agreement. The descriptive results of their responses are summarized in Table 4.5, providing a detailed analysis of their perceptions and insights into the factors influencing project performance at the SDHUD.

Table 4.5: Performance of housing construction projects

STATEMENTS	N %	A %	D %	SA %	SD %	Mean	S. Dev
The project meets its predefined objectives and targets.	4.7	42.2	1.5	51.6	-	4.44	0.664
Beneficiaries report satisfaction with the project's outcomes.	15.6	31.3	12.5	32.8	7.8	3.69	1.271
The project stays within its allocated budget and timeline.	7.8	-	46.9	-	45.3	1.63	0.630
There is a positive impact on the community or target group.	9.4	42.2	15.6	32.8	-	3.92	1.028
The project demonstrates sustainability and continued benefits after completion.	10.9	35.9	9.4	43.8	-	4.14	0.957
Stakeholders provide positive feedback on the project's progress.	4.7	28.1	12.5	21.9	32.8	2.94	1.622
The project outcomes are aligned with the initial goals and expectations.	12.5	34.4	7.8	45.3	-	4.17	0.935
Regular monitoring reports indicate steady progress and minimal setbacks.	6.3	7.8	35.9	4.7	45.3	1.91	1.123
Aggregate Score	**9.0**	**31.7**	**17.8**	**33.3**	**32.8**	**3.4**	**1.0**

Source: Research Data (2025)

The analysis of housing construction project performance revealed a generally positive perception among respondents. Participants agreed that projects largely achieve their predefined objectives and targets (M = 4.44, SD = 0.664), generate beneficiary satisfaction (M = 3.69, SD = 1.271), and create a positive impact on the community or target group (M = 3.92, SD = 1.028). Respondents also agreed that projects demonstrate sustainability and continued benefits post-completion (M = 4.14, SD = 0.957) and that outcomes align with initial goals and expectations (M = 4.17, SD = 0.935). Conversely, respondents were neutral regarding stakeholder feedback on project progress (M = 2.94, SD = 1.622) and disagreed that projects consistently stayed within allocated budgets and timelines (M = 1.63, SD = 0.630) or that monitoring reports reflected steady progress with minimal setbacks (M = 1.91, SD = 1.123).

The overall mean score of 3.4 (SD = 1.0) suggests a moderate to positive perception of project performance, indicating that while respondents generally believe projects meet objectives, deliver community benefits, and maintain sustainability, challenges remain in budget adherence, timely progress, and stakeholder engagement. The standard deviation reflects some variability in experiences, suggesting inconsistencies across different projects or departments.

These findings corroborate studies by Simiyu et al. (2021), who reported that effective M&E planning, staff expertise, and adequate financing significantly enhance project outcomes in agricultural programs in Bungoma County, Kenya. Similarly, Orre et al. (2021) found that stakeholder participation, systematic use of M&E data, thorough planning, and staff competence in M&E positively influence project performance, as evidenced in the Kenya Power and Lighting Company's Last Mile Connectivity Project in Embu County.

4.2 Inferential Analysis Results

4.2.1 Multiple Linear Regression Analysis Results

The investigation used multiple linear regression analysis to determine the effects of independent variables (M&E Practices) on Performance of Government Housing Construction Projects in The State Department for Housing and Urban Development Nairobi, Kenya. The tables 4.6 summarizes a model that explains the variance (adjusted R Square) of the predictor variables.

Table 4.6 Regression model summary

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig. F Change
1	.945	.893	.886	.323	.000

Source: Research Data (2025)

The adjusted R^2 of 0.886 shows that 88.6% of the performance of Government housing construction projects in the SDHUD variation is explained by the four independent variables M&E planning, usage of M&E data, M&E staff expertise and M&E financing. The findings suggest other factors outside this research comprise 11.4% of variation in the performance of Government housing construction projects in Nairobi City County.

Table 4.7: ANOVA of the regression

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	51.582	4	12.896	123.356	.000b
	Residual	6.168	59	.105		
	Total	57.750	63			

Source: Research Data (2025)

The significance value of 0.000 indicated that the model is significant statistically in predicting the way M&E planning, usage of M&E data, M&E staff expertise and M&E financing affect the performance of Government housing construction projects in the SDHUD.

Table 4.8: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	-.055	.247		-.223	.000
	M&E planning	.543	.113	.512	4.808	.000
	M&E Staff expertise	.335	.123	-.194	-1.338	.001
	Use of M&E data	.371	.120	.154	1.344	.002
	M&E financing	.482	.072	.560	6.698	.000

a. Dependent Variable: Project performance

Source: Research Data (2025)

The multiple linear regression analysis examined the relationship between monitoring and evaluation (M&E) practices and the performance of Government housing construction projects in Nairobi City County, Kenya. Using Pearson's correlation coefficient, the model assessed how M&E planning, financing, staff expertise, and data usage influence project outcomes. The regression equation was expressed as:

Y (Project Performance) = −0.055 + 0.543X_1 (M&E Planning) + 0.165X_2 (M&E Financing) + 0.161X_3 (M&E Staff Expertise) + 0.482X_4 (Usage of M&E Data) + ε

Although the negative intercept (−0.055) falls outside the practical range of Likert-scale data (1–5) and holds limited interpretive value, the coefficients for the independent variables indicate meaningful associations with project performance.

M&E planning had a strong positive effect on project performance (β = 0.543, p = 0.000), suggesting that well-structured planning enhances project outcomes. This aligns with prior studies, including Dalmas (2021) and Faith (2020), which found that comprehensive M&E planning significantly improves project performance in water development and women empowerment projects in Kenya.

M&E staff expertise also showed a positive, moderate impact on project performance ($\beta = 0.335$, $p = 0.001$), indicating that technically skilled and experienced staff contribute to better project results. These findings corroborate research by Elizabeth (2020) and Mathenge (2020), who highlighted the importance of staff capacity in improving public project performance.

Similarly, M&E financing demonstrated a high positive association with project performance ($\beta = 0.482$, $p = 0.000$). Adequate funding supports implementation, sustainability, and capacity building, which are essential for successful project outcomes. This concurs with studies by Beatrice (2018) and Yusuf (2020), which reported that proper budgetary allocation for M&E significantly enhances project success in Kenyan county projects.

Finally, the use of M&E baseline data was positively linked to project performance ($\beta = 0.371$, $p = 0.002$). Effective utilization of M&E data for planning, tracking, and decision-making improves project outcomes, consistent with the findings of Cyrus (2019) and Sinigi (2021), who observed that data-informed decision-making enhances project effectiveness in county-funded education and youth employment programs. Generally, the regression results indicate that all examined M&E components; planning, financing, staff expertise, and data usage positively and significantly influence the performance of Government housing construction projects, highlighting the critical role of robust M&E systems in achieving project objectives and improving implementation outcomes.

5. CONCLUSIONS AND RECOMMENDATIONS

The study concluded that effective Monitoring and Evaluation (M&E) practices play a critical role in enhancing the performance of government housing construction projects in Nairobi City County. Regarding M&E planning, the findings showed that inclusive and well-structured planning significantly improves project outcomes. The integration of M&E activities into project work plans from the inception stage, coupled with regular reviews and consultations with stakeholders, ensures that M&E frameworks remain relevant, adaptable, and capable of promoting accountability throughout the project lifecycle. Projects benefit from proactive planning that anticipates risks and incorporates mitigation strategies, making M&E a core component of overall project management.

The expertise of M&E staff was found to be equally important. Skilled and experienced personnel contributed substantially to project success through their technical knowledge, analytical abilities, and effective communication skills. Their capacity to identify potential issues early, propose practical solutions, and collaborate with other project teams ensured that monitoring and evaluation activities were conducted efficiently and effectively. Access to appropriate tools and technologies further enhanced the quality and timeliness of M&E outputs.

M&E financing was another key factor influencing project performance. Adequate and properly managed financial resources enabled the State Department for Housing and Urban Development to implement M&E activities effectively, support capacity-building initiatives for staff, and acquire necessary technologies. The alignment of funding with project objectives, alongside accountability mechanisms, strengthened the efficiency, continuity, and sustainability of M&E operations.

The use of M&E data emerged as a critical driver of evidence-based decision-making. When utilized effectively, M&E data allowed for timely identification of challenges, informed adjustments to project activities, and improved overall outcomes. Data also supported the documentation of lessons learned and best practices, facilitating adaptive management and contributing to transparency and accountability. Proper use of M&E data guided future project planning, ensuring that projects continually improve and respond to emerging needs.

Based on these conclusions, the study recommends several actions to enhance the performance of government housing projects. First, M&E planning should continue to be strengthened by ensuring that plans are comprehensive, clear, and aligned with changing project objectives. Regular updates and reviews of M&E frameworks should be institutionalized, and stakeholder engagement should remain a priority to promote inclusivity and transparency. Risk anticipation and mitigation strategies should be incorporated into the planning process, and timelines for M&E activities should be realistic and feasible to support timely decision-making.

Second, the development and retention of M&E staff expertise should be prioritized. The Department should consistently recruit skilled personnel, provide access to modern tools and technologies, and implement ongoing professional development programs. Strengthening collaboration between M&E teams and other project stakeholders will further improve the integration of expertise into project implementation, while enhancing communication skills will ensure that data is effectively translated into actionable insights.

Third, M&E financing should remain adequate, strategically allocated, and aligned with project objectives. Funding should support the adoption of modern data collection and analysis techniques, as well as staff capacity-building programs. Strong accountability mechanisms should be maintained to ensure transparency in the use of resources, thereby supporting the sustainability of M&E operations.

Lastly, the use of M&E data should be institutionalized throughout the project lifecycle. Clear procedures for analyzing and applying collected data should be established, and findings should be shared with relevant stakeholders to foster transparency and informed decision-making. Project teams should be trained to interpret and utilize M&E data effectively, ensuring that lessons learned and best practices are systematically documented and applied in future projects.

REFERENCES

[1] Abdallah, K. S. (2022). *Monitoring and Evaluation Practices and Implementation of Development Projects in Nairobi City County, Kenya* (Unpublished master's thesis). Kenyatta University.

[2] Ahmed, R. (2023). Effect of multidimensional top management support on project success: An empirical investigation. *Quality & Quantity, 50*(4). https://doi.org/10.1007/s11135-014-0142-4

[3] Amina, A. M. (2022). *Monitoring and Evaluation Practices and Performance of Drought Resilience Projects in Mandera County, Kenya* (Unpublished master's thesis). Kenyatta University.

[4] Anthony, N. K. (2023). *Monitoring and Evaluation Practices and Performance of Agriculture Projects in Makueni County, Kenya* (Unpublished master's thesis). Kenyatta University.

[5] Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120.

[6] Barney, J. (2020). *Resource-based theory: Creating and sustaining competitive advantage*. Oxford University Press.

[7] Beatrice, N. (2018). *Factors Influencing Implementation of Monitoring and Evaluation Practices in County Government Construction Projects in Kenya: A Case of Nyeri County* (Unpublished master's thesis). University of Nairobi.

[8] Blanco, M. B., Rudman, A. N., Greene, L. K., Razafindrainibe, F., Andrianandrasana, L., & Welch, C. (2020). Back to basics: Gaps in baseline data call for revisiting an environmental education program in the SAVA region, Madagascar. *PLoS ONE, 15*(4). https://doi.org/10.1371/journal.pone.0231822

[9] Campbell, J. P. (1990). Modelling the performance prediction problem in industrial and organisational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organisational psychology* (2nd ed., Vol. 1, pp. 687–732). Consulting Psychologists Press.

[10] Campbell, J. P., & Wiernik, B. M. (2021). The modeling and assessment of work performance. *Annual Review of Organizational Psychology and Organizational Behavior, 8*, 517–540.

[11] Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager, C. E. (1993). A theory of performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 35–70). Jossey-Bass.

[12] Christopher, M. N. (2022). *Monitoring and Evaluation Practices and Performance of Kenya National Highway Authority Road Construction Projects in Nairobi City County, Kenya* (Unpublished master's thesis). Kenyatta University.

[13] Cyrus, M. W. (2019). *Monitoring and Evaluation Practices and Performance of County-Funded Education Projects in Makueni County, Kenya* (Unpublished master's thesis). Kenyatta University.

[14] Dalmas, E. O. (2021). *Influence of Monitoring and Evaluation Exercises on the Performance of Water Development Programs in Tharaka-Nithi County, Kenya* (Unpublished master's thesis). University of Nairobi.

[15] Elizabeth, V. M. (2020). *Influence of Monitoring and Evaluation Practices on Performance of Police Housing Projects in Nairobi County, Kenya* (Unpublished master's thesis). University of Nairobi.

[16] Eric, M. M. (2021). *Monitoring, Evaluation Practices and Sustainability of Community-Based Projects in Embu County, Kenya* (Unpublished master's thesis). University of Nairobi.

[17] Karuga, S., Mutuku, M., & Sang, P. (2024). Financial resource scheduling and road construction projects performance in Nairobi Metropolitan, Kenya. *International Journal of Research in Business and Social Science*, *13*(4), 223-229.

[18] Kihiu, A. N. (2023). *Monitoring and Evaluation Practices and Performance of Agriculture Projects in Makueni County, Kenya* (Unpublished master's thesis). Kenyatta University.

[19] Leariwala, L. J. (2021). *Participatory Monitoring and Evaluation Practices and Performance of Selected National Government Constituency Development Fund Projects in Samburu County, Kenya* (Unpublished master's thesis). Kenyatta University.

[20] Murigi, G., & Mutuku, M. (2022). Security issues and challenges in cloud computing among public institutions in Africa. *Journal of Business and Management Sciences*, *10*(3), 131-137.

[21] Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal, 5*(2), 171–180.

[22] World Bank Group. (2016). *World development report 2016: Digital dividends*. World Bank Publications.

[23] Yussuf, K. (2020). *Influence of Monitoring and Evaluation Practices on the Performance of County Government Projects: A Case of Mandera Central Sub-County, Mandera County, Kenya* (Unpublished master's thesis). University of Nairobi.