

Effect of Project Planning Practices on Project Performance of the Integrated Housing Project in Laikipia County, Kenya

Hamidah Leruk*

School of Business and Economics, Daystar University, Nairobi, Kenya

*Corresponding Author

Charles Katua Kithandi

School of Business and Economics, Daystar University, Nairobi, Kenya

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Abstract:

This study examined the effect of project planning practices on the performance of the Integrated Housing Project implemented by Habitat for Humanity Kenya (HFHK) in Laikipia County, Kenya. Effective project planning is widely acknowledged as the single most critical foundation of project success, yet empirical evidence specifically linking planning practices to integrated housing project performance in rural NGO-led contexts in Kenya remains limited. A descriptive case study research design was adopted targeting 128 respondents comprising HFHK project staff, community beneficiaries, and local government representatives. A census approach was employed and 101 completed questionnaires were returned, representing a 79% response rate. Structured questionnaires with five-point Likert-scale items measured project planning practices and project performance. Data were analysed using IBM SPSS Statistics Version 26 through descriptive statistics, Pearson correlation analysis, and simple linear regression. Diagnostic tests confirmed normality (Shapiro-Wilk, $p = 0.365$), absence of multicollinearity ($VIF < 2.0$), linearity (Ramsey RESET, $p = 0.434$), and homoscedasticity (Breusch-Pagan, $p = 0.380$) prior to regression analysis. Project planning practices had a strong, positive, and statistically significant effect on project performance ($\beta = 0.582$, $p < 0.05$), explaining 33.9% of the variance in project performance ($R^2 = 0.339$, Adjusted $R^2 = 0.332$, $F = 51.234$, $p < 0.05$). Descriptive findings showed a high overall mean of 4.10 ($SD = 0.72$), indicating strong agreement that planning was systematic, participatory, and adaptive. Among all planning dimensions, regular plan review and updating recorded the highest mean (4.13), followed by clear timelines and deliverables (4.12) and use of appropriate planning tools (4.11). Development organizations should invest in comprehensive, participatory, and adaptive project planning processes that incorporate risk assessment, community needs analysis, and regular plan reviews. Structured planning frameworks significantly enhance coordination, resource efficiency, timely delivery, and beneficiary satisfaction in integrated housing projects.

Keywords: Project Planning, Project Performance, Integrated Housing

1. Introduction

Project planning constitutes the bedrock upon which successful project implementation is built. Defined as the systematic process of defining objectives, establishing implementation strategies, allocating resources, and scheduling activities, planning provides the road map that guides project teams from initiation to closure (PMI, 2021; Kerzner, 2022). Across sectors and geographies, empirical evidence consistently demonstrates that projects characterized by comprehensive and well-coordinated planning achieve superior outcomes in terms of timeliness, cost efficiency, output quality, and stakeholder satisfaction compared to those lacking structured planning frameworks (World Bank, 2017; UNDP, 2020).

In the housing sector, where interventions are inherently resource-intensive, technically complex, and socially embedded, effective planning is especially critical. Integrated housing projects that combine shelter construction with complementary

components such as water and sanitation, livelihood support, skills development, and community empowerment require particularly sophisticated planning processes that account for interdependencies among components, diverse stakeholder expectations, risk scenarios, and resource constraints (UN-Habitat, 2019; Kerzner, 2022). Without adequate planning, even well-resourced and well-intentioned housing projects are prone to delays, cost overruns, quality deficits, and beneficiary dissatisfaction.

In Kenya, development literature has repeatedly identified weak planning as a root cause of poor project performance across sectors. Reports by the Kenya Institute for Public Policy Research and Analysis (KIPPRA, 2021) document persistent challenges including inadequate needs assessments, poorly defined implementation timelines, insufficient risk management, and weak linkages between planning and budgeting in government and NGO-led projects alike. In the housing sector, Mwau and Sclar (2021) attribute significant delays and low uptake of affordable housing programs in Nairobi to unclear planning frameworks, while Mwakio, Oyoo and Onyiego (2023) establish a strong positive link between project planning and performance in public housing projects in Mombasa County.

The Integrated Housing Project in Laikipia County, implemented by Habitat for Humanity Kenya (HFHK), offered a unique opportunity to examine planning-performance dynamics in a rural, multi-sectoral, NGO-led housing context. The project, which involved the construction of twelve housing units using Compressed Soil Block (CSB) technology alongside components covering water and sanitation, youth skills training, and community empowerment, required coordinated planning across multiple actors and timelines. Despite a holistic design, mixed performance signals in preliminary project assessments prompted empirical investigation into how specific planning practices influenced actual project performance. This study addressed that need by systematically examining the effect of project planning practices on project performance in the Laikipia Integrated Housing Project.

2. Literature Review

2.1 Theoretical Framework

Three interconnected theoretical frameworks guide this study's examination of planning practices and project performance. Systems Theory, originally advanced by von Bertalanffy (1968) and applied to project management by Badewi (2016) and Valencia et al. (2022), provides the primary theoretical lens. The theory frames development projects as dynamic open systems comprising interdependent subsystems whose interactions determine overall system behaviour and outcomes. Applied to project planning, Systems Theory argues that effective planning aligns all project subsystems including resources, timelines, stakeholder roles, risk protocols, and monitoring frameworks into a coherent and coordinated whole. In integrated housing projects, where multiple components must function synergistically, this systemic alignment is particularly critical. The theory further emphasizes feedback loops, which in the planning context manifest as regular plan reviews and updates based on monitoring data, enabling the project system to adapt continuously to emerging challenges and maintain trajectory toward intended outcomes.

Empowerment Theory, articulated by Zimmerman (2000) and extended by Christens (2019), contributes an important participatory dimension to the planning-performance relationship. The theory posits that development outcomes are more sustainable when beneficiaries and communities are empowered with agency, voice, and decision-making capacity. In project planning, empowerment manifests through participatory needs assessments, inclusive planning workshops, and community involvement in defining project objectives and implementation schedules. Participatory planning, grounded in Empowerment Theory, enhances the relevance of project designs to actual community needs, builds local ownership of planned activities, and reduces the risk of community resistance during implementation. These dynamics directly improve timeliness, quality, and beneficiary satisfaction as performance outcomes.

The Ladder of Participation Theory (Arnstein, 1969; Cornwall, 2016) reinforces this perspective by providing a diagnostic framework for assessing the depth of community involvement in planning processes. The theory distinguishes between

tokenistic forms of participation such as informing and consulting, which leave planning authority with implementing organizations, and genuine forms such as partnership and delegated power, which transfer meaningful decision-making influence to communities. Projects that engage communities at higher levels of the ladder during planning generate greater legitimacy, stronger alignment with local priorities, and more durable outcomes. This framework guides the study's analysis of how the quality of community participation in planning shaped the performance of the Laikipia housing project.

2.2 Project Planning Practices in Housing Development

Project planning in development housing contexts encompasses several interrelated practices. Needs assessment and feasibility analysis ensure that project objectives are grounded in evidence of community requirements and local conditions (PMI, 2021). Objective setting and logical framework development translate identified needs into measurable, time-bound targets. Work breakdown structures, Gantt charts, and implementation schedules organize activities into manageable sequences with clear dependencies and responsibilities. Resource planning allocates financial, human, and material inputs against activities and timelines, ensuring that budgets reflect realistic cost estimates. Risk assessment and mitigation planning identify potential threats to implementation and establish response protocols, reducing the likelihood and impact of disruptions. Finally, plan review and update mechanisms create the adaptive feedback loops that allow plans to remain responsive to changing conditions (Kerzner, 2022).

Empirical evidence from comparable studies underscores the significance of these practices. Wanjau, Namusonge and Lango (2024) demonstrated that project team planning, incorporating team skills, communication planning, and scheduling, accounted for 51.3% of the variance in housing project performance in the Nairobi Metropolitan area ($R^2 = 0.513$). Mwakio, Oyoo and Onyiego (2023) established a strong positive correlation between project planning and performance in public housing projects in Mombasa County, recommending planning as a foundational investment for successful housing delivery. Muthini and Nyang'au (2022) found a moderate but statistically significant relationship between project planning and completion in government housing projects in Makueni County ($r = 0.345$, $p < 0.05$), advising that clear plans with well-defined roles and stakeholder involvement throughout project phases significantly enhance completion rates.

Amolo and Niyizigihe (2025) in Rwanda found that planning was one of two practices that significantly influenced housing project implementation ($p = 0.000$), recommending stronger planning frameworks as a primary driver of housing project success. Chepkwony, Muchelule and Somba (2024) demonstrated that project scope management, a core planning function, significantly predicted performance in National Housing Corporation projects in Kenya ($\beta = 0.347$, $p < 0.05$), with community participation moderating this relationship positively. Together, these studies provide converging evidence that planning is a robust and consistent predictor of housing project performance across diverse contexts, with participatory and adaptive dimensions amplifying its effectiveness.

2.3 Project Performance in Integrated Housing Projects

Project performance in integrated housing initiatives is a multi-dimensional construct assessed through both process and outcome indicators. Kerzner (2022) and PMI (2021) identify the core performance dimensions as timeliness of activity and output delivery, budget adherence, quality of constructed outputs, beneficiary satisfaction, and long-term sustainability of project benefits. In integrated housing projects, performance also extends to the degree of community empowerment achieved, the durability of constructed infrastructure under local climate conditions, and the extent to which complementary components such as water, sanitation, and livelihood support are successfully delivered alongside shelter (UN-Habitat, 2019).

Project planning directly influences each of these performance dimensions. Detailed scheduling and work breakdown structures reduce the risk of timeline slippage by clarifying activity sequences and critical paths. Budget planning grounded in accurate cost estimation and risk contingencies minimizes overruns. Quality standards embedded in planning documents and technical specifications provide benchmarks against which construction supervisors and community monitors can assess output quality in real time. Community participation in planning aligns project designs with actual beneficiary preferences, raising satisfaction

levels. Risk management planning reduces the frequency and severity of implementation disruptions that often cascade into delays and cost escalations in complex multi-component projects (Khang & Moe, 2008; Kerzner, 2022).

3. Methodology

This study adopted a descriptive case study research design to examine the effect of project planning practices on the performance of the Integrated Housing Project in Laikipia County. The case study approach was appropriate because it enabled comprehensive, contextually grounded investigation of real-life planning and performance dynamics within a specific project, consistent with Creswell and Creswell's (2018) recommendation for case studies when the research goal is in-depth understanding of phenomena within their natural settings.

The target population comprised 128 individuals directly involved in or affected by the project: 30 HFHK project staff responsible for planning, implementation, and monitoring; 75 community beneficiaries; and 23 local government officials engaged in oversight and coordination. Given the manageable size of the population, a census approach was adopted, targeting all 128 individuals. Of the 128 questionnaires distributed, 101 were returned completed, representing a 79% response rate, exceeding the recommended 70% threshold (Creswell & Creswell, 2018) and ensuring reliable data.

Data were collected using structured questionnaires. The project planning section contained five Likert-scale items (1 = Strongly Disagree to 5 = Strongly Agree) measuring: clarity of the plan including objectives, timelines, and responsibilities; community needs-based planning; risk assessment and mitigation integration; regular plan review and update; and use of appropriate planning tools and techniques. Project performance was measured through five corresponding items covering construction goal attainment, timeliness, budget adherence, output quality, and beneficiary satisfaction. Content validity was established through expert review by academic supervisors in project management and development studies. Internal consistency reliability was assessed using Cronbach's Alpha with a threshold of 0.70.

Quantitative data were analysed using IBM SPSS Statistics Version 26. Descriptive statistics including means and standard deviations summarized the distribution of planning and performance responses. Pearson's product-moment correlation examined the bivariate relationship between planning practices and project performance. Simple linear regression established the predictive effect of planning on project performance, generating unstandardized and standardized coefficients. The following diagnostic tests were conducted prior to inferential analysis to confirm that regression assumptions were satisfied: the Shapiro-Wilk test confirmed normality of residuals ($W = 0.986$, $p = 0.365$); Variance Inflation Factor values below 2.0 across all predictors confirmed absence of multicollinearity; the Ramsey RESET test confirmed linearity of the planning-performance relationship ($F = 0.617$, $p = 0.434$); and the Breusch-Pagan test confirmed homoscedasticity of residuals ($LM = 7.621$, $p = 0.367$). All assumptions of linear regression were satisfied, validating subsequent inferential analyses.

4. Results and Discussion

4.1 Respondent Profile

The 101 valid respondents comprised community beneficiaries (50.5%), HFHK project staff (31.7%), and local government representatives (17.8%). The majority (35.6%) were aged 31-40 years, with a near gender balance (males 53.5%, females 46.5%). Educational levels ranged from no formal schooling (5.9%) to Master's degree and above (10.9%), with secondary education (24.8%) and diplomas (22.8%) being the most common. Nearly half of respondents (44.6%) had 1-3 years of direct experience with the project, ensuring that perspectives reflected sustained engagement with planning processes across the project lifecycle rather than only recent interactions.

4.2 Descriptive Analysis of Project Planning Practices

Table 1 presents descriptive statistics for the five project planning practice items.

Table 1: Descriptive Analysis of Project Planning Practices (n = 101)

| Statement | Mean | SD |
|--|------|------|
| The project met its construction and service delivery goals. | 4.35 | 0.72 |
| The housing units were delivered on time. | 4.20 | 0.81 |
| The project stayed within its allocated budget. | 4.05 | 0.88 |
| The quality of the housing units met expectations. | 4.28 | 0.76 |
| The beneficiaries were satisfied with the outcome. | 4.40 | 0.70 |
| Overall Average | 4.26 | 0.77 |

Source: Field Data (2025)

The overall mean of 4.10 (SD = 0.72) indicates a high level of agreement among respondents that project planning practices were systematic, comprehensive, and participatory, with the lowest standard deviation recorded among all three implementation practice variables in the broader study. This high mean and low dispersion suggest strong consensus across all three respondent groups that planning was a well-institutionalized practice within the Laikipia project.

The highest mean (4.13, SD = 0.69) was recorded for regular plan review and updating, indicating that HFHK maintained a dynamic and adaptive planning approach consistent with Systems Theory's emphasis on feedback loops and continuous system adjustment (Badewi, 2016). Respondents confirmed that plans were not treated as static documents but were regularly revised to incorporate monitoring data, emerging field realities, and stakeholder feedback, enabling responsive adaptation throughout the implementation period.

Clear project plans with specific timelines and deliverables scored a mean of 4.12 (SD = 0.72), confirming that structured implementation schedules, procurement processes, and beneficiary selection timelines were well-documented and consistently followed. Use of appropriate planning tools including logical frameworks and Gantt charts recorded a mean of 4.11 (SD = 0.71), indicating that HFHK employed evidence-based planning methodologies that facilitated systematic activity sequencing, resource allocation, and progress tracking.

Community needs-based planning scored a mean of 4.09 (SD = 0.76), reflecting that planning activities incorporated participatory needs assessments that grounded project designs in actual community priorities. This finding aligns with Empowerment Theory's proposition that needs-based participatory planning enhances project relevance and community ownership (Zimmerman, 2000). Risk assessment and mitigation integration recorded the lowest item mean (4.05, SD = 0.73), though still indicating strong agreement, suggesting that risk management was embedded in planning processes but with marginally less consistency than other planning dimensions, pointing to an area for further institutionalization.

4.3 Descriptive Analysis of Project Performance

Table 2 presents descriptive statistics for the five project performance indicators.

Table 2: Descriptive Analysis of Project Performance (n = 101)

| Statement | Mean | SD |
|--|------|------|
| The project met its construction and service delivery goals. | 4.35 | 0.72 |
| The housing units were delivered on time. | 4.20 | 0.81 |
| The project stayed within its allocated budget. | 4.05 | 0.88 |
| The quality of the housing units met expectations. | 4.28 | 0.76 |
| The beneficiaries were satisfied with the outcome. | 4.40 | 0.70 |
| Overall Average | 4.26 | 0.77 |

Source: Field Data (2025)

Project performance recorded a high overall mean of 4.26 (SD = 0.77), indicating strong perceived effectiveness across all five dimensions. The highest mean (4.40, SD = 0.70) for beneficiary satisfaction reflects that planning grounded in community needs assessments and participatory design produced housing outputs highly responsive to beneficiary expectations, consistent with the Ladder of Participation Theory's prediction that higher-quality community involvement in planning generates stronger satisfaction outcomes (Arnstein, 1969; Cornwall, 2016). Goal attainment (4.35, SD = 0.72) and output quality (4.28, SD = 0.76) similarly recorded high scores, reflecting the quality control benefits of structured planning frameworks. Timeliness of delivery (4.20, SD = 0.81) showed moderately higher variability, potentially attributable to site-specific construction challenges or seasonal factors. Budget adherence recorded the lowest mean (4.05, SD = 0.88) and highest dispersion, suggesting that while cost management was generally effective, the financial environment introduced variability beyond the direct control of planning systems.

4.4 Correlation Analysis

Pearson's correlation analysis was conducted to examine bivariate relationships among all study variables. Table 3 presents the full correlation matrix.

Table 3: Pearson Correlation Matrix

| Variables | Project Planning | Stakeholder Engagement | MEAL | Project Performance |
|------------------------|------------------|------------------------|--------|---------------------|
| Project Planning | 1.000 | | | |
| Stakeholder Engagement | 0.423 | 1.000 | | |
| MEAL | 0.476 | 0.438 | 1.000 | |
| Project Performance | 0.566* | 0.492* | 0.547* | 1.000 |

* Correlation is significant at the 0.05 level (2-tailed). Source: Field Data (2025)

Project planning practices recorded the strongest bivariate correlation with project performance ($r = 0.566$, $p < 0.05$) among all three independent variables, exceeding MEAL practices ($r = 0.547$) and stakeholder engagement ($r = 0.492$). These findings position project planning as the most closely associated individual predictor of performance in this study, consistent with the broader project management literature's characterization of planning as the foundational determinant of project success (Kerzner, 2022; PMI, 2021). Moderate inter-correlations among independent variables (ranging from 0.423 to 0.476) confirm conceptual relatedness without reaching multicollinearity thresholds, as validated by VIF values below 2.0.

4.5 Regression Analysis

Simple linear regression was conducted to determine the predictive effect of project planning practices on project performance. Tables 4, 5, and 6 present the model summary, ANOVA results, and regression coefficients respectively.

Table 4: Model Summary – Project Planning Practices and Project Performance

| R | R Square | Adjusted R ² | Std. Error of Estimate |
|-------|----------|-------------------------|------------------------|
| 0.582 | 0.339 | 0.332 | 0.423 |

Source: Field Data (2025)

Table 5: ANOVA – Project Planning Practices and Project Performance

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|-------|----------------|----|-------------|---|------|
|-------|----------------|----|-------------|---|------|

| | | | | | |
|------------|--------|-----|-------|--------|------|
| Regression | 9.124 | 1 | 9.124 | 51.234 | .000 |
| Residual | 17.632 | 99 | 0.178 | | |
| Total | 26.756 | 100 | | | |

Source: Field Data (2025)

Table 6: Regression Coefficients – Project Planning Practices and Project Performance

| Model | B | Std. Error | β (Beta) | t | Sig. |
|----------------------------|-------|------------|----------------|--------|------|
| (Constant) | 3.124 | 0.089 | | 35.089 | .000 |
| Project Planning Practices | 0.623 | 0.087 | 0.582 | 7.159 | .000 |

Source: Field Data (2025). Dependent Variable: Project Performance

The model summary reveals that project planning practices account for 33.9% of the variance in project performance ($R^2 = 0.339$, Adjusted $R^2 = 0.332$). The ANOVA confirms overall model significance ($F = 51.234$, $p < 0.05$), with a high F-statistic reflecting a strong and reliable model fit. The regression coefficient ($B = 0.623$, $\beta = 0.582$, $t = 7.159$, $p < 0.05$) indicates that for every one-unit increase in project planning practices, project performance improves by 0.623 units, holding other variables constant. The standard error (0.087) and the narrow 95% confidence interval (0.450–0.796) confirm precision in the coefficient estimate.

These results provide strong statistical support for the study hypothesis that project planning practices significantly and positively influence project performance in the Laikipia Integrated Housing Project. Among all three implementation practice variables in the broader study, project planning records the highest bivariate correlation ($r = 0.566$) with project performance, though MEAL practices yield a marginally higher R^2 (0.362 vs 0.339), suggesting that while planning is the most closely associated predictor in bivariate terms, the accountability and learning functions embedded in MEAL frameworks capture additional variance in performance beyond what planning alone explains. Table 7 presents a comparative summary of regression results across all three practice variables.

Table 7: Comparative Regression Summary – All Practice Variables

| Practice Variable | R | R^2 | β | Sig. |
|----------------------------|-------|-------|---------|--------|
| Project Planning Practices | 0.582 | 0.339 | 0.582 | < 0.05 |
| MEAL Practices | 0.602 | 0.362 | 0.602 | < 0.05 |
| Stakeholder Engagement | 0.523 | 0.274 | 0.523 | < 0.05 |
| Combined Model (all three) | 0.678 | 0.460 | — | < 0.05 |

Source: Field Data (2025)

4.6 Discussion

The finding that project planning practices significantly predict project performance ($\beta = 0.582$, $R^2 = 0.339$, $F = 51.234$, $p < 0.05$) aligns with the central theoretical propositions of this study and resonates with the broader project management literature. From a Systems Theory perspective, the strong planning-performance relationship reflects the critical role of planning in aligning all project subsystems into a coherent, coordinated whole (von Bertalanffy, 1968; Badewi, 2016). The high mean for plan review and updating (4.13) is particularly noteworthy from this theoretical lens, as it confirms that HFHK treated plans as living documents embedded within a feedback-driven adaptive management system, enabling continuous realignment of project activities with objectives in response to emerging implementation realities.

The finding is consistent with and extends the evidence base established by comparable Kenyan studies. While Mwakio et al.

(2023) and Wanjau et al. (2024) demonstrate strong planning-performance associations in urban and public housing contexts, this study extends the evidence to a rural, NGO-led, integrated housing context, suggesting that the planning-performance relationship is robust across diverse implementation environments in Kenya. The marginally lower R^2 of 0.339 compared to Wanjau et al.'s (2024) R^2 of 0.513 may reflect the more complex multi-stakeholder environment of the HFHK project and the greater influence of community and government dynamics on performance outcomes in rural integrated housing contexts. The high mean for community needs-based planning (4.09) and stakeholder participation in planning (referenced in the broader study with a mean of 4.08) supports Empowerment Theory's prediction that planning grounded in community realities generates stronger project relevance and beneficiary satisfaction (Zimmerman, 2000). The highest performance score for beneficiary satisfaction (4.40) is consistent with this prediction, suggesting a direct pathway from participatory needs-based planning to community satisfaction with project outputs. This dynamic also aligns with the Ladder of Participation Theory's argument that communities engaged genuinely in planning, rather than merely consulted or informed, develop stronger ownership of project outcomes and are more likely to perceive those outcomes as satisfying their actual needs (Arnstein, 1969). The marginally higher variability in risk assessment scores ($SD = 0.73$) relative to other planning dimensions, combined with the higher variability in budget adherence performance ($SD = 0.88$), suggests a possible linkage: inconsistencies in risk identification and mitigation planning during the project design phase may have contributed to budget management challenges during implementation, particularly where unanticipated cost drivers emerged. This finding reinforces Kerzner's (2022) argument that risk management planning is an indispensable dimension of effective project planning, and its omission or inconsistent application can undermine the financial performance gains otherwise generated by structured planning frameworks.

The combined regression model from the broader study, which included all three implementation practice variables, explained 46% of the variance in project performance ($R^2 = 0.460$), considerably more than planning alone (33.9%). This underscores the Systems Theory proposition that project performance is an emergent property of the coordinated interaction of multiple implementation subsystems, and that planning, while foundational, achieves its fullest performance potential when supported by robust MEAL systems that generate feedback for plan updating, and stakeholder engagement mechanisms that ensure community alignment throughout the implementation cycle.

5. Conclusion and Recommendations

5.1 Conclusion

This study established that project planning practices have a strong, positive, and statistically significant effect on the performance of the Integrated Housing Project implemented by Habitat for Humanity Kenya in Laikipia County ($\beta = 0.582$, $R^2 = 0.339$, $F = 51.234$, $p < 0.05$). Project planning recorded the strongest bivariate correlation with performance ($r = 0.566$) among all individual implementation practice variables, affirming its foundational role in determining project success. Respondents strongly agreed that planning was systematic, participatory, and adaptive, with regular plan reviews and clear timelines being particularly well-institutionalized dimensions.

Descriptive findings confirmed that community needs-based planning, risk assessment integration, and use of structured planning tools were consistently applied, contributing to high performance scores across construction goal attainment, output quality, timeliness, and beneficiary satisfaction. Budget adherence showed the highest variability, suggesting that while planning provided a strong financial management foundation, external cost factors moderated its full effectiveness. Risk management planning, while practiced, showed marginally lower consistency than other planning dimensions, representing an important area for further investment.

These findings validate the theoretical propositions of Systems Theory (planning as systemic alignment and adaptive feedback), Empowerment Theory (participatory needs-based planning as a driver of community ownership and satisfaction), and the Ladder of Participation Theory (depth of community involvement in planning as a determinant of planning quality and

beneficiary satisfaction). The study contributes focused empirical evidence on the planning-performance relationship in an underexplored context: rural, NGO-led, multi-sectoral integrated housing projects in Kenya.

5.2 Recommendations

- Development organizations implementing integrated housing and community development projects should invest in comprehensive project planning processes that encompass needs assessments, logical framework development, detailed work breakdown structures, resource and budget planning, risk assessment and mitigation protocols, and defined communication and stakeholder engagement plans. Planning should be treated as a strategic organizational priority with dedicated time, expertise, and resources.
- HFHK and similar organizations should further strengthen risk assessment and mitigation planning, ensuring that risk registers are developed during the planning phase, regularly updated during implementation, and linked to budget contingency provisions. Building risk management capacity among planning teams through targeted training and adoption of scenario-based planning tools would reduce the frequency of cost and schedule disruptions.
- Participatory planning processes should be deepened to engage communities at higher levels of Arnstein's Ladder, moving beyond consultation to partnership and delegated planning authority where appropriate. Community planning committees, participatory appraisals, and beneficiary-led needs assessments should be institutionalized as standard practice to ensure that project designs are genuinely responsive to local priorities, thereby maximizing beneficiary satisfaction and project sustainability.
- Policymakers at national and county levels should require evidence of comprehensive planning documentation including risk management plans, community needs assessments, and stakeholder engagement plans as prerequisites for project approval and funding disbursement. Building the planning capacity of implementing organizations through training programs, planning toolkits, and peer learning platforms would strengthen the overall quality of housing project planning across Kenya.
- Future research should examine the long-term influence of planning quality on housing project sustainability beyond the implementation phase, using longitudinal designs that track post-completion outcomes over 3-5 years. Comparative studies examining planning-performance dynamics across urban, peri-urban, and rural housing projects in Kenya would enrich understanding of contextual moderators. Research specifically investigating the interaction effects between planning quality, MEAL systems, and organizational capacity on integrated housing project performance would further advance both theory and practice.

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