



Effect of Stakeholder Management on Project Sustainability in Rwanda: A Case of Takeda Project in Nyagatare District

Nziza Karegeya Tonny, Ruth Odengo

University of Kigali

<https://orcid.org/0009-0000-4967-5701>

Email: nzizattonny@gmail.com

Abstract: The general objective of this study was to examine the effect of stakeholder management on sustainability of Takeda Project in Nyagatare District. This study specifically assessed the effect of stakeholder identification on the sustainability of Takeda Project, analyze the effect of stakeholder analysis on the sustainability of Takeda Project, evaluate the effect of stakeholder engagement on the sustainability of Takeda Project, and determine the effect of stakeholder communication on sustainability of Takeda Project in Nyagatare District. The researcher used SPSS (Statistical Package for the Social Sciences, version 28). The regression findings revealed that stakeholder identification had a positive and significant effect on sustainability of Takeda Project in Nyagatare District ($B = 0.315$, $t = 7.362$, $p = 0.000$), while stakeholder analysis also had a positive and significant effect on sustainability of Takeda Project in Nyagatare District ($B = 0.357$, $t = 7.952$, $p = 0.000$). The findings further showed that stakeholder engagement had a positive and significant effect on sustainability of Takeda Project in Nyagatare District ($B = 0.096$, $t = 2.342$, $p = 0.021$), and stakeholder communication had a positive and significant effect on sustainability of Takeda Project in Nyagatare District ($B = 0.243$, $t = 5.570$, $p = 0.000$). The study concluded that stakeholder management practices significantly contribute to project sustainability. The study recommended that Takeda Project management should maintain an updated stakeholder register showing stakeholder roles, contacts, interests, expectations, and level of involvement to strengthen coordination and sustainability.

Keywords: Stakeholder Management, Stakeholder Identification, Stakeholder Analysis, Stakeholder Engagement, Stakeholder Communication, Project Sustainability

How to cite this work (APA):

Nziza, K. T., & Odengo, R. (2026). Effect of Stakeholder Management on Project Sustainability in Rwanda: A Case of Takeda Project in Nyagatare District. *Journal of Research Innovation and Implications in Education*, 10(4), 241 – 255. <https://doi.org/10.59765/bfd9h7>

1. Introduction

Stakeholder management has gained expanding attention in recent discussions of project sustainability, particularly in contexts where development initiatives depend on cooperation among government institutions, private organizations, and community groups. Sustainable outcomes rarely emerge from technical decisions alone; instead, they gain strength from dialogue, shared expectations, and continuous coordination across actors whose priorities may differ. The focus on sustainability has therefore encouraged researchers to examine practices that strengthen mutual

understanding and collective responsibility (Chatterjee & Saha, 2022).

In the United States, stakeholder management in infrastructure and environmental projects supports long-term continuity through open communication across planning and operational phases. Government agencies coordinate with contractors, local residents, civic groups, and environmental organizations to clarify expectations and long-range responsibilities, where steady dialogue and accessible feedback channels reduce resistance and strengthen acceptance of project decisions over extended timelines (Li et al., 2022). A comparable pattern appears

in Germany, where urban development initiatives rely on structured coordination among municipal planning authorities, private developers, and neighborhood associations. Scheduled consultation meetings and written agreements define responsibilities, while ongoing joint committee discussions maintain trust and steady the implementation process even when political directions shift, preventing disruptions in project continuity across administrative periods (Hesser & Reiter, 2022). A similar emphasis on shared responsibility is present in India, where sustainable rural water supply systems function through leadership drawn from the local area together with monitoring groups that address operational concerns and ensure upkeep. When perspectives from local stakeholders shape planning and routine oversight, operational stability is maintained, whereas excluding these voices frequently results in unclear responsibilities and breakdowns that interrupt service continuity (Singh & Lata, 2023).

In Africa, Ethiopia coordinates irrigation development through cooperation among agricultural offices, farmer associations, and district authorities, where planning discussions and phased review meetings clarify operational duties and address pressures linked to climatic shifts or limited water flow, allowing irrigation systems to continue functioning because maintenance expectations and task responsibilities are understood and acted upon collectively across seasons (Tsegaye, 2023).

Kenya applies stakeholder management in water resource systems through locally formed committees that take part in decisions concerning allocation, scheduling of upkeep tasks, and supervision of daily operation, creating a shared sense of duty that keeps infrastructure services consistent since users recognize their ongoing role in sustaining access, which supports continued functioning with fewer disruptions (Muriithi & Wambugu, 2022). Uganda organizes stakeholder coordination in health service projects through structured interaction among district leadership, health personnel, and local administrative teams, where periodic meetings clarify priorities, outline available capacities, and support continuity in service activities, meaning that delivery remains steady even during funding changes because responsibilities are communicated clearly across all participants (Nabukeera, 2023).

Tanzania follows a similar pattern in environmental conservation projects, where village leadership collaborates with local forest groups and recognizes ecological knowledge in land protection and rehabilitation efforts, reinforcing long-run stewardship through coordinated caretaking rather than external enforcement, thereby reducing degradation risks and strengthening the durability of restored natural spaces (Mwakyusa, 2022).

Stakeholder management for project sustainability in Rwanda operates through shared coordination across

public services, production systems, and environmental programs, where responsibilities are distributed among local actors rather than held solely at administrative centers. Rural water supply schemes function through participation of local water user groups working together with sector authorities to oversee daily monitoring, clarify tasks, and maintain operational continuity, which reduces the need for external intervention and strengthens long-term upkeep (Uwizeyimana, 2022). This cooperative pattern also extends into agricultural production networks where cooperative boards organize structured communication with elected member representatives, allowing pricing, resource allocation, and seasonal planning decisions to be discussed clearly, which supports consistent production and market access because decisions are understood and accepted collectively (Niyonsenga, 2023). A similar coordination structure appears in health programs, where implementing agencies work alongside district management offices and local health committees through scheduled review meetings that align priorities with available capacity, maintaining service continuity even when funding conditions change (Mukamana, 2021). The same collaborative approach is evident in land restoration and forest protection programs, where local representatives participate in monitoring and caretaking roles that reinforce shared stewardship and long-term landscape protection rather than temporary external oversight (Habimana, 2024).

Despite Rwanda's commendable progress in implementing development projects across sectors, the sustainability of these initiatives remains a pressing concern. Numerous studies have highlighted that while short-term outputs are often achieved, long-term impact and continuity are frequently compromised due to weak exit strategies, limited stakeholder ownership, and inconsistent monitoring and evaluation frameworks.

Ndungutse (2021) found that only 38% of USAID-funded projects in Rwanda sustained their core activities two years after donor withdrawal, attributing this decline to the absence of institutionalized exit strategies and capacity transfer mechanisms. He emphasized that projects without embedded sustainability plans tend to collapse once external support ceases. Similarly, a study by Uwizeyimana and Ndagijimana (2022) on community-based water supply projects in Eastern Province revealed that 61% of the systems became non-functional within three years due to poor maintenance structures and lack of community engagement.

Monitoring and evaluation (M&E) practices also play a pivotal role. According to Musabyimana et al. (2023), projects that allocated more than 10% of their budget to M&E achieved 60% higher sustainability scores compared to those with minimal investment in tracking and learning. One project officer interviewed in the study remarked, without real-time feedback and adaptive learning, sustainability becomes guesswork. This aligns

with findings from the Rwanda Governance Board (2020), which reported that only 42% of local government projects had functional M&E systems, contributing to premature project failure.

Furthermore, stakeholder participation remains uneven. A study by Nkurunziza and Mugisha (2021) found that projects with active community involvement during planning and implementation phases had a 72% retention rate of core activities, compared to only 41% in top-down initiatives. The authors concluded that ownership is not a byproduct of implementation, it must be cultivated from inception.

Previous studies such as Ndungutse (2021), Uwizeyimana and Ndagijimana (2022), Musabyimana et al. (2023), Rwanda Governance Board (2020), and Nkurunziza and Mugisha (2021) have examined various dimensions of project sustainability in Rwanda, including exit strategies, monitoring and evaluation practices, and community participation. However, these studies have not specifically addressed the relationship between stakeholder management and project sustainability within the context of health-related interventions in Nyagatare District. This study analyzed the effect of stakeholder management on project sustainability, focusing on Takeda Project in Nyagatare District, thereby addressing a documented gap in knowledge and contributing to the operational understanding of participatory frameworks in health sector development.

1.1 General Objective

The general objective of this study was to examine the effect of stakeholder management on project sustainability in Rwanda, specifically focusing on Takeda Project in Nyagatare District.

1.2 Specific Objectives

Specifically, the study had the following objectives:

1. To assess the effect of stakeholder identification on sustainability of Takeda Project in Nyagatare District.
2. To analyze the effect of stakeholder analysis on sustainability of Takeda Project in Nyagatare District.
3. To evaluate the effect of stakeholder engagement on sustainability of Takeda Project in Nyagatare District.
4. To determine the effect of stakeholder communication on sustainability of Takeda Project in Nyagatare District.

2. Literature Review

2.1 Theoretical Review

This study was guided through Stakeholder Theory, Resource Based View Theory, Theory of Change and Goal Setting Theory to explain project sustainability outcomes.

2.1.1 Stakeholder Theory

Stakeholder Theory entered project planning discussions in 1984 when attention began shifting toward the different actors connected to project activities and outcomes. The theory holds that projects are shaped through continuous interaction among groups and individuals who have interests linked to the project's direction. Recognizing these interests at early stages strengthens cooperation and supports clarity of decisions as projects progress (Chatterjee & Saha, 2022).

Stakeholder Theory guided the first objective, which assesses the effect of stakeholder identification on sustainability of Takeda Project in Nyagatare District. The theory is appropriate because stakeholder identification focuses on recognizing the individuals, groups, and institutions that influence or are influenced by project activities. Therefore, the theory helps explain how proper identification of beneficiaries, local leaders, partners, donors, project staff, and implementing institutions contributes to project sustainability.

2.1.2 Resource Based View Theory

Resource Based View Theory was formally introduced by Birger Wernerfelt in 1984 and later developed by Jay Barney in 1991. The theory explains how organizational performance and sustainability are strengthened through effective use of valuable, rare, inimitable, and well-organized resources. It emphasizes that projects achieve stronger continuity when they mobilize internal capacities such as skilled personnel, technical knowledge, financial resources, coordination systems, community trust, and institutional experience. Recent literature shows that resources become more useful when they are organized strategically and converted into capabilities that support long-term performance and sustainability (Mailani et al., 2024).

Resource Based View Theory guided the second objective, which analyzes the effect of stakeholder analysis on sustainability of Takeda Project in Nyagatare District. The theory is relevant because stakeholder analysis helps determine the resources, capacities, interests, influence, and contributions that different stakeholders bring to the project. In this study, the theory explained how technical expertise, financial support, institutional capacity, community trust, and coordination

resources contribute to the sustainability of Takeda Project.

2.1.3 Theory of Change

Theory of Change was developed through the work of Carol Weiss in 1995 within evaluation studies that focused on how complex community and development programs produce intended change. The theory explains how planned project activities are expected to produce outputs, outcomes, and long-term impact through clear causal pathways. It emphasizes that sustainable results are achieved when project actors define the desired change, identify assumptions, align activities with expected outcomes, and monitor whether implementation is moving toward the intended results. Recent evaluation literature indicates that Theory of Change is useful in explaining sustainable impact because it links resources, actions, outputs, results, and learning processes within complex development interventions (van der Knaap, 2024).

Theory of Change guided the third objective, which evaluates the effect of stakeholder engagement on sustainability of Takeda Project in Nyagatare District. The theory is suitable because stakeholder engagement connects project inputs, activities, outputs, outcomes, and long-term results. It helped explain how participation in planning, implementation, monitoring, feedback, and learning supports continuity of project benefits and strengthens sustainability.

2.1.4 Goal Setting Theory

Goal Setting Theory was first introduced by Edwin Locke in the late 1960s and later developed with Gary Latham into a comprehensive motivational theory in 1990. The theory explains that performance improves when individuals and organizations work toward clear, specific, measurable, and challenging goals. It maintains that goals direct attention, increase effort, support persistence, and provide standards for assessing achievement. Recent organizational literature shows that goals influence performance when they are clearly communicated, aligned with organizational priorities, and supported by feedback mechanisms that guide action toward expected results (Gkizani & Galanakis, 2022).

Goal Setting Theory guided the fourth objective, which determines the effect of stakeholder communication on sustainability of Takeda Project in Nyagatare District. The theory is appropriate because communication helps stakeholders understand project goals, expected results, roles, responsibilities, timelines, and performance targets. In this study, the theory explained how clear and continuous communication improves coordination, accountability, feedback, and commitment toward sustainable outcomes of Takeda Project.

2.2 Empirical Review

2.2.1 Stakeholder Identification and Project Sustainability

Dziadkiewicz et al. (2022) examined stakeholder identification within sustainable project management in tourism settings in Pomerania, working with a focus group of 48 participants experienced in project delivery. Discussion activities concentrated on listing of stakeholder categories, clarification of interests, and priority decisions. The work demonstrates that a complete stakeholder register established at the beginning strengthens coordination, clarifies distribution of roles among organizations, and reduces repetition of tasks during implementation. A register functions effectively when a single custodian maintains it, update points match project phase transitions, and documentation keeps responsibilities continuously visible. The authors emphasize that structured identification anchors cooperation and strengthens continuity of sustainability aims across the full project cycle. Recommendations include formal listing procedures, verification of stakeholder registers through consultation, and aligning identified actors with communication schedules and project review sessions.

Machuma et al. (2024) investigated stakeholder participation and sustainability of community-based water borehole projects in Mavoko Constituency using a descriptive survey with systematic random sampling across 20 projects. The target population was 1,230 individuals and 302 respondents were selected through Taro Yamane's formula, with data examined using SPSS version 25.0 and binomial logistic regression. The results indicate that social inclusion increased sustainability likelihood approximately 5.6 times, stakeholder engagement increased sustainability likelihood approximately 4.8 times, and effective planning increased sustainability likelihood approximately 3.6 times. Clear stakeholder identification early in the project process supported consistent responsibility sharing and steady continuity of service after external support decreased. Recommendations direct attention to maintaining inclusive stakeholder registers, strengthening committee capacity for monitoring and resource decisions, and ensuring identified actors participate in structured planning and follow up sessions.

Hategekimana and Tarus (2025) evaluated stakeholder salience and project sustainability within Compassion International Rwanda's initiatives through a descriptive design combining quantitative and qualitative elements. The target population was 363, and 190 respondents were selected using Slovin's formula, with 185 questionnaires returned, producing a 97 percent response rate. Analysis in SPSS version 21 recorded a Pearson correlation coefficient of $r = 0.786$ and a standardized beta coefficient of 0.870 with a p value of 0.000, indicating a strong positive effect of stakeholder salience

on sustainability. Higher salience corresponded with clearer alignment of project intentions, stronger continuity of activities, and steadier maintenance practices. Recommendations center on constructing a salience-based register during initial planning, updating stakeholder categories when project conditions shift, and ensuring high salience actors participate actively in monitoring meetings and decision review processes.

2.2.2 Stakeholder Analysis and Project Sustainability

Węgrzyn and Wojewnik-Filipkowska (2022) examined stakeholder analysis in the context of public–private partnership projects using a conceptual model rooted in benefit orientation and engagement depth. Their work classified stakeholders in relation to economic, social, and environmental expectations across infrastructure undertakings in Poland. They demonstrated that systematic analysis of stakeholder attitudes and preferred outcomes created clearer alignment between PPP objectives and long-term sustainability conditions. Their test of the benefit–engagement model confirmed that stakeholders hold different motivations that must be assessed to manage cooperation across time and scope. The authors emphasized that sustainability strengthens when project teams allocate attention to stakeholders based on well-defined attributes and priority criteria. They recommended applying structured identification matrices, continuous attitude assessment, and periodic classification reviews to preserve continuity and reduce misalignment as projects progress.

Kaggwa et al. (2025) evaluated stakeholder management in ABSA Bank Uganda using a cross-sectional survey across four branches, targeting internal stakeholders including branch managers, supervisors, tellers, and loan officers selected with simple random sampling. Quantitative analysis in SPSS version 27 showed that higher levels of stakeholder engagement corresponded with improved planning and evaluation and also supported gains in employee productivity and customer satisfaction. The research confirmed statistically significant positive relationships between stakeholder engagement, stakeholder satisfaction, and organizational performance outcomes. The authors demonstrated that structured stakeholder analysis allowed strategic prioritization of communication, training, and coordination efforts that strengthened operational continuity. Recommendations emphasized maintaining consistent communication channels, reinforcing satisfaction mechanisms through accountability and transparency, and linking stakeholder analysis results to performance routines and service quality improvement activities.

Ndayizeye and Munene (2022) examined stakeholder participation in the AVEH Umurerwa funded project in Bugesera District using a descriptive design with both qualitative and quantitative approaches. The target population was 251 and the sample consisted of 188

respondents selected through stratified random sampling. The correlation results showed positive and significant associations between consultative planning and quality performance ($r = 0.712$, $\text{sig} = 0.00 < 0.01$), budgetary performance ($r = 0.717$, $\text{sig} = 0.00 < 0.01$), and schedule performance ($r = 0.783$, $\text{sig} = 0.00 < 0.01$). Collective implementation also aligned positively with performance, and joint monitoring showed $r = 0.650$ to $r = 0.705$ across performance dimensions. Their work demonstrates that stakeholder analysis that clarifies who has influence, responsibility, and required involvement supports continuity and strengthens sustained project effectiveness.

2.2.3 Stakeholder Engagement and Project Sustainability

Attanasio et al. (2022) examined stakeholder engagement within business models for sustainability using a multiple case study of five Italian B Corporations. The research presented a stakeholder value flow model consisting of value intention, value proposition, value creation, value delivery, and value capture, showing how engagement at each stage shapes continuity of sustainability commitments. Stakeholder engagement strengthened sustainability when responsibilities were clarified across stages and communication remained consistent, ensuring shared direction and coordination. The authors emphasized alignment of stakeholder roles with long-term project intentions to preserve purpose and reduce fragmentation in execution. Recommendations centered on periodic stakeholder mapping, structured communication cycles, and integration of stakeholder engagement into continuous learning programs to maintain sustainability focus across project phases.

Sanka (2024) investigated stakeholder engagement in donor funded WASH projects in Babati District using a mixed methods approach. Engagement elements examined included alignment with local needs, participation in planning actions, collaborative representation in decision moments, and capacity strengthening for maintenance activities. The findings indicated that project sustainability strengthened when community actors contributed to design decisions and maintained presence in monitoring routines, enabling continuity after external support reduced. Projects experienced difficulty where capacity strengthening was insufficient and stakeholder expectations were not clarified early, which limited cohesion during implementation. The study recommended structured dialogue spaces, feedback channels that clarify adjustments, and tailored capacity strengthening programs that prepare local actors for technical and administrative responsibilities essential for long-term sustainability.

Habumuremyi and Tarus (2021) examined stakeholder engagement and sustainability of community projects in

Ruhango District using a descriptive research design with a sample of 401 participants. Passive participation recorded a positive and significant relationship with sustainability ($\beta = 0.739$; $p < 0.05$), and interactive participation also recorded a positive and significant relationship ($\beta = 0.194$; $p < 0.05$). Stakeholder engagement strengthened sustainability when project actors attended meetings, accessed information, contributed to consultations, and took part in shared decision moments. The authors emphasized structured participation that assigns opportunity for expression and encourages confidence in project continuity. The study recommended strengthening both passive and interactive participation to secure long-term stewardship, with particular emphasis on communication routines, collective problem-solving forums, and capacity strengthening sessions for stakeholders who manage ongoing activities.

2.2.4 Stakeholder Communication and Project Sustainability

Ukoha (2022) examined the communication strategies project managers use to engage stakeholders and improve project performance in a qualitative single-case study from the Nigerian oil and gas industry. Data were gathered from five experienced project managers using semistructured interviews, archival documents, and field notes. Thematic analysis revealed four core strategies: clear and well-written communication, frequent engagement, transparency and sincere messaging, and active listening supported by structured communication plans. The study concluded that ineffective communication reduces engagement, performance, and sustainability, while tailored communication aligned with stakeholder needs enhances project success. It recommended identifying stakeholders' communication preferences, detail levels, education, and cultural context to strengthen engagement and improve organizational performance.

Bukhala et al. (2025) evaluated how stakeholder identification, involvement, and communication influence the sustainability of donor-funded projects in NGOs, focusing on FIDA Kenya's Toll-Free Lines Project. Using an explanatory cross-sectional design and census of 90 stakeholders, the study achieved 67 responses (74 %). Quantitative analysis through SPSS showed that stakeholder identification ($\beta = 0.923$), stakeholder involvement ($\beta = 0.587$), and stakeholder communication ($\beta = 0.981$) significantly influence sustainability, while legal and regulatory compliance played a supportive role ($\beta = 0.161$). The regression model explained 82.2 % of sustainability variation ($R^2 = 0.822$). The study concluded that systematic identification, involvement, and communication are essential for long-term viability and recommended adopting evidence-based stakeholder engagement strategies.

Mbabazi and Njoroge (2025) investigated the influence of stakeholder engagement on the sustainability of the Kaizen Project implemented by JICA under WASAC in Rwanda. Using a mixed-method design, they collected data from 178 respondents including management, M&E officers, JICA experts, and beneficiaries through questionnaires and interviews. Findings showed a strong positive correlation between stakeholder engagement and sustainability ($r = 0.684$, $p < 0.001$). Qualitative results highlighted transparent communication, participatory planning, and continuous capacity building as critical for ownership and accountability. Their study concluded that effective engagement enhances institutional performance and long-term relevance. They recommended institutionalizing participatory feedback mechanisms and integrating stakeholder collaboration into strategic planning to sustain Kaizen outcomes beyond donor support.

3. Methodology

3.1 Research Design

This study employed a descriptive and correlational research design to examine the relationship between stakeholder management dimensions and project sustainability. The descriptive design enabled the researcher to collect detailed information on stakeholder identification, stakeholder analysis, stakeholder engagement, and stakeholder communication processes within Takeda Project. The correlational component assisted in determining the strength and direction of relationships among these variables.

This design was appropriate because it facilitated both descriptive analysis and inferential testing of how stakeholder management practices influenced project sustainability outcomes. It allowed comparisons across multiple stakeholder groups while maintaining objectivity in analysis. Statistical analysis was conducted to identify patterns and relationships among the study variables, ensuring credible conclusions.

3.2 Study Population

The total population for this study was 253 individuals including local government officials, community health workers, SFH Rwanda staff and project staff.

3.3 Sampling Design

The Krejcie and Morgan (1970) formula was applied to determine the sample size, ensuring that all major categories are proportionally represented. The stratified random sampling technique was used to accommodate differences across professional groups within Takeda Project.

The study utilised stratified sampling, a method that first divided the population into homogeneous subgroups, known as strata, based on shared characteristics such as role, experience, or location. Within each stratum, simple random sampling was applied to select participants. Each stratum, including local government officials, community health workers, SFH Rwanda staff and project staff, was proportionally sampled to ensure fair representation of all respondent categories.

3.4 Data Collection Instrument

The primary data for this study was collected using a structured questionnaire composed of closed-ended and Likert-scale items aligned with the study objectives. The questionnaire measured stakeholder identification, stakeholder analysis, stakeholder engagement, and stakeholder communication in relation to project sustainability. In addition to primary data, secondary data was obtained through a systematic review of project reports, progress documents, policy guidelines, and other relevant literature to support interpretation and validation of the findings.

As noted by Mouton and Ferreira (2024), questionnaires are reliable tools for collecting standardized data from a large population within limited time. In this study, questionnaires were distributed to respondents across all strata. The instrument was divided into sections corresponding to each study objective. Closed-ended questions captured quantifiable data, while limited open-ended items allowed respondents to clarify or elaborate where necessary.

Secondary data was collected through document review, which enhances validation of primary data (Ravitch & Carl, 2021). Relevant documents such as Takeda Project reports, sustainability assessments, district development plans, and stakeholder engagement frameworks was reviewed. These records provided supplementary evidence on project activities, stakeholder mapping, and sustainability outcomes.

3.5 Pilot Study, Validity and Reliability

A pilot study was conducted to evaluate the clarity, reliability, and functionality of the questionnaire before the main data collection. Approximately 15 participants (10% of the total sample size) were selected randomly from Takeda Project in Muhanga District.

Content validity was assessed using the Content Validity Index (CVI). The number of relevant items was 25, obtained from all statements in the questionnaire variable tables. The total number of items was 29 after adding four demographic categories. Therefore, $CVI = \text{Relevant items} / \text{Total items} = 25/29 = .862$. Since the CVI was above .80, the instrument was considered valid for the study.

Internal consistency of the questionnaire was assessed using Cronbach's Alpha coefficient through SPSS software. A coefficient of 0.70 or higher was considered acceptable. Items that lower reliability was modified or eliminated to strengthen overall consistency of the scales.

Table 1: Reliability Results

Variable	N of Items	Cronbach's Alpha
Stakeholder Identification	5	.832
Stakeholder Analysis	5	.811
Stakeholder Engagement	5	.838
Stakeholder Communication	5	.838
Project Sustainability	5	.804

The results in Table 1 show that all variables had Cronbach's Alpha values above 0.70. Stakeholder Identification recorded 0.832, Stakeholder Analysis 0.811, Stakeholder Engagement 0.838, Stakeholder Communication 0.838, and Project Sustainability 0.804. This indicates that the questionnaire items had acceptable internal consistency. Therefore, the instrument was reliable for collecting data on stakeholder management practices and project sustainability in Takeda Project.

3.6 Data Analysis

Collected data was coded and analyzed using the Statistical Package for the Social Sciences (SPSS) Version 28.0.

Specifically, correlation and regression analysis, examined the relationships among stakeholder management variables and project sustainability. Bivariate correlation analysis tested relationships between one dependent variable and one independent variable. The results were interpreted using the Pearson correlation (r), which ranges from negative one to

positive one. Statistical significance was based on a Sig. 2-Tailed value less than or equal to 0.05.

3.7 Ethical Considerations

To uphold research ethics, the study adhered to principles of confidentiality, voluntary participation, and informed consent. A formal letter from the University of Kigali authorized data collection within Takeda Project. All participants were informed about the study's purpose, and their participation remained voluntary. Respondent anonymity was maintained by using identification codes instead of names. Findings were presented in aggregated form to protect confidentiality. Acknowledgment of all scholarly sources was made following ethical research and academic integrity standards.

4. Results and Discussions

4.1 Response Rate

Response rate shows the proportion of questionnaires that were successfully completed and returned compared to the total number distributed. A high response rate improves the quality of data because it shows that the collected information represents the views of the intended respondents. In this study, the response rate was important because the findings depended on the participation of respondents familiar with stakeholder management and project sustainability in Takeda Project in Nyagatare District.

Table 2: Response Rate

Questionnaires	Frequency	Percent
Returned complete	140	91.5
Not returned/incomplete	13	8.5
Total distributed	153	100.0

Source: Field Data, 2026

The findings in Table 2 indicate the response rate for questionnaires distributed to respondents involved in the study on stakeholder management and sustainability of Takeda Project in Nyagatare District. Out of 153 questionnaires distributed, 140 were returned complete, representing 91.5%, which was sufficient for analysis and reflected a high level of respondent cooperation. The 13 questionnaires representing 8.5% were not returned or were incomplete, but this proportion was small and did not weaken the adequacy of the collected data. This response rate provided a reliable basis for analysing respondents' views on stakeholder identification, stakeholder analysis, stakeholder engagement, stakeholder communication, and project sustainability.

4.2 Inferential Statistics

4.2.1 Correlation Analysis

Correlation analysis was conducted to determine whether stakeholder identification, stakeholder analysis, stakeholder engagement, and stakeholder communication had significant relationships with project sustainability in Takeda Project in Nyagatare District. Pearson correlation coefficient was used to measure the strength and direction of the relationship, while the p-value was used to determine statistical significance at the 0.05 level.

Table 3: Correlation Analysis

		Stakeholder Identification	Stakeholder Analysis	Stakeholder Engagement	Stakeholder Communication	Project Sustainability
Stakeholder Identification	Pearson	1	.736**	.687**	.745**	.861**
	Correlation					
	Sig. (2-tailed)		.000	.000	.000	.000
Stakeholder Analysis	N	140	140	140	140	140
	Pearson	.736**	1	.736**	.744**	.878**
	Correlation					
Stakeholder Engagement	Sig. (2-tailed)	.000		.000	.000	.000
	N	140	140	140	140	140
	Pearson	.687**	.736**	1	.698**	.778**
Stakeholder Communication	Correlation					
	Sig. (2-tailed)	.000	.000		.000	.000
	N	140	140	140	140	140
Project Sustainability	Pearson	.745**	.744**	.698**	1	.846**
	Correlation					
	Sig. (2-tailed)	.000	.000	.000		.000
	N	140	140	140	140	140
	Pearson	.861**	.878**	.778**	.846**	1
	Correlation					
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	140	140	140	140	140

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

Source: Field Data, 2026

The results in Table 3 indicate the correlation analysis between stakeholder management practices and project sustainability in Takeda Project in Nyagatare District. Stakeholder identification had a strong positive and statistically significant relationship with project sustainability, as shown by Pearson correlation coefficient of 0.861 and p-value of 0.000. Since the p-value was less than 0.05, the relationship was statistically significant. This means that improvement in stakeholder identification was associated with improvement in project sustainability.

The results are supported by Hategekimana and Tarus (2025), who found that stakeholder salience strengthens sustainability when stakeholders are clearly identified, categorized, and involved in monitoring and decision review processes. Their study shows that proper stakeholder recognition improves continuity of activities and strengthens maintenance of project benefits.

Stakeholder analysis had a strong positive and statistically significant relationship with project sustainability. The Pearson correlation coefficient was 0.878, while the p-value was 0.000. Since the p-value was below 0.05, the relationship was statistically significant. This implies that better stakeholder analysis

was linked with higher sustainability of Takeda Project in Nyagatare District.

The outcomes correspond with Węgrzyn and Wojewnik-Filipkowska (2022), who noted that systematic stakeholder analysis helps project teams understand stakeholder attitudes, expectations, and priority interests. Their work confirms that sustainability is strengthened when projects allocate attention to stakeholders based on clear attributes and priority criteria.

Stakeholder engagement showed a strong positive and statistically significant relationship with project sustainability. The Pearson correlation coefficient was 0.778, with a p-value of 0.000. Since the p-value was less than 0.05, the relationship was statistically significant. This indicates that increased stakeholder engagement was related to improved project sustainability.

The findings resonate with Habumuremyi and Tarus (2021), who established that stakeholder engagement strengthens sustainability when project actors participate in meetings, access information, contribute to consultations, and take part in shared decision-making. Their study supports the view that structured

participation improves project continuity and stakeholder ownership.

Stakeholder communication had a strong positive and statistically significant relationship with project sustainability. The Pearson correlation coefficient was 0.846, while the p-value was 0.000. Since the p-value was below 0.05, the relationship was statistically significant. This suggests that effective stakeholder communication was associated with better sustainability of Takeda Project in Nyagatare District.

The results are supported by Mbabazi and Njoroge (2025), who found that transparent communication, participatory planning, and continuous capacity building are important for ownership and accountability. Their study confirms that effective communication strengthens institutional performance and long-term project relevance.

Therefore, the correlation findings show that all stakeholder management practices considered in this

study had strong positive and statistically significant relationships with project sustainability. Stakeholder analysis had the highest correlation with project sustainability, followed by stakeholder identification, stakeholder communication, and stakeholder engagement. This means that improvements in these stakeholder management practices were associated with better sustainability outcomes in Takeda Project in Nyagatare District.

4.2.2 Regression Analysis

Regression analysis was conducted to determine the effect of stakeholder identification, stakeholder analysis, stakeholder engagement, and stakeholder communication on project sustainability in Takeda Project in Nyagatare District. The Model Summary was used to show the predictive strength of the model, the ANOVA table was used to test the overall significance of the regression model, and the Coefficients table was used to determine the individual effect of each independent variable on project sustainability.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.951 ^a	.904	.901	.11471	1.841

a. Predictors: (Constant), Stakeholder Communication, Stakeholder Engagement, Stakeholder Identification, Stakeholder Analysis
b. Dependent Variable: Project Sustainability
Source: Field Data, 2026

The findings in Table 4 indicate the model summary for the effect of stakeholder management practices on project sustainability in Takeda Project in Nyagatare District. The value of R was 0.951, indicating a very strong relationship between stakeholder identification, stakeholder analysis, stakeholder engagement, stakeholder communication, and project sustainability. The R Square value was 0.904, meaning that the four independent variables explained 90.4% of the variation in project sustainability. This shows that stakeholder management practices had a very high predictive contribution to project sustainability. The remaining 9.6% could be explained by other factors not included in the model. The Durbin-Watson value was 1.841, which

was close to 2, indicating that there was no serious autocorrelation problem in the regression model.

The results are consistent with Bukhala et al. (2025), who found that stakeholder identification, involvement, and communication jointly strengthen sustainability of donor-funded projects. They also agree with Kagawa et al. (2025), who showed that structured stakeholder management supports planning, evaluation, employee productivity, customer satisfaction, and operational continuity. This implies that stakeholder management practices work better when they are applied together rather than treated as separate project activities.

Table 5: ANOVA Summary

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.695	4	4.174	317.188	.000 ^b
	Residual	1.776	135	.013		
	Total	18.471	139			

a. Dependent Variable: Project Sustainability
b. Predictors: (Constant), Stakeholder Communication, Stakeholder Engagement, Stakeholder Identification, Stakeholder Analysis
Source: Field Data, 2026

The results in Table 5 indicate the ANOVA summary for the regression model on stakeholder management practices and project sustainability in Takeda Project in Nyagatare District. The F-statistic was 317.188, showing that the regression model was strong in explaining project sustainability. The significance value was 0.000, which was less than the 0.05 level of significance. This means that the model was statistically significant. The findings indicate that stakeholder identification, stakeholder analysis, stakeholder engagement, and stakeholder communication jointly had a significant effect on project sustainability. Therefore, the regression model was suitable for explaining the effect of stakeholder management on sustainability of Takeda Project in Nyagatare District.

The outcomes are supported by Machuma et al. (2024), who established that stakeholder participation, planning, and social inclusion jointly improve sustainability of community-based projects. They also align with Bukhala et al. (2025), who confirmed that stakeholder identification, involvement, and communication collectively influence sustainability of donor-funded initiatives. This means that stakeholder management practices provide a meaningful framework for explaining project sustainability when applied as a combined management approach.

Table 6: Coefficients Summary

Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	.033	.119		.277	.782		
Stakeholder Identification	.315	.043	.329	7.362	.000	.356	2.807
Stakeholder Analysis	.357	.045	.373	7.952	.000	.323	3.092
Stakeholder Engagement	.096	.041	.100	2.342	.021	.391	2.558
Stakeholder Communication	.243	.044	.254	5.570	.000	.343	2.917

a. Dependent Variable: Project Sustainability

Source: Field Data, 2026

The findings in Table 6 indicate the coefficients summary for the effect of stakeholder management practices on project sustainability in Takeda Project in Nyagatare District. Stakeholder identification had a positive and statistically significant effect on project sustainability, with $B = 0.315$. This means that one unit increase in stakeholder identification would increase project sustainability by 0.315 units, when other variables remain constant. The t-value was 7.362, showing that stakeholder identification made a meaningful contribution to the model. The p-value was 0.000, which was less than 0.05, meaning that the effect was statistically significant. The tolerance value of 0.356 and VIF of 2.807 showed that stakeholder identification had no serious multicollinearity problem.

The findings are supported by Dziadkiewicz et al. (2022), who emphasized that a complete stakeholder register established at the beginning of a project strengthens coordination, clarifies organizational roles, and reduces repetition of tasks during implementation. Their study confirms that structured stakeholder identification anchors cooperation and supports continuity of sustainability aims across the project cycle.

Stakeholder analysis had a positive and statistically significant effect on project sustainability, with $B = 0.357$. This means that one unit increase in stakeholder analysis would increase project sustainability by 0.357 units, holding other variables constant. The t-value was

7.952, which showed that stakeholder analysis had a strong contribution to project sustainability. The p-value was 0.000, which was less than 0.05, confirming that the effect was statistically significant. The tolerance value of 0.323 and VIF of 3.092 indicated that stakeholder analysis had no serious multicollinearity problem.

The outcomes agree with Ndayizeye and Munene (2022), who showed that stakeholder participation supports project performance when responsibilities, influence, and required involvement are clearly understood. Their study confirms that stakeholder analysis strengthens continuity by clarifying who should participate, how they should contribute, and where their influence is most relevant.

Stakeholder engagement had a positive and statistically significant effect on project sustainability, with $B = 0.096$. This means that one unit increase in stakeholder engagement would increase project sustainability by 0.096 units, when other variables remain constant. The t-value was 2.342, showing that stakeholder engagement contributed to the regression model. The p-value was 0.021, which was less than 0.05, meaning that the effect was statistically significant. The tolerance value of 0.391 and VIF of 2.558 showed that stakeholder engagement had no serious multicollinearity problem.

The results are consistent with Sanka (2024), who found that project sustainability improves when community

actors contribute to design decisions and remain active in monitoring routines. The study supports the view that stakeholder engagement strengthens sustainability when participation is structured, expectations are clear, and local actors are prepared for long-term responsibilities.

Stakeholder communication had a positive and statistically significant effect on project sustainability, with $B = 0.243$. This means that one unit increase in stakeholder communication would increase project sustainability by 0.243 units, holding other variables constant. The t-value was 5.570, showing that stakeholder communication made an important contribution to the model. The p-value was 0.000, which was less than 0.05, confirming that the effect was statistically significant. The tolerance value of 0.343 and VIF of 2.917 showed that stakeholder communication had no serious multicollinearity problem.

The findings are supported by Ukoha (2022), who explained that clear communication, frequent engagement, transparency, and active listening improve stakeholder engagement and project performance. This confirms that stakeholder communication contributes to sustainability when information is tailored to stakeholder needs and supported by structured communication plans.

Therefore, the coefficient results show that all four stakeholder management practices had positive and statistically significant effects on project sustainability in Takeda Project in Nyagatare District. Stakeholder analysis had the strongest effect based on the unstandardized coefficient, followed by stakeholder identification, stakeholder communication, and stakeholder engagement. The collinearity statistics showed that all VIF values were below 10 and all tolerance values were above 0.10, meaning that multicollinearity was not a serious concern in the model. These findings confirm that strengthening stakeholder management practices contributes to improved project sustainability.

4.3 Decision on Null Hypotheses

This section presents decisions on the null hypotheses that were tested using multiple linear regression analysis. The decision was based on the p-value at the 0.05 level of significance, where a null hypothesis was rejected when the p-value was less than 0.05 and retained when the p-value was greater than 0.05.

Table 7: Decision on Null Hypotheses

Null Hypothesis	Results	Decision
H01: There is no significant effect of stakeholder identification on the sustainability of Takeda Project in Nyagatare District.	$p = 0.000$	Rejected
H02: There is no significant effect of stakeholder analysis on the sustainability of Takeda Project in Nyagatare District.	$p = 0.000$	Rejected
H03: There is no significant effect of stakeholder engagement on the sustainability of Takeda Project in Nyagatare District.	$p = 0.021$	Rejected
H04: There is no significant effect of stakeholder communication on the sustainability of Takeda Project in Nyagatare District.	$p = 0.000$	Rejected

Source: Researcher, 2026

The findings in Table 7 indicate the decision on null hypotheses for the effect of stakeholder management practices on project sustainability in Takeda Project in Nyagatare District. The null hypothesis on stakeholder identification was rejected because the p-value of 0.000 was less than 0.05, meaning that stakeholder identification had a significant effect on project sustainability. The null hypothesis on stakeholder analysis was rejected because the p-value of 0.000 was less than 0.05, indicating that stakeholder analysis had a significant effect on project sustainability. The null hypothesis on stakeholder engagement was rejected because the p-value of 0.021 was less than 0.05, confirming that stakeholder engagement had a significant effect on project sustainability. The null

hypothesis on stakeholder communication was also rejected because the p-value of 0.000 was less than 0.05, showing that stakeholder communication had a significant effect on project sustainability.

5. Conclusions and Recommendations

5.1 Conclusion

The study concluded that stakeholder identification had a significant effect on sustainability of Takeda Project in Nyagatare District. Proper identification of stakeholders helped the project to understand who should be involved, contacted, assigned roles, and considered during project

activities. Clear stakeholder identification also supported better coordination and reduced confusion in project implementation. Therefore, stakeholder identification was an important foundation for sustaining project benefits.

The study concluded that stakeholder analysis significantly influenced sustainability of Takeda Project in Nyagatare District. Analyzing stakeholder influence, priorities, capacities, relationships, and concerns helped the project to assign responsibilities and manage stakeholder expectations effectively. Stakeholder analysis also supported better decision-making because the project could understand the needs and positions of different actors. Therefore, strong stakeholder analysis was essential for improving project sustainability.

The study concluded that stakeholder engagement had a significant effect on sustainability of Takeda Project in Nyagatare District. Engaging stakeholders through discussions, consultations, communication channels, collaborative planning, and participation strengthened their involvement in project processes. This helped stakeholders to feel included and encouraged them to support project activities.

The study concluded that stakeholder communication significantly affected sustainability of Takeda Project in Nyagatare District. Effective communication supported timely information sharing, message clarity, feedback exchange, proper channel use, and consistent reporting. These practices helped stakeholders to understand project activities and coordinate their roles more effectively.

The study concluded that stakeholder management had a significant effect on project sustainability in Takeda Project in Nyagatare District. Stakeholder identification, stakeholder analysis, stakeholder engagement, and stakeholder communication all contributed positively to sustainability. The findings showed that projects become more sustainable when stakeholders are properly identified, analysed, engaged, and informed.

5.2 Recommendations

1. Takeda Project management should strengthen stakeholder identification by maintaining an updated stakeholder register for all groups involved in project activities.
2. Project managers should improve stakeholder analysis by regularly assessing stakeholder influence, priorities, capacities, and concerns.
3. Takeda Project should continue promoting inclusive stakeholder engagement through regular consultations, community meetings, and joint planning sessions.
4. Project communication officers should strengthen information dissemination by

preparing clear communication plans for different stakeholder groups.

5. The project should improve feedback mechanisms by creating structured channels where stakeholders can share concerns, suggestions, and progress updates. This would help management respond quickly to issues affecting project sustainability.

References

- Attanasio, G., Preghenella, N., De Toni, A. F., & Battistella, C. (2022). Stakeholder engagement in business models for sustainability: The stakeholder value flow model for sustainable development. *Business Strategy and the Environment*, 31(3), 860–874. <https://doi.org/10.1002/bse.2922>
- Bookbinder, R., Mdee, A., & Roelich, K. (2024). The possibility of a theory of change to tackle the climate crisis in a UK university. *International Journal of Sustainability in Higher Education*, 25(8), 1929–1944. <https://doi.org/10.1108/IJSHE-05-2023-0185>
- Bukhala, E., Ekambi, J., & Kithandi, C. (2025). Stakeholder engagement and sustainability of donor funded projects among non-governmental organizations in Kenya: Case of toll-free lines project. *African Journal of Commercial Studies*, 6(5), 145–156. <https://doi.org/10.59413/ajocs/v6.i5.14>
- Chatterjee, R., & Saha, P. (2022). Stakeholder engagement and sustainability in community development projects. *Sustainability*, 14(7), 4102.
- Dziadkiewicz, A., Sokołowska, E., & Jerzemowska, M. (2022). Stakeholder identification as a determinant of sustainable project management. *Scientific Papers of Silesian University of Technology. Organization and Management Series*, 156, 141–155. <https://doi.org/10.29119/1641-3466.2022.156.10>
- Gkizani, A. M., & Galanakis, M. (2022). Goal setting theory in contemporary businesses: A systematic review. *Psychology*, 13(3), 420–426. <https://doi.org/10.4236/psych.2022.133028>
- Habimana, E. (2024). Stakeholder roles and sustainability outcomes in environmental restoration projects in Rwanda. *East African Journal of Environmental Studies*, 5(1).

- Habumuremyi, J. B., & Tarus, T. K. (2021). Effect of stakeholders' participation on sustainability of community projects in Ruhango District, Rwanda. *International Journal of Research and Innovation in Social Science*, 5(9), 429–433. <https://doi.org/10.47772/IJRISS.2021.5926>
- Hategekimana, L., & Tarus, T. (2025). Contribution of stakeholders participation on project sustainability of Compassion International Rwanda's initiatives. *Journal of Research Innovation and Implications in Education*, 9(2), 261–274.
- Hesser, F., & Reiter, M. (2022). Stakeholder collaboration for sustainable infrastructure planning in Germany. *Sustainability*, 14(12), 7354.
- Kaggwa, A., Aassanga, A., & Wanjiku, C. (2025). Project stakeholder management and the performance of ABSA Bank–Uganda. *International Journal of Research Publication and Reviews*, 6(1), 1412–1426.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. <https://doi.org/10.1177/001316447003000308>
- Li, H., Talebi, S., & Anderson, S. (2022). Stakeholder engagement strategies in sustainable infrastructure projects in the United States. *Sustainability*, 14(3), 1456.
- Machuma, R. S., Odek, A., & Vundi, N. (2024). Stakeholder participation and the sustainability of community-based water borehole projects in Mavoko Constituency, Machakos County, Kenya. *African Journal of Empirical Research*, 5(4), 1076–1088. <https://doi.org/10.51867/ajernet.5.4.89>
- Madhavan, V., & Venugopalan, M. (2024). Formal learning and organizational performance: The interplay of goal setting and flexible learning practices in attaining goal congruence. *Benchmarking: An International Journal*, 31(3), 955–989. <https://doi.org/10.1108/BIJ-10-2021-0623>
- Mailani, D., Hulu, M. Z. T., Simamora, M. R., & Kesuma, S. A. (2024). Resource-based view theory to achieve a sustainable competitive advantage of the firm: Systematic literature review. *International Journal of Entrepreneurship and Sustainability Studies*, 4(1), 1–15. <https://doi.org/10.31098/ijeass.v4i1.2002>
- Mbabazi, A., & Njoroge, N. N. (2025). The influence of stakeholder engagement on the sustainability of the Kaizen Project in Rwanda. *International Journal of Social Science and Humanities Research*, 13(4), 152–157. <https://doi.org/10.5281/zenodo.17386151>
- Mouton, J., & Ferreira, P. (2024). *Quantitative research methods for development studies*. South African Academic Press.
- Mukamana, A. (2021). *Stakeholder coordination and sustainability of donor-funded health projects in Rwanda*. University of Rwanda Institutional Repository.
- Muriithi, J., & Wambugu, D. (2022). Stakeholder participation and sustainability of community water projects in Kenya. *African Journal of Project Management*, 4(2).
- Musabyimana, E., Habimana, T., & Mugiraneza, P. (2023). Influence of monitoring and evaluation practices on sustainability of development projects in Rwanda: Evidence from Rubona Water Supply Project. *International Journal of Applied Engineering Research*, 18(3), 97–108.
- Mwakyusa, P. (2022). Stakeholder engagement practices and sustainability of forest conservation projects in Tanzania. *Journal of Environmental Management in Africa*, 6(3).
- Nabukeera, H. (2023). Stakeholder coordination and sustainability of health service projects in Uganda. *Journal of Public Administration and Policy Research*, 15(1).
- Ndayizeye, A., & Munene, P. (2022). Stakeholder participation and performance of funded project in Rwanda: A case of AVEH Umurerwa Project in Bugesera District. *Journal of Entrepreneurship & Project Management*, 6(2), 8–32. <https://doi.org/10.53819/81018102t2061>
- Ndungutse, Y. (2021). *Effectiveness of exit strategies on sustainability of development projects in Rwanda: A case of USAID-funded projects [Master's thesis, University of Rwanda]*. University of Rwanda Repository.
- Niyonsenga, J. (2023). Community stakeholder engagement and sustainability of agricultural cooperatives in Rwanda. *Rwanda Journal of Social Sciences*, 10(4).
- Nkurunziza, A., & Mugisha, C. (2021). Community participation and sustainability of development projects in Rwanda: A comparative study of

- participatory and top-down approaches. *Journal of African Development Studies*, 9(1), 83–94.
- Ozdemir, S., Fernandez de Arroyabe, J. C., Sena, V., & Gupta, S. (2023). Stakeholder diversity and collaborative innovation: Integrating the resource-based view with stakeholder theory. *Journal of Business Research*, 164, Article 113955. <https://doi.org/10.1016/j.jbusres.2023.113955>
- Ravitch, S. M., & Carl, N. M. (2021). *Qualitative research: Bridging the conceptual, theoretical, and methodological* (2nd ed.). SAGE Publications.
- Rwanda Governance Board. (2020). *Annual assessment report on local government project performance and sustainability*. RGB Publications.
- Sanka, E. (2024). Impact of stakeholder engagement on the success of water, sanitation, and hygiene projects in Babati, Tanzania. *Journal of Policy and Development Studies*, 17(1), 46–53. <https://doi.org/10.4314/jpds.v17i1.4>
- Singh, R., & Lata, P. (2023). Stakeholder engagement for sustainable rural water supply projects in India. *Sustainability*, 15(4), 2560.
- Tsegaye, A. (2023). Stakeholder collaboration and sustainability in irrigation schemes in Ethiopia. *Journal of Agricultural Development*, 8(2).
- Ukoha, J. U. (2022). *Project management communication strategies to engage stakeholders and improve project performance [Doctoral dissertation, Walden University]*. ScholarWorks.
- Uwizeyimana, D., & Ndagijimana, J. (2022). Assessment of sustainability of community-based water supply projects in Eastern Province, Rwanda. *Rwanda Journal of Engineering, Science, Technology and Environment*, 5(2), 45–59.
- Uwizeyimana, T. (2022). Stakeholder participation and sustainability of rural water supply projects in Rwanda. *Rwanda Journal of Engineering, Science and Technology*, 3(1).
- van der Knaap, P. (2024). Theories of change and the evaluation of sustainable impact: Moving beyond simplicity in development cooperation. In A. Koleros, M.-H. Adrien, & T. Tyrrell (Eds.), *Theories of change in reality: Strengths, limitations and future directions* (pp. 112–121). Routledge.
- Węgrzyn, J., & Wojewnik-Filipkowska, A. (2022). Stakeholder analysis and their attitude towards PPP success. *Sustainability*, 14(3), Article 1570. <https://doi.org/10.3390/su14031570>