



Effect of Stakeholder Involvement on Success of Construction Projects in Rwanda: A Case Study of Rwanda Charity Eye Hospital in Kamonyi District

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Abstract: This study examined the effect of stakeholder involvement in project planning on the success of the Rwanda Charity Eye Hospital construction project. Specifically, the study assessed how stakeholder involvement in project planning contributes to successful construction project outcomes. The study adopted a quantitative approach using descriptive and correlational research designs. The study targeted 147 respondents, with 119 valid questionnaire responses used for quantitative analysis. Data were collected using structured questionnaires and analyzed using SPSS. Descriptive statistics, Pearson correlation, and simple linear regression were used for data analysis. The findings revealed a strong positive and statistically significant relationship between stakeholder involvement in project planning and project success ($r = 0.847$, $p = 0.000$). Regression analysis further showed that stakeholder involvement in project planning significantly predicted project success, explaining 71.7% of the variation in project success ($R^2 = 0.717$). The regression coefficient indicated a positive and statistically significant effect of stakeholder involvement in project planning on project success ($\beta = 0.847$, $p = 0.000$). The study concluded that effective stakeholder involvement in defining project objectives and priorities, identifying project requirements, improving project designs and plans, and identifying potential project risks contributes to successful construction project outcomes. The study recommends strengthening stakeholder participation throughout the planning process, particularly in objective setting, requirement identification, design review, and risk identification, to enhance the successful implementation of construction projects.

Keywords: Stakeholder involvement; Project planning; Project success; Construction projects; Stakeholder participation; Rwanda Charity Eye Hospital.

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1. Introduction

Construction projects are important contributors to economic growth, social development, and the provision of essential infrastructure. However, construction projects involve multiple stakeholders with different interests, responsibilities, expectations, and levels of influence. These stakeholders may include project owners, government institutions, contractors, consultants, donors,

technical professionals, local authorities, and project beneficiaries. Effective stakeholder involvement is therefore important from the early stages of a project because it promotes communication, facilitates coordination, improves the identification of project requirements, and strengthens commitment to project objectives. In contrast, inadequate stakeholder involvement during planning may result in unclear requirements, conflicts, unrealistic schedules, inappropriate resource

allocation, and difficulties during project implementation (Lee, 2024; Keystone, 2022).

In developed countries, construction projects are generally supported by established project management systems and institutional mechanisms that encourage collaboration among stakeholders. Early consultation and participation allow project teams to understand different stakeholder expectations and identify potential challenges before implementation begins. Similarly, in large-scale construction projects in Asia, stakeholder participation has been emphasized as a means of improving project coordination, defining project requirements, and reducing misunderstandings and conflicts. The involvement of stakeholders during planning enables project teams to incorporate diverse knowledge and experiences into project objectives, scope, resource requirements, and implementation strategies (Innova, 2022; Lee, 2023).

In Sub-Saharan Africa, construction projects contribute to the development of healthcare, education, transportation, housing, and other essential infrastructure. Nevertheless, projects in the region continue to experience delays, cost increases, resource constraints, and quality-related challenges. Limited involvement of relevant stakeholders in project planning can contribute to these challenges because important project requirements and potential risks may not be adequately identified at the beginning of the project. Involving communities, government authorities, contractors, consultants, and beneficiaries in planning can provide useful technical and local knowledge, strengthen project ownership, improve resource planning, and contribute to more realistic project schedules and objectives (Mwangi, 2022; Uttey, 2024).

Within East Africa, increasing investments in infrastructure, healthcare facilities, and urban development have increased the importance of effective stakeholder participation in construction projects. Stakeholders possess different forms of knowledge and resources that can contribute to project planning. For example, local communities can provide information about local needs and conditions, while technical professionals can contribute expertise concerning project design, resources, risks, and implementation requirements. Government authorities can provide information concerning regulatory requirements, while project beneficiaries can clarify their expectations regarding the intended facility. Effective participation of these groups during planning can therefore improve the alignment between project objectives and stakeholder needs (Kiombo, 2025; Huller, 2022).

In Rwanda, the construction sector has expanded through investments in healthcare facilities, public buildings, infrastructure, and urban development. Despite this development, construction projects continue to face challenges associated with delays, cost variations, quality

concerns, and coordination among project actors. These challenges emphasize the importance of involving relevant stakeholders from the planning stage. In particular, stakeholder participation can assist project teams in identifying needs, defining project priorities, allocating resources, assessing risks, and establishing realistic implementation plans. The Rwanda Charity Eye Hospital construction project involves project managers, engineers, contractors, consultants, government officials, donors, hospital administrators, local leaders, and community representatives. Their involvement during planning is therefore potentially important for ensuring that project objectives and requirements reflect the needs and expectations of the different groups associated with the project.

Project planning provides the foundation upon which subsequent construction activities are organized. The planning process involves defining project objectives and scope, identifying requirements, determining resources, establishing schedules, and anticipating potential risks. Stakeholder involvement at this stage allows different actors to contribute information and expertise that may not be available to the project management team alone. The dissertation literature further indicates that stakeholder participation can help align project objectives with stakeholder needs, improve resource allocation, identify risks at an early stage, and strengthen cooperation among project participants (Njogu, 2018; Li & Zhang, 2021; Mugabo & Mulyungi, 2019).

Project success is commonly associated with the extent to which predetermined project objectives are achieved. In construction, success may be reflected through timely completion, adherence to the approved budget, achievement of required quality standards, effective resource utilization, and satisfaction of stakeholders. Stakeholder involvement during planning can influence these dimensions by improving the accuracy of project requirements, reducing uncertainty, identifying risks, and establishing realistic project expectations. Consequently, effective participation during the planning stage may provide a foundation for successful construction project delivery (Linsey, 2024; Mambwe et al., 2020; Mukakarisa & Njoroge, 2024).

Against this background, the present study focuses specifically on stakeholder involvement in project planning and the success of the Rwanda Charity Eye Hospital construction project in Kamonyi District. The focus is based on the recognition that decisions made during the planning stage influence subsequent project activities and outcomes. Understanding whether and to what extent stakeholder involvement in planning contributes to project success can provide useful evidence for improving the management of construction projects in Rwanda.

1.1 Statement of the Problem

Construction projects in Rwanda are important for improving public infrastructure and social services, yet some projects continue to experience delays, budget overruns, quality deficiencies, and coordination challenges. The dissertation reports that 38% of public building projects experience delays exceeding six months, with insufficient stakeholder involvement identified as an important underlying factor (Ministry of Infrastructure, 2023). It further reports that only 46% of communities are able to participate in infrastructure planning, suggesting that opportunities for stakeholder participation in the early stages of infrastructure development remain limited.

The planning stage is particularly important because it establishes project objectives, scope, resource requirements, schedules, and risk management approaches. When relevant stakeholders are inadequately involved in these activities, project plans may fail to capture important technical, institutional, community, and beneficiary requirements. Such gaps can subsequently contribute to conflicts, changes in project requirements, inefficient resource utilization, delays, and dissatisfaction among project stakeholders. Evidence from East African studies suggests that structured stakeholder engagement can positively influence project performance, including timely completion and adherence to budgets (Mwangi & Muchelule, 2021).

Despite the recognized importance of stakeholder participation, limited empirical attention has been given to the specific effect of stakeholder involvement during project planning on construction project success in the Rwandan context. Existing discussions have often considered stakeholder engagement broadly or concentrated on general project processes and technical challenges. This creates a contextual and empirical gap regarding how the participation of stakeholders in identifying needs, defining objectives, planning resources, developing project plans, and identifying risks contributes to successful construction project outcomes in Rwanda.

The Rwanda Charity Eye Hospital construction project provides an appropriate context for examining this relationship because it involves multiple stakeholder groups whose knowledge, expectations, resources, and responsibilities can influence project planning. Therefore, this study specifically assesses the effect of stakeholder involvement in project planning on the success of the Rwanda Charity Eye Hospital construction project in Kamonyi District.

1.3 Objective of the Study

The study was guided by the following specific objective:

To assess the effect of stakeholder involvement in project planning on the success of the Rwanda Charity Eye Hospital construction project.

1.4 Research Hypothesis

H₀₁: Stakeholder involvement in project planning has no significant effect on the success of the Rwanda Charity Eye Hospital construction project.

2. Literature Review

This section reviews literature related to stakeholder involvement in project planning and project success. It presents the concept of stakeholder involvement in planning and explains how participation in key planning activities can contribute to successful construction project outcomes. The review provides a basis for understanding the relationship between stakeholder involvement and the success of the Rwanda Charity Eye Hospital construction project.

2.1 Stakeholder Involvement in Project Planning

Stakeholder involvement in project planning refers to the participation of individuals, groups, and organizations that can affect or are affected by a project in activities undertaken before project implementation. In construction projects, such involvement may include identifying project needs, defining objectives and scope, establishing priorities, estimating resources, developing schedules, identifying risks, and reviewing proposed project plans. The involvement of stakeholders at this stage is important because different stakeholders possess different forms of knowledge, expertise, authority, and experience that can contribute to the quality of project planning. Heravi et al. (2015), for example, found that stakeholder involvement is an important component of construction planning and emphasized the need to improve the participation of key stakeholders during the initial planning stages.

Effective stakeholder involvement begins with the identification and analysis of relevant stakeholders (Mwangi, 2023). Project managers need to determine who is affected by the project, who possesses decision-making authority, who controls important resources, and whose support is necessary for successful implementation. Once stakeholders are identified, their expectations and requirements can be incorporated into the planning process. This can help project teams establish realistic objectives and develop plans that reflect both technical requirements and the needs of intended beneficiaries. In construction projects, failure to identify important stakeholders early may result in overlooked requirements,

disagreements over project scope, and changes during implementation (Khatam, 2023).

Stakeholders can also contribute substantially to the definition of project scope and requirements (Terry, 2022). Project owners and managers may provide strategic direction, while engineers, architects, contractors, and consultants contribute technical knowledge. Government authorities can provide information concerning regulatory and environmental requirements, whereas local communities and beneficiaries can explain local needs and expectations. Bringing these perspectives together during planning can reduce uncertainty and improve the alignment between planned outputs and stakeholder expectations.

Resource planning is another important area of stakeholder involvement. Construction projects require financial resources, human resources, materials, equipment, and technical expertise. Stakeholders who control or provide these resources can contribute to realistic resource estimates and allocation decisions. For example, contractors can provide practical information about construction materials, labour requirements, and equipment, while financial stakeholders can provide information about funding limitations. Early participation can therefore help ensure that project plans are consistent with available resources and reduce the likelihood of resource shortages during implementation (Gaine, 2024).

Stakeholder involvement is equally important in identifying and managing risks during the planning stage (Lee, 2025). Stakeholders possess different experiences and perspectives that enable them to identify risks that may not be visible to project managers alone. Local communities may identify social or environmental concerns, technical professionals may identify design and construction risks, and regulatory authorities may identify compliance risks. Incorporating these perspectives into the planning process enables project teams to anticipate potential problems and develop appropriate responses before construction activities begin. Talley et al. (2016), as discussed in the dissertation, emphasize the value of involving diverse stakeholders in risk assessment during the planning phase because early identification of environmental and social risks can reduce unforeseen problems during implementation (Shanty, 2024).

Communication and consultation are also fundamental to stakeholder involvement in planning (Wellars, 2022). Effective communication allows stakeholders to understand project objectives, provide feedback, clarify expectations, and identify areas of disagreement before plans are finalized. Regular consultation can consequently reduce misunderstandings and improve trust among project participants. This is particularly important in construction projects where decisions made during planning may affect

communities, contractors, government institutions, beneficiaries, and other parties differently. A participatory planning process therefore provides a platform through which competing interests can be discussed and reconciled before project implementation (Ferrari, 2024).

2.2 Project Success

Project success refers to the extent to which a project achieves its predetermined objectives and delivers the expected value to its stakeholders (PMI, 2021). Traditionally, project success has been assessed using the “iron triangle” of time, cost, and quality; however, contemporary project management perspectives also emphasize stakeholder satisfaction, effective resource utilization, and the achievement of intended project benefits (Shenhar et al., 2001). In construction projects, these dimensions are particularly important because successful delivery requires completion within the planned schedule and budget while meeting specified quality standards and satisfying the expectations of beneficiaries and other stakeholders. Effective planning can contribute to these outcomes by establishing clear objectives, realistic schedules, appropriate resource requirements, and mechanisms for addressing potential risks.

The achievement of project success is therefore closely connected to the quality of decisions made during the planning stage. Poorly defined requirements can result in scope changes and rework, while inadequate resource estimates and unrealistic schedules may contribute to cost overruns and delays. Conversely, involving relevant stakeholders during planning can provide project teams with diverse technical, financial, social, and operational perspectives that improve the quality and feasibility of project plans. Heravi et al. (2015) emphasize the importance of stakeholder involvement across construction project planning phases, while Chinyio and Akintoye (2008) demonstrate that effective stakeholder engagement can help reduce conflicts, improve relationships, and support better construction project outcomes.

2.3 Theoretical Framework

The relationship between stakeholder involvement in project planning and project success is primarily explained by Stakeholder Theory, developed by Freeman (1984). The theory argues that organizations should recognize and consider the interests of individuals and groups that can affect or are affected by organizational activities. In the context of construction projects, this perspective suggests that project managers should involve relevant stakeholders in planning rather than relying exclusively on project owners or technical teams. Stakeholders can contribute to defining project objectives, identifying requirements,

allocating resources, assessing risks, and establishing appropriate implementation strategies. Consequently, stakeholder involvement can help ensure that project plans reflect the needs and expectations of those affected by the project (Freeman, 1984; Donaldson & Preston, 1995).

Stakeholder Theory is particularly relevant to construction projects because such projects involve multiple stakeholders with different interests, responsibilities, knowledge, and levels of influence. Contractors, consultants, government authorities, local communities, project beneficiaries, suppliers, and project owners may each possess information that is important for effective planning. Early involvement provides an opportunity to identify these different expectations and reconcile potential conflicts before implementation begins. According to Mitchell et al. (1997), understanding stakeholders according to their power, legitimacy, and urgency enables managers to determine whose interests require attention, while Olander (2007) emphasizes the importance of stakeholder analysis and management in construction projects. Thus, applying Stakeholder Theory to project planning can facilitate more inclusive decision-making and improve the acceptability and practicality of project plans.

The theory further provides a basis for explaining how stakeholder involvement in planning can contribute to project success. When stakeholders participate in defining objectives, scope, resources, schedules, and potential risks, project managers can access broader information and develop plans that are more responsive to project requirements. Such participation can reduce misunderstandings, identify potential problems at an early stage, and strengthen stakeholder commitment to project objectives. Chinyio and Akintoye (2008) argue that effective stakeholder management is important for addressing stakeholder interests and reducing conflicts in construction projects, while Heravi et al. (2015) demonstrate the importance of stakeholder involvement across construction project planning phases. Therefore, Stakeholder Theory provides an appropriate theoretical foundation for examining whether stakeholder involvement in project planning significantly affects the success of the Rwanda Charity Eye Hospital construction project.

2.4 Empirical Review

Empirical studies have consistently examined stakeholder involvement as an important factor in construction project performance. Mukakarisa and Njoroge (2024) investigated stakeholder engagement and construction project performance in Rwanda, focusing specifically on stakeholder involvement in project planning at Horizon Construction Company. The study found a strong positive

relationship between stakeholder involvement in project planning and project performance ($r = 0.719$, $p < 0.001$), while regression analysis showed that stakeholder involvement in planning had a statistically significant positive effect on project performance ($\beta = 0.325$, $p < 0.001$). The findings indicate that involving stakeholders in defining project requirements and planning activities can contribute to improved project outcomes.

Similarly, Nziyumvira and Amolo (2025) examined stakeholder engagement strategies and road construction project performance in Musanze District, Rwanda. Using data from stakeholders involved in the Rwanda Urban Development Project, the study found that stakeholder involvement, collaboration, participation, and empowerment had statistically significant positive effects on project performance. The researchers concluded that active stakeholder engagement contributes to smoother project execution, reduced conflicts, and better alignment between project deliverables and stakeholder expectations. These findings are relevant to the present study because they demonstrate that stakeholder participation is important within the Rwandan construction context, although the study considered stakeholder engagement more broadly rather than isolating stakeholder involvement specifically during project planning.

Further evidence is provided by Nyetweka and Dushimimana (2024), who examined project planning practices and project performance in the King Faisal Maternity Ward project in Gasabo District, Rwanda. Their findings showed a strong positive relationship between project planning practices and project performance ($R = 0.815$), with planning variables explaining 66.5% of the variation in project performance. In addition, a 2023 study published in *Buildings* found that stakeholder engagement plays an important role in construction project success, demonstrating the broader importance of stakeholder-related practices in achieving successful construction outcomes. Together, these studies provide evidence that both effective planning and stakeholder engagement are associated with improved project outcomes. However, limited empirical attention has been given to the specific effect of stakeholder involvement in project planning on the success of healthcare construction projects in Rwanda, which provides the justification for the present study of the Rwanda Charity Eye Hospital construction project in Kamonyi District

3. Methodology

The study adopted a mixed-methods approach, combining quantitative and qualitative methods. The quantitative approach involved collecting numerical data through questionnaires and analyzing the data using descriptive and inferential statistics, while the qualitative approach involved interviews with key informants to obtain detailed

explanations concerning stakeholder involvement and project success. The study adopted a descriptive and correlational research design, which enabled the researcher to describe stakeholder involvement in project planning and establish the relationship between stakeholder involvement in project planning and project success.

The target population consisted of 230 stakeholders directly involved in the Rwanda Charity Eye Hospital construction project. These included project managers, engineers, contractors, consultants, government officials, donors, hospital administrators, local leaders, and community representatives. The respondents were selected because of their involvement in project planning, implementation, decision-making, monitoring, and evaluation activities. A sample size of 147 respondents was determined using Slovin's formula at a 5% level of error. The sample comprised 127 respondents for the questionnaire survey and 20 key informants for interviews. Purposive sampling was used to select stakeholders who possessed relevant knowledge and experience concerning the construction project and stakeholder involvement.

The study collected both primary and secondary data. Primary data were collected using a structured questionnaire and interview guide. The questionnaire was administered to 127 respondents and contained closed-ended statements measured using a five-point Likert scale. For the present study, questionnaire items concerning stakeholder involvement in project planning focused on stakeholders' participation in identifying project needs, defining project objectives, developing project plans, allocating resources, and identifying potential risks. Interviews were conducted with 20 key informants, including the project manager and engineers who had direct knowledge of project planning and implementation. Secondary data were obtained from books, journals, reports, electronic sources, and relevant project documentation.

Before the main data collection exercise, the research instruments were subjected to validity and reliability assessment. Content validity was established through review of the questionnaire to ensure that the items adequately represented the study variables and objectives. Reliability was assessed using Cronbach's Alpha coefficient, with 0.70 considered the acceptable threshold. The stakeholder involvement in project planning variable consisted of five items and recorded a Cronbach's Alpha coefficient of 0.812, indicating that the instrument was reliable. The project success variable also demonstrated high internal consistency, with a coefficient of 0.874. The overall reliability coefficient was 0.864, confirming the suitability of the instrument for data collection.

The collected quantitative data were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize stakeholder involvement in project planning and project success. Pearson correlation analysis was used to establish the strength and direction of the relationship between stakeholder involvement in project planning and project success. Since the present manuscript focuses on one independent variable, simple linear regression analysis was used to determine the effect of stakeholder involvement in project planning on project success. Qualitative data obtained from interviews were analyzed thematically and used to complement the quantitative findings.

Since the study focuses on one independent variable, the analytical model was expressed as:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where:

Y = Project Success

β_0 = Constant term

β_1 = Regression coefficient

X_1 = Stakeholder Involvement in Project Planning

ε = Error term

The regression model was used to determine whether stakeholder involvement in project planning significantly predicted project success. A positive and statistically significant regression coefficient would indicate that greater stakeholder involvement in project planning was associated with improved project success.

Finally, the study observed ethical considerations throughout the research process. The researcher obtained an introductory letter from the university and permission from the relevant authorities before data collection. Participation was voluntary, informed consent was obtained, and respondents were informed about the purpose of the study. Confidentiality and anonymity were maintained, and the information collected was used strictly for academic purposes

4. Results and Discussion

This section presents and discusses the findings on the effect of stakeholder involvement in project planning on the success of the Rwanda Charity Eye Hospital construction project. The findings are based on questionnaire and interview data and are presented using descriptive statistics, correlation analysis, and regression analysis. The discussion relates the findings to previous empirical studies and Stakeholder Theory.

4.1 Findings

This section presents the findings on the effect of stakeholder involvement in project planning on the success of the Rwanda Charity Eye Hospital construction project. The findings are based on responses obtained from the study participants and are presented using descriptive and inferential statistics. The analysis focuses specifically on stakeholder involvement during the planning stage and its relationship with project success.

4.1.1 Response Rate

The study targeted 147 respondents drawn from stakeholders involved in the construction project of the

Rwanda Charity Eye Hospital. Of these, 127 respondents were selected to provide quantitative information through questionnaires, while 20 key informants were selected for interviews. Out of the 127 questionnaires distributed, 119 were successfully completed and returned, representing a response rate of 93.7%, while eight questionnaires, equivalent to 6.3%, were not returned. All 20 selected key informants participated in the interviews, resulting in a 100% interview response rate. The interviewed key informants included the Project Manager and Engineers who had direct experience in project planning, technical supervision, implementation, coordination, and monitoring activities.

Table 1: Response Rate of Respondents

Response Category	Frequency	Percentage (%)
Questionnaires Returned	119	93.7
Questionnaires Not Returned	8	6.3
Total Questionnaires Distributed	127	100
Key Informants Interviewed	20	100
Total Targeted Respondents	147	-

Source: Field Data, 2026

The questionnaire response rate of 93.7% was considered adequate for analysis because a large proportion of the targeted quantitative respondents provided usable information. The high response rate also increased the availability of information concerning stakeholder involvement in project planning and its relationship with project success. The quantitative analysis presented in the subsequent sections is based on the 119 valid questionnaire responses reported in the study's statistical tables.

4.3.1 Descriptive Statistics of Stakeholder Involvement in Project Planning and Project Success

The objective of this study was to examine the effect of stakeholder involvement in project planning on the success of the construction project of the charitable eye hospital in Rwanda. Stakeholder involvement in project planning was assessed using indicators including stakeholder participation in defining project objectives, involvement in identifying project requirements, consultation during project design, participation in risk identification, and contribution to project scheduling and budgeting decisions. Respondents were requested to indicate their level of agreement with each statement using a five-point Likert scale where 5 = Strongly Agree (SA), 4 = Agree (A), 3 = Neutral (N), 2 = Disagree (D), and 1 = Strongly Disagree (SD). The results are presented in Table 2.

Table 2: Respondents' Perceptions of Stakeholder Involvement in Project Planning and Project Success

Statements	N	Mean	Std.
Stakeholders are involved in defining project objectives and priorities during the planning phase.	119	4.31	0.72
Stakeholders participate in identifying project requirements before implementation begins.	119	4.24	0.78
Stakeholder consultation improves the accuracy of project designs and plans.	119	4.18	0.81
Stakeholders contribute to identifying potential project risks during planning.	119	4.27	0.75
Stakeholder involvement in planning contributes to successful project implementation.	119	4.39	0.69
Overall Mean		4.28	0.75

Source: Field Data, 2026

Table 2 presents respondents' perceptions regarding stakeholder involvement in project planning and its contribution to the success of the charitable eye hospital construction project in Rwanda. The findings indicate that respondents generally agreed that stakeholder involvement during the planning phase significantly contributed to project success, as demonstrated by the overall mean score of 4.28 and a standard deviation of 0.75. The high overall mean score indicates that respondents perceived stakeholder participation in project planning as an effective practice that improved project preparation, coordination, and implementation outcomes. The relatively low standard deviation further shows that respondents had similar opinions regarding the importance of involving stakeholders during the early stages of the project.

The findings reveal that respondents strongly agreed that stakeholder involvement in planning contributes to successful project implementation, recording the highest mean score of 4.39 with a standard deviation of 0.69. This finding implies that involving stakeholders before project implementation begins helped create a common understanding of project goals, responsibilities, and expected outcomes. Early participation enabled stakeholders such as engineers, government officials, hospital administrators, donors, and community representatives to provide valuable input that guided project decisions. As a result, the project team was able to develop plans that reflected stakeholder expectations, minimized misunderstandings, and improved the likelihood of achieving project objectives.

The results further indicate that respondents agreed that stakeholders were involved in defining project objectives and priorities during the planning phase, with a mean score of 4.31 and a standard deviation of 0.72. This finding suggests that the project planning process was not conducted solely by project managers but involved contributions from different stakeholder groups. Participation in defining objectives enabled stakeholders to understand the purpose of the hospital construction project and ensured that project activities were aligned with the intended beneficiaries' needs. This collaborative approach strengthened ownership and commitment among stakeholders, which are important factors for achieving project success. Similarly, respondents agreed that stakeholders contributed to identifying potential project risks during the planning stage, as shown by a mean score of 4.27 and a standard deviation of 0.75. This implies that stakeholder participation helped the project team recognize possible technical, financial, environmental, and social risks before project implementation. The involvement of different stakeholders provided diverse knowledge and experiences that improved risk identification and supported the development of appropriate mitigation strategies. Effective early risk identification reduced uncertainties and

increased the project's ability to respond to challenges during implementation.

The statement that stakeholders participate in identifying project requirements before implementation begins recorded a mean score of 4.24 and a standard deviation of 0.78. This finding demonstrates that respondents believed stakeholder consultation contributed to understanding the resources, technical requirements, and operational needs necessary for successful project delivery. When stakeholders participate in defining requirements, project managers are able to develop realistic implementation plans, avoid unnecessary modifications, and reduce delays caused by incomplete information.

The findings also indicate that respondents agreed that stakeholder consultation improves the accuracy of project designs and plans, recording a mean score of 4.18 and a standard deviation of 0.81. Although this indicator recorded the lowest mean score among the planning variables, respondents still expressed a positive perception regarding the role of consultation in improving project planning. The finding suggests that continuous consultation with stakeholders helped identify design issues, incorporate practical considerations, and ensure that the final project structure met the expectations of users and other interested parties.

Overall, the findings demonstrate that stakeholder involvement during the planning phase played an important role in improving the success of the charitable eye hospital construction project in Rwanda. Through participation in objective setting, requirement identification, risk assessment, and project design discussions, stakeholders contributed to the development of comprehensive and realistic project plans. Effective stakeholder involvement reduced uncertainty, enhanced coordination, improved decision-making, and strengthened commitment among project participants.

The qualitative findings from interviews supported the quantitative results by providing deeper explanations regarding how stakeholder involvement during project planning influenced project success. The interviews involved the Project Manager and Engineers because of their direct involvement in planning, designing, coordinating, and supervising the construction activities of the charitable eye hospital project.

The Project Manager explained that stakeholder engagement was considered essential during the early planning stages because it enabled the project team to understand different expectations and incorporate necessary adjustments before construction activities began. The respondent stated:

"During the planning stage, we involved key stakeholders to understand their requirements, identify possible challenges, and ensure that the project design reflected the needs of the hospital and beneficiaries." Similarly, one Engineer explained that stakeholder participation improved technical planning by allowing professionals from different areas to contribute their knowledge and recommendations. The respondent stated: "The involvement of engineers, government authorities, and hospital representatives helped us identify technical requirements early and develop designs that were practical and suitable for implementation."

The interview findings further revealed that stakeholder participation helped minimize conflicts and improve coordination among project participants. The Project Manager emphasized that early involvement created a sense of ownership among stakeholders and encouraged cooperation throughout the project lifecycle. A recurring theme from the interviews was that stakeholder involvement during project planning improved communication, enhanced risk identification, strengthened decision-making, and increased stakeholder commitment. These qualitative findings therefore reinforce the quantitative results, demonstrating that effective stakeholder participation during the planning phase contributes significantly to construction project success.

The findings of this study are consistent with previous empirical studies reviewed in Chapter Two. Li and Zhang (2021) established that early stakeholder involvement in construction project planning improves project scope definition, reduces scope changes, and enhances cost and

time management. Similarly, Mohamed and Nguyen (2021) found that effective stakeholder management during the planning phase improves project performance by reducing conflicts, improving expectation management, and increasing the likelihood of achieving project objectives. Chinyio and Akintoye (2023) also demonstrated that involving communities and regulatory stakeholders during project planning improves project legitimacy and reduces resistance during implementation.

The findings also support the Stakeholder Theory, which guided this study. The theory argues that organizations and projects achieve better outcomes when they consider and involve all parties affected by their activities. In the context of the charitable eye hospital construction project, involving engineers, government officials, donors, hospital administrators, local leaders, and community representatives enabled the project team to incorporate diverse perspectives and develop more effective plans. Therefore, the findings confirm that stakeholder involvement during project planning is a critical factor contributing to successful construction project delivery.

4.1.3 Correlation Analysis

Pearson correlation analysis was conducted to determine the direction and strength of the relationship between stakeholder involvement in project planning and the success of the Rwanda Charity Eye Hospital construction project. The analysis was based on the 119 valid questionnaire responses, with statistical significance assessed at the 5% level

Table 3: Correlation Matrix between variable

		Stakeholder Involvement	Success of Construction Projects
Stakeholder Involvement	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	119	
Success of Construction Projects	Pearson Correlation	.847**	1
	Sig. (2-tailed)	.000	
	N	119	119

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

The results show a strong positive and statistically significant relationship between stakeholder involvement in project planning and the success of construction projects ($r = .847$, $p = .000$, $N = 119$). This implies that increased stakeholder involvement in project planning is associated with higher levels of construction project success. The finding suggests that involving stakeholders in defining project objectives, identifying requirements, assessing risks, and developing project plans can contribute substantially to successful project outcomes.

4.1.4 Regression Analysis

Simple linear regression analysis was conducted to determine the effect of stakeholder involvement in project planning on the success of the Rwanda Charity Eye Hospital construction project. The regression coefficient for stakeholder involvement in project planning was examined while controlling for the other stakeholder engagement dimensions included in the overall model.

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.847 ^a	.717	.714	.20495

a. Predictor: (Constant), stakeholder involvement in project planning

The results in Table 4 indicate a very strong positive relationship between stakeholder involvement in project planning and project success, as shown by $R = 0.847$. The R Square of 0.717 indicates that stakeholder involvement in project planning explains 71.7% of the variation in project success, while the remaining 28.3% is explained by other factors not included in the model. The Adjusted R Square of 0.714 confirms that stakeholder involvement in project planning remains a strong predictor of project success after adjustment for the sample size. The

implication of these findings is that effective involvement of stakeholders during project planning is critical to improving project success, as their participation can contribute to better identification of project needs, clearer objectives, improved planning decisions, and more realistic project arrangements. Therefore, project managers should strengthen stakeholder participation from the early planning stages to enhance the likelihood of successful project outcomes.

Table 5: ANOVA Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.436	1	12.436	296.075	.000 ^b
	Residual	4.914	117	.042		
	Total	17.351	118			

a. Dependent Variable: Success of Construction Projects

b. Predictors: (Constant), stakeholder involvement in project planning

The ANOVA results indicate that the regression model was statistically significant, $F(1,117) = 296.075$, $p = .000$. Since the significance value is less than the 0.05 level, the model significantly explains variations in the success of construction projects. This finding demonstrates that stakeholder involvement in project planning has a statistically significant effect on project success. The result implies that strengthening stakeholder participation during

the planning stage can contribute to better project outcomes by ensuring that stakeholder needs, project requirements, priorities, and potential risks are adequately considered before implementation. Therefore, the findings provide statistical support for rejecting the null hypothesis that stakeholder involvement in project planning has no significant effect on the success of the Rwanda Charity Eye Hospital construction project.

Table 6. Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	.895	.166		5.381
	stakeholder involvement in project planning	.769	.045	.847	17.207

a. Dependent Variable: Success of Construction Projects

The regression results of Table 6 show that stakeholder involvement in project planning had a positive and statistically significant effect on the success of construction projects ($B = 0.769$, $\beta = 0.847$, $t = 17.207$, $p = 0.000$). The unstandardized coefficient indicates that a one-unit increase in stakeholder involvement in project planning is associated with a 0.769-unit increase in project success. The standardized coefficient ($\beta = 0.847$) demonstrates a very strong positive effect. Since the significance level is $0.000 < 0.05$, the effect is statistically significant. Therefore, H_{01} is rejected, confirming that stakeholder

involvement in project planning significantly contributes to the success of the Rwanda Charity Eye Hospital construction project. The finding implies that project managers should ensure meaningful stakeholder participation during planning, particularly in identifying project requirements, setting objectives, assessing risks, and developing realistic plans, because such involvement can substantially enhance successful project outcomes.

4.2 Discussion of Findings

The objective of this study was to assess the effect of stakeholder involvement in project planning on the success of the Rwanda Charity Eye Hospital construction project. The findings indicate that stakeholder involvement in project planning is an important practice in supporting successful construction project implementation. Stakeholders were involved in defining project objectives and priorities, identifying project requirements, contributing to project designs and plans, identifying potential risks, and providing inputs that supported project implementation. This suggests that involving stakeholders during the planning stage helps ensure that project plans reflect relevant needs, expectations, and practical requirements.

The descriptive findings further suggest that stakeholder participation during planning can improve the quality of project decisions. Involving stakeholders in identifying project requirements enables project managers to obtain information from people with different experiences, responsibilities, and interests in the project. Similarly, their participation in defining objectives and priorities can create a shared understanding of what the project is expected to achieve. Stakeholder involvement in identifying potential risks can also help project teams recognize challenges at an early stage and incorporate appropriate responses into the project plan.

The correlation analysis revealed a strong positive relationship between stakeholder involvement in project planning and the success of construction projects. This indicates that greater stakeholder involvement in planning is associated with higher levels of project success. The finding suggests that stakeholder participation can contribute to successful project outcomes by improving communication, clarifying project requirements, strengthening coordination, and ensuring that important stakeholder concerns are considered before implementation. Meaningful participation can also increase stakeholder understanding and commitment to the project, thereby creating a more supportive environment for implementation.

The regression analysis further demonstrated that stakeholder involvement in project planning had a positive and statistically significant effect on the success of construction projects. This finding indicates that stakeholder involvement in planning contributes significantly to explaining variations in project success and is therefore an important predictor of successful construction project outcomes. The implication is that project managers should not treat stakeholder participation as merely a consultation activity but should integrate stakeholder contributions into actual planning decisions. Effective participation can support better identification of project needs, clearer objectives, appropriate risk assessment, and more realistic project plans.

The findings are consistent with Mukakarisa and Njoroge (2024), who found that stakeholder involvement in project planning was positively associated with project performance in Rwanda. Their findings emphasize the importance of involving stakeholders in planning activities to improve project outcomes. Similarly, Nziyumvira and Amolo (2025) found that stakeholder involvement, collaboration, participation, and empowerment contributed positively to road construction project performance in Rwanda. These findings support the present study because active stakeholder participation provides project teams with relevant information and promotes cooperation among individuals and groups involved in project implementation.

The findings also agree with Heravi, Coffey, and Trigunarsyah (2015), who emphasized the importance of stakeholder involvement during the planning processes of building projects. Their study highlighted the need for greater stakeholder participation, particularly during the initial stages of construction projects. The present findings reinforce this argument by showing that stakeholder participation during planning can contribute to better project outcomes. Similarly, Nyetweka and Dushimimana (2024) found that effective project planning practices were significantly associated with project performance in a healthcare construction project in Rwanda, further supporting the importance of effective planning in construction projects.

The findings are further supported by Stakeholder Theory, which emphasizes the importance of identifying and considering the interests of individuals and groups who can affect or are affected by project activities. In the context of the Rwanda Charity Eye Hospital construction project, stakeholder involvement during planning provides an opportunity to understand different expectations, needs, and concerns before important project decisions are finalized. The theory therefore helps explain the positive relationship between stakeholder involvement and project success because participation can promote alignment, improve communication, strengthen cooperation, and reduce disagreements among project stakeholders.

5. Conclusion and Recommendations

5.1 Conclusion

The study concluded that stakeholder involvement in project planning positively and significantly influences the success of the Rwanda Charity Eye Hospital construction project. Involving stakeholders in defining project objectives and priorities, identifying project requirements, contributing to project designs and plans, and identifying potential risks helped promote effective planning, communication, coordination, and shared understanding among project participants. The correlation analysis

demonstrated a strong positive relationship between stakeholder involvement in project planning and project success, while the regression analysis confirmed a significant effect. Therefore, the null hypothesis was rejected, and the study concludes that meaningful stakeholder involvement from the early planning stages is essential for improving construction project outcomes and enhancing the achievement of project objectives.

5.2 Recommendations

Based on the findings of the study, the following recommendations are made:

1. Project managers should ensure that relevant stakeholders are actively involved from the beginning of the planning process so that project objectives and priorities reflect the needs and expectations of the hospital, beneficiaries, government authorities, technical teams, donors, and community representatives.
2. Stakeholders should be given sufficient opportunities to contribute to the identification of technical, operational, and resource requirements and to review proposed project designs and plans. This can help ensure that project plans are practical and responsive to actual project needs.
3. Project managers should involve stakeholders in identifying potential technical, financial, environmental, and social risks during planning. The knowledge and experience of different stakeholders should be incorporated into risk assessment and the development of appropriate mitigation measures before implementation.
4. Stakeholder involvement should continue throughout the planning process through regular meetings, consultations, and feedback sessions. This would strengthen communication, coordination, shared understanding, and stakeholder commitment, thereby supporting successful implementation of construction projects.

References

- Chinyio, E., & Akintoye, A. (2008). Practical approaches for engaging stakeholders in construction projects. *Construction Management and Economics*, 26(6), 591–599.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65–91.
- Ferrari, M. (2024). Stakeholder communication and collaborative planning in construction projects. *International Journal of Project Management Studies*, 8(2), 45–59.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
- Gaine, P. (2024). Stakeholder participation and resource planning in construction projects. *Journal of Construction Project Management*, 12(1), 33–47.
- Heravi, A., Coffey, V., & Trigunarysyah, B. (2015). Evaluating the level of stakeholder involvement during the project planning processes of building projects. *International Journal of Project Management*, 33(5), 985–997.
- Huller, M. (2022). Stakeholder participation in infrastructure development projects in East Africa. *African Journal of Construction Management*, 7(2), 41–55.
- Innova. (2022). *Stakeholder collaboration in large-scale construction projects*. Innova Construction Research.
- Khatam, R. (2023). Stakeholder identification and project scope management in construction projects. *International Journal of Construction Management*, 15(3), 112–126.
- Keystone. (2022). *Stakeholder engagement and construction project performance*. Keystone Project Management Institute.
- Kiombo, J. (2025). Stakeholder participation and infrastructure project performance in East Africa. *East African Journal of Project Management*, 10(1), 22–37.
- Lee, J. (2023). Stakeholder participation and construction project coordination in Asia. *Asian Journal of Construction Management*, 9(2), 64–78.
- Lee, J. (2024). Stakeholder involvement and construction project performance. *International Journal of Construction Studies*, 14(1), 25–39.
- Lee, J. (2025). Stakeholder involvement in construction project risk management. *Journal of Project Risk Management*, 11(2), 51–66.
- Li, Y., & Zhang, X. (2021). Stakeholder engagement and construction project planning performance. *International Journal of Project Management*, 39(4), 415–428.

- Linsey, K. (2024). Project success factors in contemporary construction management. *Journal of Construction Management*, 18(2), 75–89.
- Mambwe, P., Chileshe, N., & Rwelamila, P. D. (2020). Project success factors in construction projects: A developing country perspective. *Construction Economics and Building*, 20(3), 45–60.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–886.
- Mohamed, S., & Nguyen, T. (2021). Stakeholder management and construction project performance. *International Journal of Project Management*, 39(6), 612–625.
- Mukakarisa, J., & Njoroge, P. (2024). Stakeholder engagement and construction project performance in Rwanda. *International Journal of Entrepreneurship and Project Management*, 9(4), 22–35.
- Mwangi, J. (2022). Stakeholder participation and construction project performance in Sub-Saharan Africa. *African Journal of Construction and Development*, 8(1), 34–49.
- Mwangi, J. (2023). Stakeholder identification and engagement in construction project planning. *Journal of Project Management Practice*, 6(2), 19–32.
- Mwangi, J., & Muchelule, Y. (2021). Stakeholder engagement and performance of construction projects in East Africa. *International Journal of Construction Management*, 21(4), 301–315.
- Mugabo, E., & Mulyungi, P. (2019). Stakeholder participation and project performance in Rwanda. *International Journal of Scientific and Research Publications*, 9(5), 125–134.
- Njogu, P. (2018). Stakeholder involvement and construction project performance in developing countries. *International Journal of Project Management Research*, 6(1), 15–28.
- Nziyumvira, J., & Amolo, J. (2025). Stakeholder engagement strategies and road construction project performance. *International Journal of Finance & Banking Studies*, 14(1), 1–15.
- Nyetweka, J., & Dushimimana, E. (2024). Project planning practices and project performance: A case of King Faisal maternity ward project implementation in Gasabo District, Rwanda. *African Journal of Empirical Research*, 5(2), 112–124.
- Olander, S. (2007). Stakeholder impact analysis in construction project management. *Construction Management and Economics*, 25(3), 277–287.
- Project Management Institute. (2021). *A guide to the project management body of knowledge (PMBOK® guide)* (7th ed.). Project Management Institute.
- Shanty, R. (2024). Stakeholder participation and risk assessment in construction projects. *International Journal of Project Risk Studies*, 9(1), 28–42.
- Shenhar, A. J., Dvir, D., Levy, O., & Maltz, A. C. (2001). Project success: A multidimensional strategic concept. *Long Range Planning*, 34(6), 699–725.
- Talley, J. L., Schneller, A. J., & Heller, M. (2016). Stakeholder risk assessment and management in construction projects. *International Journal of Project Management*, 34(5), 779–790.
- Terry, P. (2022). Stakeholder involvement in project scope and requirements management. *Journal of Construction Project Management*, 10(2), 55–68.
- Uttey, D. (2024). Community participation and construction project performance in Sub-Saharan Africa. *African Journal of Infrastructure Development*, 9(1), 38–52.
- Wellars, J. (2022). Communication and stakeholder consultation in construction project planning. *Rwanda Journal of Management and Development*, 5(2), 66–80.