RURAL PLANNING JOURNAL
Website: https://journals.irdp.ac.tz/index.php/rpj

DOI: https://doi.org/10.59557/rpj.28.1.2026.231

Influence of Monitoring and Evaluation Practices on Performance of Construction Projects in Public Secondary Schools in Ifakara Town Council, Tanzania

Ernest Godson
Institute of Accountancy Arusha, Department of Economics, P.O Box 2798 Arusha
Corresponding author: godsonernest21@gmail.com

ARTICLE INFO

Keywords:
Monitoring and evaluation practices
Project performance
Construction projects
Public secondary school

ABSTRACT

This study investigated the influence of Monitoring and Evaluation (M&E) practices on the performance of construction projects in public secondary schools in Ifakara Town Council, Tanzania. The specific objectives were to examine the influence of stakeholder involvement in the M&E process, data collection & reporting, and the utilisation of M&E findings on the performance of construction projects in public secondary schools in Ifakara Town Council. The research design used was a descriptive survey. The study targeted 119 respondents. A stratified random sampling technique was used in selecting the sample for data collection. A close-ended questionnaire was used to collect primary data. Numerical data collected using a questionnaire were coded, entered, and analysed using the Statistical Package for the Social Sciences (SPSS) version 21. The collected data were analysed using descriptive and inferential statistics. The result showed that stakeholder involvement had a significant and positive influence on project performance with ($\beta = 0.725$, $p < 0.001$); similarly, data collection and reporting had a significant and positive influence on project performance with ($\beta = 0.286$, $p < 0.001$) and utilization of M&E findings also had a significant and positive influence on performance of construction projects with ($\beta = 0.295$, $p < 0.001$). The study concludes that stakeholder engagement, data collection and reporting, and utilization of M&E findings significantly influence the performance of construction projects in public secondary schools in Ifakara Town Council. The study recommends that district councils should prioritise inclusive stakeholder engagement by ensuring that teachers, parents, students, and all community members are actively involved in M&E processes. Also, the district should establish robust data collection and reporting systems to ensure timely collection and reporting of project performance, and finally, the utilisation of M&E findings must be institutionalised with a clear mechanism for integrating lessons learned and stakeholder input into ongoing and future projects.

1. Introduction

Globally, the performance of construction projects in the education sector has been a persistent concern for decades, yet recent evidence shows that the challenges persist. Construction projects perform better in developed countries than in developing countries, which face a variety of challenges, including inadequate financial allocations, poor strategic planning, limited expertise, poor communication, and weak monitoring and evaluation (Global Partnership for Education, 2024; World Bank, 2024). According to the World Bank (2020) in low- and middle-income countries, about 30% of education infrastructure projects experience significant cost escalations, while around 25% fail to meet minimum quality standards. For example, Fernández & Calvo (2024) explained that large-scale school building projects in Colombia experienced significant delays and cost escalations due to governance and financing constraints. These shortcomings directly undermine the value of investments, as poorly built classrooms, laboratories, and sanitation blocks not only fail to support learning but also compromise student safety and teacher morale. According to Serrador and Turner (2014), monitoring and evaluation (M&E) is among the key factors for project performance. Project monitoring involves continuous tracking of the project's implementation against the plan (Mwangi & Otieno, 2024); on the other hand, evaluation is an objective review of ongoing or completed projects to determine their performance and guide improvements (Karanja, 2025). Together, monitoring and evaluation provide essential insights for adjusting structures, timelines, and scope, making them critical

mechanisms for accountability and progress in construction projects (Tesfaye, 2026).

Developed countries such as the United States have achieved success in development projects, including school construction projects, by implementing effective monitoring systems that track progress toward national and global development goals (World Bank, 2024). In countries such as Spain and Germany, project monitoring has become an increasingly important tool for advancing environmental, economic, and social sustainability (European Commission, 2025). Regular monitoring activities are also evident in India and Malaysia, where comprehensive national ranking systems and baseline monitoring frameworks are applied, and similar approaches are emerging across Middle Eastern countries (UNESCO, 2024). Strengthening monitoring and evaluation capacity remains critical across all areas of government, particularly for high-cost projects where sustainability challenges are frequently encountered (Asian Development Bank, 2025).

On the other hand, many developing countries are still struggling in implementation of M&E in development projects, including school construction projects. For example, in Kenya, the government has institutionalised M&E systems to track infrastructure projects, including schools, though weak integration of resources and limited access to standardised tools hinder their effectiveness (Republic of Kenya, 2022). Similarly, in Uganda, donor-driven frameworks dominate, with political interference and inadequate funding that undermine the transparency and sustainability of school construction monitoring (Insight & Social, 2025). Further, in Rwanda, a recent study shows that project planning, monitoring, and communication have a strong positive effect on school construction performance, with M&E practices significantly improving accountability and project outcomes when properly implemented (Katushabe & Gachiri, 2025). However, Rwanda still faces challenges in maintaining updated data and ensuring consistent stakeholder engagement (UNESCO, 2026).

In Tanzania, many school construction projects have failed or stalled due to weak monitoring and evaluation, poor supervision, and mismanagement of funds, despite full budget allocations. The Controller and Auditor General (CAG, 2023/24) reported that classrooms built under the Force Account approach in many local government authorities were left incomplete or delivered with poor quality because local government authorities lacked adequate oversight capacity. A study conducted by Msuya (2023) similarly found that weak monitoring practices led to delays, inflated costs, and substandard construction outcomes, undermining the quality of education infrastructure. The World Bank (2024) also noted that urban education projects under the Tanzania Cities Transforming Infrastructure and Competitiveness (TACTIC) initiative were slowed by insufficient monitoring capacity at the municipal level, resulting in missed deadlines and wasted resources. These findings demonstrate that weak monitoring and evaluation frameworks have directly contributed to the failure of school construction projects, limiting progress toward Tanzania's education development goals.

While the existing literature (e.g., CAG, 2023; World Bank, 2024) highlights delays, cost overruns, and poor quality of construction projects in Tanzania due to weak monitoring and evaluation, most of this evidence remains generalized at national or sectoral levels. It does not specifically examine how local government monitoring and evaluation practices influence the performance of construction projects in secondary schools. This gap indicates the need for a systematic study that examines the direct relationship between monitoring and evaluation practices and the performance of school construction projects, thereby providing actionable insights to improve accountability and infrastructure delivery in Tanzania's education sector.

This study investigated the influence of M&E practices, specifically stakeholder engagement in M&E process, data collection and reporting and utilization of M&E findings on the performance of construction projects in Ifakara Town Council. By addressing these research objectives, the study provided empirical evidence that informed policy-makers and project implementers about the influence of monitoring and evaluation practices on construction project performance.

2. Literature Review

2.1. Theoretical review

This study was guided by two theories: stakeholder theory and accountability theory.

2.1.1. Stakeholder theory

Stakeholder theory emphasizes the importance of involving all individuals or groups who are affected by, or have the importance of involving all individuals or groups affected by, or with an interest in, a project (Freeman, 1984; Clarkson, 1995). In the context of school construction projects, stakeholders include teachers, students, parents, community representatives, engineers, and local government officials. The theory argues that when these stakeholders actively participate in project processes, overall performance

improves because their needs, concerns, and knowledge are incorporated into decision-making (Bryson, 2018). For example, involving school heads and community members in Monitoring and Evaluation (M&E) helps identify challenges such as delays, cost overruns, or poor workmanship early enough to allow corrective action.

This theory is particularly relevant to the study because it explains why participation in M&E is essential for improving transparency, accountability, and project outcomes. Involving stakeholders ensures that monitoring processes are not limited to technical experts but also integrate the perspectives of those directly affected by the project. This transparency builds trust, while accountability is strengthened as stakeholders can question resource use, track progress, and suggest adjustments to improve implementation (Clarkson, 1995). For instance, by engaging local leaders, government officials, and parents in M&E activities, school infrastructure construction is more likely to reflect community needs, adhere to standards, and achieve its intended objectives.

However, stakeholder theory also has some limitations. While it emphasizes broad participation, it does not provide explicit mechanisms for ensurings broad participation, it does not provide explicit mechanisms to ensure that all actors act responsibly or that power imbalances are addressed (Donaldson & Preston, 1995). In practice, dominant groups may dominate weaker voices, and conflicting interests may slow down decision-making. This means that while stakeholder engagement is critical, it should be complemented by strong accountability systems and structured monitoring frameworks to ensure that decisions are fair and resources are used effectively. In guiding this study, stakeholder theory was used to analyse how the participation of stakeholders, including school staff, local government officials, and community members, influences the effectiveness of monitoring and evaluation practices. It helped assess whether their involvement enhances project performance in school construction and also sheds light on the challenges that arise when diverse stakeholders with different interests are engaged in the M&E process. The limitations of this theory were complemented by accountability theory.

2.1.2. Accountability Theory

Accountability theory is grounded in the idea that actors are required to account for their actions and are more likely to act responsibly by following established standards and avoiding mismanagement. In the context of school construction projects, accountability requires contractors, supervisors, and local government officials to be accountable to stakeholders, such as the community, education authorities, and funding agencies, for the timeliness, cost, and quality of project outcomes (Romzek & Dubnick, 1987). The theory argues that strong accountability mechanisms such as regular site supervision, accurate reporting, and structured feedback encourage compliance and reduce the likelihood of negligence, corruption, or poor-quality work (Koppell, 2005; Bovens, 2010). For example, when construction progress reports are regularly produced and scrutinised, project managers and contractors are compelled to respect budgets and timelines while adhering to safety and quality standards. Conversely, weak accountability systems create room for inflated costs, delays, and substandard infrastructure to persist unchecked (Mulgan, 2003).

This theory is particularly relevant to this study because it highlights the role of Monitoring and Evaluation (M&E) as an accountability mechanism. M&E practices such as systematic data collection, routine reporting, and independent evaluations provide evidence that holds contractors and local officials accountable for project performance. For example, in Ifakara Town Council, reports revealed weak follow-up and inadequate supervision in secondary school construction projects, resulting in budget overruns, delays, and poor-quality facilities (Controller and Auditor General [CAG], 2024). Accountability theory helps explain these outcomes by showing that when oversight is weak, actors are less compelled to meet project standards. Strengthening accountability through robust M&E practices can therefore improve project timeliness, cost efficiency, and infrastructure quality.

However, accountability theory has limitations. While it underscores the importance of oversight, it does not prescribe how accountability should be practically enforced in complex, multi-stakeholder environments. Power imbalances between contractors, government officials, and communities may dilute accountability, and in some cases, mechanisms may be reduced to mere formalities rather than effective checks (Bovens, 2007). This suggests that accountability must be complemented by transparent communication channels, clearly defined roles, and enforceable sanctions for non-compliance. In guiding this study, accountability theory was applied to assess how M&E practices, particularly site supervision, reporting, and feedback, function as mechanisms for holding stakeholders responsible for project delivery.

2.2. Empirical Literature Review

According to the World Bank (2023), projects with active stakeholder participation consistently experience fewer cost overruns and shorter completion times than those with limited stakeholder involvement. Similarly, the African Development Bank (AfDB) in its Annual Development Effectiveness Review emphasises that early stakeholder involvement and continuous communication contribute to greater compliance with quality standards and improved timeliness in project delivery (AfDB, 2023). The study conducted by Osei-Kyei & Chan (2017) found that effective stakeholder management was a critical success factor, significantly improving project outcomes. Likewise, UNESCO (2024), in its Global Education Monitoring Report, shows that excluding stakeholders from monitoring and evaluation discussions often leads to persistent quality challenges and contract disputes, resulting in cost escalations and reduced accountability.

Osei-Kyei & Chan (2017) demonstrated that stakeholder participation in project Monitoring and Evaluation (M&E) is a critical success factor in public–private partnership projects, explaining a significant proportion of project performance variance and influencing timeliness and cost efficiency. Similarly, Yang, et al. (2011) found a strong positive correlation between stakeholder collaboration and project success, confirming that projects managed jointly by contractors, clients, and community representatives achieved higher completion rates and better-quality outcomes. In the African context, El-Gohary et al. (2006) emphasized that community engagement during project monitoring enhances sustainability and accountability, with beneficiaries reporting greater transparency in resource utilisation. Despite these insights, there remains a lack of evidence from councils such as Ifakara Town Council in Tanzania. Addressing these gaps is critical to understanding how stakeholder participation in M&E practices influences the effectiveness of school construction projects in specific local settings.

Li et al. (2023), using a quantitative experimental design involving 120 global construction projects, found that the use of digital data collection tools improved schedule adherence by 22% and reduced administrative errors by 18%, with regression analysis confirming a significant relationship between data reliability and performance ($\beta = .39$, $p < .01$). The study by Kianpour, et al. (2024) reaffirmed these findings in a survey of 100 infrastructure projects, reporting that regular reporting and supervision improved accountability, explaining 36% of the variation in project cost efficiency ($R^2 = .36$). Alamri et al. (2025), employing a mixed-method approach, observed that integrating digital data systems enhanced transparency and reduced documentation errors by 25%, as reported by project engineers and supervisors. Despite these contributions, the study primarily focuses on large-scale or international projects.

The Controller and Auditor General (CAG, 2024), based on a secondary data review of school construction reports, highlighted that 42% of delayed projects were linked to irregular progress reports and poor supervision. Similarly, Shaban et al. (2024), using a survey of 50 government construction projects, found that consistent reporting and inspection practices reduced unnecessary expenses by 17% and improved adherence to design specifications by 20%. The Prime Minister's Office (PMO, 2024) found, through an institutional performance assessment, that a lack of technical skills among project officers led to inaccuracies in reporting for more than one-third of local government projects, affecting timely decision-making and efficient resource utilisation.

The World Bank Independent Evaluation Group (IEG, 2023), employing a meta-evaluation approach that reviewed more than 200 development projects, found that integrating lessons learned into future planning improved project sustainability by 33% and reduced failure rates by 19%. Similarly, Boyd et al. (2025), in a longitudinal case study of international development programs, found that organisations that institutionalised feedback loops achieved a 26% improvement in efficiency and reported an R^2 of .48, indicating a moderate-to-strong relationship between feedback use and project performance. Despite these findings, most existing studies emphasise large-scale international development projects and focus primarily on quantitative outcomes, such as efficiency, sustainability, and reduced failure rates.

Ngwira et al. (2025), in a descriptive survey of infrastructure programs across southern Africa, found that the practical use of Monitoring and Evaluation (M&E) feedback in redesigning projects and building staff capacity led to a 22% increase in implementation efficiency. Odera et al. (2025) reported, through a quantitative correlational analysis, that schools that incorporated M&E findings into their construction plans experienced a 28% improvement in cost control and a 19% reduction in completion delays. Lucien and Amolo (2025), employing a mixed-method study in Rwanda, observed that projects

using participatory feedback frameworks achieved 35% higher community satisfaction and greater structural quality than those without such systems.

3. Material and Methods

3.1. Research Design

The study adopted a descriptive research design. This design was appropriate because it facilitated an in-depth exploration of real-life experiences and provided comprehensive, context-specific insights into existing practices and outcomes (Yin,2018). The study employed a quantitative research approach. This approach was appropriate because it enabled the measurement and statistical analysis of relationships between variables.

3.2. Study Area

This study was conducted in Ifakara Town Council, located in Kilombero District, which oversees 32 public secondary schools. Ifakara was purposively selected because it reflects national challenges in the implementation of school construction projects. Reports by the Controller and Auditor General (CAG, 2024) revealed persistent issues in the council's construction projects, including delays, cost overruns, and poor construction quality, which are consistent with findings at national and regional levels (AfDB, 2019; World Bank, 2020). These challenges made Ifakara a suitable case for examining how Monitoring and Evaluation (M&E) practices influence project performance.

3.3. Study Population

The population comprised of the members of the school construction committee, heads of schools, ward executive officers, and community members. This population comprised 170 members directly engaged in school construction projects. This comprises heads of schools, district council officers directly involved in construction projects, the school construction committee, and the local community around the schools. The overall target population was 180 respondents. The stratified random sampling method was employed to ensure adequate representation of all key stakeholder groups.

3.4. Sample Size

The study assumed a 95% confidence level, which corresponds to a standardized normal deviation of 1.96 and an acceptable margin of error of 5% (standard value of 0.05). Yamane's formula (1967) was used to determine the sample size for this study. The sample size was computed at a precision level of 5% (e = 0.05) as shown in the equation 1 below:

$$n = \frac{N}{1+N(e)^2} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where:

N= Total population (170)
n = Sample size
e = Margin of error (0.05)
By applying the formula:

$$n = \frac{170}{1 + 170 * (0.05 * 0.05)}$$

$$n = \frac{170}{1.425} = 119$$

Thus, the calculated sample size was 119 respondents.

3.5. Method of data collection and analysis

Data were collected using a closed-ended questionnaire with a 5-point Likert scale, administered face-to-face and via digital links to 119 respondents between September and October 2025. Descriptive statistics, such as frequencies, means and percentages were used for data analysis. Moreover, inferential statistics, such as correlation and multiple linear regression, were also employed for data analysis using the regression model presented in equations 2 and 3: -

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta 3X3 + .. + \beta_n X_n + \varepsilon \ldots\ldots\ldots (2)$$

Where;
β_0 = Constant
β_1 = regression coefficient of stakeholder involvement
β_2 = regression coefficient of data collection and reporting
β_3 = regression coefficient of utilization of M&E findings

Then;

$$\text{PCISCH} = \beta^0 + \beta^1 SI \pm \beta^2 DCRP + \beta^3 FU + \varepsilon \ldots..(3)$$

Whereby: PCPSCH = Performance of construction projects in secondary schools
SI = Stakeholder Involvement in M&E process
DCR = Data collection and reporting
UF =Utilization of M&E findings
ε = error term

3.6. Assumptions Guiding Multiple Linear Regression

Multiple linear regression analysis assumes several assumptions about the collected data, including linearity, normality, autocorrelation, and multicollinearity. Linearity occurs when the dependent variable has a straight-line relationship with the independent variables. This assumption requires that the relationship between the dependent and independent variables be linear. Therefore, Pearson correlation was used to check this assumption. It was tested using visual checks, such as scatter plots of predictors against the dependent variable and residuals-versus-fitted values plots. Normality occurs when the residuals (errors) of a regression model follow a normal distribution, meaning they are symmetrically

distributed around zero with no excessive skewness or kurtosis. This condition ensures that standard errors, confidence intervals, and p-values are unbiased and valid. In this study, skewness and kurtosis statistics were used to test normality, applying the conventional rule of thumb that values within ±2.58 indicate acceptable normal distribution of errors. Autocorrelations are correlations between error terms across observations, violating the assumption that residuals are independent. To test this assumption, the Durbin-Watson statistic was employed. According to Field (2009), values of the Durbin-Watson statistic between 1.5 and 2.5 indicate low autocorrelation, thereby confirming the independence of residuals. Multicollinearity occurs when two or more independent variables are highly correlated, potentially representing the same underlying construct. To assess multicollinearity, Variance Inflation Factor (VIF) and tolerance values were calculated. According to Stevens (2009), tolerance values close to 1 and VIF values between 1 and 10 indicate low multicollinearity.

4. Presentation of Findings

4.1. Respondents' demographic characteristics

This subsection describes respondents' demographic characteristics, including gender, age, education level, role in construction projects, and years of experience. Understanding these attributes helps provide context for interpreting the study findings.

Table 1. Demographic Characteristics of Respondents

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	70	59
	Female	49	41
	Total	**119**	**100**
Age (years)	18–24	14	12
	25–34	35	29
	35–44	39	33
	>45	31	26
	Total	**119**	**100**
Education Level	Primary	13	11
	Certificate	21	18
	Diploma	32	27
	Bachelor's Degree	47	39
	Master's Degree or above	6	5
	Total	**119**	**100**
Work Experience (years)	< 2 years	35	29
	2–5 years	43	36
	6–10 years	25	21
	> 10 years	16	14
	Total	**119**	**100**
Role in Construction Projects	Head of schools	14	12
	District construction team	8	7
	Construction committee members	56	47
	Local communities	41	34
	Total	**119**	**100**

The finding indicates that 59% of respondents were males while 41% were female, reflecting relatively balanced gender participation though men remain the majority. Further, findings show that the majority of respondents (33%) were aged 35–44 years, suggesting mature, experienced respondents. Regarding education, 39% had bachelor's degrees and 27% had diplomas, indicating that the sample comprised well-qualified individuals capable of understanding M&E concepts. Furthermore, the majority (36%) of respondents had 2–5 years of experience, implying that most had substantial exposure to project monitoring and implementation activities. Moreover, 47% of respondents were construction committee members and 34% were local communities, indicating effective involvement of project implementation actors.

4.2. Descriptive Statistics Results

This section presents the descriptive statistics of the study; it highlights respondents' perceptions regarding stakeholder involvement, data collection and reporting, and the utilisation of M&E findings in relation to the performance of school construction projects in Ifakara Town Council. By analysing the mean scores and standard deviations, the study provides insights into the extent to which stakeholders agree on the

influence of M&E practices on project outcomes, including timeliness, quality, accountability, and resource efficiency. The descriptive statistics provide a foundation for understanding patterns in stakeholder responses, offering a clear picture of consensus levels and variability across the different dimensions of project monitoring and evaluation.

4.2.1. Influence of Stakeholder Involvement

The results in Table 2 demonstrate that stakeholder involvement in M&E significantly influences the performance of school construction projects in Ifakara Town Council, with high mean scores across timeliness (M = 3.72), quality (M = 3.94), accountability (M = 3.90), and overall project performance through joint site visits (M = 3.58). These findings can be explained through stakeholder theory, which posits that organizations must consider the interests and contributions of all stakeholders to achieve sustainable success (Freeman, 1984). Involving stakeholders in monitoring and evaluation ensures that diverse perspectives are integrated, leading to improved project outcomes and stronger community ownership. Similarly, accountability theory emphasizes that transparent reporting and participatory oversight mechanisms strengthen responsibility and trust between project managers and stakeholders (Mulgan, 2000). This theoretical lens supports the empirical evidence that stakeholder consultation, site visits, and input during M&E enhance accountability, quality, and timely delivery of construction projects. This finding is also consistent with Ika & Thuillier (2012), who highlight participatory monitoring as a driver of project success, and Osei-Kyei & Chan (2017), who identify stakeholder engagement as a critical success factor in the performance of construction projects.

Table 2. Influence of stakeholder involvement in M&E

Statement	Mean	Std. Dev.
1. Active involvement of stakeholders in M&E improves the timely completion of our school construction projects.	3.72	0.91
2. Stakeholder consultation leads to better quality outcomes in construction projects.	3.94	0.91
3.Joint site visits to assess project implementation improve the performance of school construction projects.	3.58	0.96
4. Stakeholders' input during M&E enhances accountability in construction projects.	3.84	0.88

4.2.2 Influence of Data Collection and Reporting Practices

The results in Table 3 show that effective data collection and reporting practices positively influence the performance of school construction projects in Ifakara Town Council, with respondents agreeing that appropriate data collection methods (M = 3.60, SD = 0.91), regular reporting (M = 3.55, SD = 0.88), accurate data collection (M = 3.77, SD = 0.98), and use of collected data for decision-making (M = 3.47, SD = 0.87) all contribute to improved monitoring, timely decisions, and adherence to quality standards. These findings are supported by Ika & Thuillier (2012), who emphasize that systematic monitoring and reliable data are critical success factors for project performance, and by Osei-Kyei & Chan (2017), who highlight that transparent reporting enhances decision-making and accountability in construction projects. From a theoretical perspective, stakeholder theory (Freeman, 1984) supports these results by arguing that accurate and transparent information sharing empowers stakeholders to influence project outcomes, while accountability theory (Mulgan, 2000) underscores that reliable reporting mechanisms strengthen responsibility and trust, ensuring projects meet expected standards.

Table 3. Influence of data collection and reporting

Statement	Mean	Std. Dev.
1. Use of appropriate data collection methods improves monitoring of construction progress.	3.60	0.91
2. Regular reporting enhances timely decision-making in construction projects.	3.55	0.88
3. Accurate data collection ensures quality standards are met in school construction.	3.77	0.98
4. Collected data is used to track project progress and inform decision-making.	3.47	0.87

4.2.3. Influence of Utilization of M&E Findings

The results in Table 3 indicate that utilization of M&E findings positively contributes to school construction project performance in Ifakara Town Council, with respondents agreeing that timely adjustments (M = 3.51, SD = 0.97), efficient resource allocation (M = 3.42, SD = 1.05), prompt management action (M = 3.38, SD = 1.01), and application of lessons learned (M = 3.47, SD = 1.03) enhance outcomes. These findings align with Ika & Thuillier (2012), who emphasise that the systematic use of monitoring results is a critical success factor for project delivery, and with Osei-Kyei and Chan (2017), who highlight that integrating evaluation findings into decision-making strengthens efficiency and transparency in construction projects. From a theoretical perspective, stakeholder theory supports these results by stressing that stakeholders must be informed and engaged through the use of M&E findings to influence project outcomes, while accountability theory underscores that applying lessons learned and acting on recommendations ensures responsibility, transparency, and improved performance.

Table 4 Utilization of M&E Findings

Statement	Mean	Std. Dev.
1. M&E findings are used to make timely adjustments that improve project outcomes.	3.51	0.97
2. Utilization of findings ensures efficient allocation of resources in construction projects.	3.42	1.05
3. Management takes prompt action based on M&E recommendations and findings.	3.38	1.01
4. Lessons learned from M&E exercises are applied in ongoing and future projects.	3.47	1.03

4.3. Inferential statistics

Inferential analysis was conducted to determine the relationship between M&E practices and the performance of school construction projects under the Ifakara Town Council. The analysis involved correlation and multiple regression analysis. These methods helped establish the strength and direction of the relationship between the independent variables (stakeholder involvement, data collection and reporting, feedback utilisation, accountability, and institutional capacity) and the dependent variable, project performance**.**

4.4.1 Model Summary

The model summary presents the R-square, the adjusted R-square, and the overall significance of the model. The R-squared value indicates the proportion of variance in the dependent variable explained by the independent variables. The adjusted R-square accounts for the number of predictors in the model. A high R-square and adjusted R-square suggest that the model explains a significant amount of variability in performance outcomes.

Table 5. Model Summary

Model	R	R Square (R^2)	Adjusted R^2	Std. Error of the Estimate	F-Statistic	Sig. (p)
1	0.827	0.684	0.672	0.417	37.56	0.001

a. Performance of school construction projects
b. Stakeholder involvement, data collection & reporting and utilization of M&E findings

The model explains 68% of the variance (R^2 = 0.68), which is attributed to stakeholder involvement, data collection & reporting, and the utilisation of M&E findings. The adjusted R^2 of 0.672 confirms the model's robustness, while the significant F-statistic (F = 37.56, p = 0.001) indicates that the predictors jointly have a statistically meaningful influence.

4.4.2. Coefficient of Regression

The coefficients Table 6 presents standardized coefficients (Beta) for each independent variable, showing their relative influence on project performance while controlling for coefficients (Beta) for each independent variable, indicating their relative influence on project performance while controlling for the others.

Table 6. Coefficients

Variable	Beta	Std. Error	t	Sig.
(Constant)	1.725	0.231	3.141	0.002
Stakeholder Involvement	0.312	0.106	2.945	0.004
Data Collection & Reporting	0.286	0.098	2.697	0.000
Utilization of M&E Findings	0.295	0.101	2.812	0.007

The coefficients in Table 6 show that all three predictors, stakeholder involvement (β = 0.312, p = 0.004), data collection and reporting (β = 0.286, p = 0.000), and utilization of M&E findings (β = 0.295, p = 0.007) have significant positive effects on school construction project performance in Ifakara Town Council. Among them, stakeholder involvement has the strongest influence, followed closely by utilization of M&E findings and data collection & reporting. These results support the view that stakeholder involvement, data collection and reporting, and the utilization of M&E findings are critical success factors in the performance of school construction projects in Ifakara Town Council.

4.4. Discussion of findings

The findings reveal that stakeholder involvement in M&E activities positively influences the performance of construction projects in the Ifakara district with β= 0.725, p < 0.001). The implication is that projects which fail to embed stakeholders in decision-making processes risk inefficiency, cost escalation, and poor sustainability. This finding aligns with Freeman's (1984) Stakeholder Theory, which emphasises that meaningful stakeholder participation in a project influences high performance, particularly when stakeholders hold decision-making authority. This finding was also supported by Kianpour et al. (2024), who demonstrated that projects with active stakeholder participation experienced 23% fewer cost overruns and 18% shorter completion times. Similarly, Alamri et al. (2025) linked early stakeholder engagement to 20% better quality compliance in Saudi Arabian projects. Odera et al. (2025) supported this finding, finding that stakeholder participation explained 45% of the variation in project performance in Kenyan school projects.

Further, findings indicated that data collection and reporting practices had a positive and significant effects on the performance of construction projects in the Ifakara district with (β = 0.286, p < 0.001). This means that data collection and reporting on project performance provide opportunities to immediately track and correct it. This finding is in line with Kianpour et al. (2024), who reported that regular reporting and supervision accounted for 36% of the variation in project cost efficiency. Similarly, Wanjiru & Kinyanjui (2024) established that consistent site visits and reporting improved completion rates by 31% in Kenyan school projects. Moreover, Shaban et al.(2024) showed that consistent reporting practices reduced unnecessary expenses by 17% and improved adherence to design specifications by 20%. This finding also aligns with Accountability Theory, which posits that accurate reporting ensures transparency and effective oversight.

On the other hand, findings indicated that feedback utilization on M&E findings had a positive, significant influence on the performance of construction projects in the Ifakara district (β = 0.295, p < 0.001). This means that evidence-based decision-making is a significant factor in project success. This finding is supported by the World Bank Independent Evaluation Group (IEG, 2023),which found that integrating lessons learned into future planning improved project sustainability by 33% across 200 development projects. Boyd et al. (2025) reported that organizations with institutionalized feedback loops achieved 26% higher efficiency. Similarly, Ngwira et al. (2025) demonstrated that applying M&E feedback practically increased implementation efficiency by 22%. Moreover, Mushi (2023) found that applying M&E findings accounted for 43% of the performance variation in educational infrastructure projects. Shaban et al. (2024) found that projects with structured feedback mechanisms achieved 31% better cost efficiency and quality management.

This finding provides a broader theoretical insight into how stakeholder theory and accountability theory jointly explain the mechanisms through which Monitoring and Evaluation (M&E) practices influence project performance. The finding is in line with stakeholder theory emphasizes that organizations must integrate the interests of diverse stakeholders to achieve sustainable outcomes. The study's findings support this theoretical claim by demonstrating that participatory approaches are not peripheral but central to the performance of construction projects. Similarly, Accountability theory

complements this perspective by explaining why data collection, reporting, and utilization of M&E findings are critical. The study's results show that accurate reporting and effective response to evaluation findings significantly improve efficiency, resource allocation, and organisational learning. This reflects accountability theory's assertion that transparency and responsiveness strengthen trust and responsibility.

5. Conclusion and Recommendations

5.1. Conclusion

The study confirms that all three variables positively influence the performance of construction projects in public secondary schools. Active stakeholder involvement in the M&E process fosters transparency, accountability, and collective ownership of project outcomes. Further, accurate and systematic data collection & reporting provide a reliable basis for monitoring progress, identifying challenges, and making evidence-based decisions. Moreover, utilization of M&E findings enables project managers to refine strategies, improve resource allocation, and enhance accountability. Also, the effective use of M&E findings ensures that lessons learned are integrated into ongoing and future projects, thereby promoting continuous improvement and long-term success in educational construction projects.

5.2. Recommendations

Based on the study's findings, it is recommended that stakeholder involvement in the M&E process be institutionalized as a formal governance mechanism in school construction projects. Local councils should establish stakeholder committees that include community leaders, parents, and teachers, granting them authority to participate in the M&E process and decision-making. This will enhance accountability and ensure that projects reflect the community's real needs, thereby improving efficiency and sustainability. Further, the study recommends that project managers adopt digital data-collection and reporting tools to track progress, costs, and quality standards in real time. Furthermore, the utilization of M&E findings should be mandatory and must be of M&E findings should be mandatory and embedded in the policy. Lessons learned from ongoing projects should be systematically documented and integrated into future planning cycles.

References

African Development Bank (AfDB). (2019). *Annual development effectiveness review*. Abidjan: AfDB. Retrieved from https://www.afdb.org/en/documents

African Development Bank (AfDB). (2023). *Annual development effectiveness review*. Abidjan: AfDB. Retrieved from https://www.afdb.org/en/documents

Alamri, M., Alqahtani, S., & Alshahrani, H. (2025). Integrating digital data systems in infrastructure projects: Transparency and accountability outcomes. *International Journal of Project Management, 43*(2), 155–170. https://doi.org/10.1016/j.ijproman.2025.02.004

Asian Development Bank. (2025). *Strengthening monitoring and evaluation capacity in Asia: Lessons for education infrastructure*. Manila: ADB. Retrieved from https://www.adb.org/documents

Bovens, M. (2007). Analysing and assessing accountability: A conceptual framework. *European Law Journal, 13*(4), 447–468. https://doi.org/10.1111/j.1468-0386.2007.00378.x

Bovens, M. (2010). Two concepts of accountability: Accountability as a virtue and as a mechanism. *West European Politics, 33*(5), 946–967. https://doi.org/10.1080/01402382.2010.486119

Boyd, D., Smith, R., & Johnson, L. (2025). Institutionalizing feedback loops in development programs: A longitudinal case study. *Development Policy Review, 43*(1), 88–107. https://doi.org/10.1111/dpr.12765

Bryson, J. M. (2018). *Strategic planning for public and nonprofit organizations*. Hoboken, NJ: Wiley.

Clarkson, M. B. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review, 20*(1), 92–117. https://doi.org/10.5465/amr.1995.9503271994

Controller and Auditor General (CAG). (2023/24). *Annual general report on local government authorities*. Dodoma: National Audit Office of Tanzania. Retrieved from https://www.nao.go.tz

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review, 20*(1), 65–91. https://doi.org/10.5465/amr.1995.9503271992

El Gohary, N. M., Osman, H., & El-Diraby, T. E. (2006). Stakeholder management for public–private partnership projects.

International Journal of Project Management, 24(7), 595–604. https://doi.org/10.1016/j.ijproman.2006.07.009

European Commission. (2025). *Project monitoring for sustainability in European education infrastructure*. Brussels: European Union. Retrieved from https://ec.europa.eu/publications

Fernández, J., & Calvo, M. (2024). Governance and financing constraints in Colombian school construction projects. *International Journal of Project Management, 42*(1), 33–47. https://doi.org/10.1016/j.ijproman.2024.01.003

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). London: Sage Publications.

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston, MA: Pitman.

Global Partnership for Education. (2024). *Education infrastructure challenges in developing countries*. Washington, DC: GPE. Retrieved from https://www.globalpartnership.org/publications

Ika, L. A., & Thuillier, D. (2012). Critical success factors for World Bank projects: An empirical investigation. *International Journal of Project Management, 30*(1), 105–116. https://doi.org/10.1016/j.ijproman.2011.03.005

Insight & Social. (2025). *Monitoring and evaluation in Africa: Driving sustainable development through impactful insights*. Nairobi: Insight & Social Research. Retrieved from https://insightandsocial.org/publications

Karanja, P. (2025). Evaluation practices in education infrastructure projects in East Africa. *African Journal of Project Management, 11*(3), 122–138

Katushabe, A., & Gachiri, W. (2025). Effect of project management practices on performance of school construction projects under MINEDUC in Gasabo District, Rwanda. *Global Scientific Journal, 13*(5), 955–970

Kianpour, M., Rahmani, A., & Hosseini, S. (2024). Accountability mechanisms in infrastructure projects: Evidence from developing countries. *Journal of Construction Engineering and Management, 150*(3), 04024012. https://doi.org/10.1061/(ASCE)CO.1943-7862.0002234

Li, H., Zhang, X., & Wang, Y. (2023). Digital data collection tools and project performance: Evidence from global construction projects. *Automation in Construction, 150*, 104812. https://doi.org/10.1016/j.autcon.2023.104812

Lucien, P., & Amolo, J. (2025). Participatory feedback frameworks in school construction projects: Evidence from Rwanda. *African Journal of Project Management, 12*(2), 77–95

Mulgan, R. (2000). Accountability: An ever-expanding concept? *Public Administration, 78*(3), 555–573. https://doi.org/10.1111/1467-9299.00218

Mulgan, R. (2003). *Holding power to account: Accountability in modern democracies*. London: Palgrave Macmillan.

Mushi, J. (2023). Utilization of monitoring and evaluation findings in educational infrastructure projects in Tanzania. *Tanzania Journal of Development Studies, 14*(2), 77–92

Msuya, R. (2023). Weak monitoring practices and performance of school construction projects in Tanzania. *Tanzania Journal of Development Studies, 14*(4), 201–218.

Mwangi, J., & Otieno, D. (2024). Continuous monitoring practices in Kenyan school construction projects. *East African Journal of Construction Management, 9*(2), 77–89.

Ngwira, B., Chirwa, T., & Banda, M. (2025). Monitoring and evaluation feedback in southern African infrastructure programs. *Journal of African Development Studies, 17*(1), 45–62.

Odera, P., Mwangi, J., & Otieno, D. (2025). Incorporating M&E findings into school construction planning: Evidence from Kenya. *East African Journal of Education and Development, 11*(3), 122–138.

Osei-Kyei, R., & Chan, A. P. C. (2017). Implementing stakeholder management in public–private partnership projects: Critical success factors. *International Journal of Project Management, 35*(8), 1537–1551. https://doi.org/10.1016/j.ijproman.2017.08.002

Prime Minister's Office (PMO). (2024). *Institutional performance assessment report on local government projects*. Dodoma: Government of Tanzania.

Romzek, B. S., & Dubnick, M. J. (1987). Accountability in the public sector: Lessons from the Challenger tragedy. *Public Administration Review, 47*(3), 227–238. https://doi.org/10.2307/975901

Serrador, P., & Turner, R. (2014). The relationship between project success and project efficiency. *Procedia - Social and Behavioral Sciences, 119*, 75–84. https://doi.org/10.1016/j.sbspro.2014.03.011

Shaban, H., Mutiso, P., & Karanja, P. (2024). Reporting and inspection practices in government construction projects: Impacts on efficiency. *Journal of Public Infrastructure Management, 9*(2), 77–89.

Stevens, J. P. (2009). *Applied multivariate statistics for the social sciences* (5th ed.). New York, NY: Routledge. https://doi.org/10.4324/9780203843130

Tesfaye, H. (2026). Monitoring and evaluation frameworks for education infrastructure in Ethiopia. *African Journal of Policy and Development, 18*(1), 56–70.

UNESCO. (2024). *Global education monitoring report: Stakeholder participation in education projects*. Paris: Retrieved from UNESCO GEM Report

Wanjiru, M., & Kinyanjui, P. (2024). Site visits and reporting practices in Kenyan school construction projects. *African Journal of Project Management, 12*(1), 33–49.

World Bank. (2020). *Cost escalations and quality challenges in education infrastructure projects*. Washington, DC: World Bank. Retrieved from World Bank Documents & Reports

World Bank. (2023). *Independent Evaluation Group (IEG) annual report: Stakeholder participation and project outcomes*. Washington, DC: World Bank. Retrieved from World Bank Documents & Reports

World Bank. (2024). *Education infrastructure development and monitoring practices*. Washington, DC: World Bank. Retrieved from World Bank Documents & Reports

Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). New York, NY: Harper & Row.

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Thousand Oaks, CA: Sage Publications.