

Contribution of Strategic Project Planning on Project Success. A Case Study of “Rwanda Dairy Development Project Phase I, In Gatsibo District, Rwanda (2021-2023)”

Jean Paul Simbarikure¹; Dr. Wilson Gachiri²

^{1,2}University of Kigali

Publication Date: 2025/06/11

Abstract: This research assesses the contribution of strategic project planning toward achieving positive outcomes in Phase I of the Rwanda Dairy Development Project (RDDP) in Gatsibo District. The study focused on three main components: community engagement, resource management, and strategic vision and goal alignment. It aimed to examine the impact of each component on project outcomes using a mixed-methods approach. Data were collected from 202 respondents, including project beneficiaries, implementers, and stakeholders. The findings showed that all three components positively influenced project success. Community engagement fostered inclusive decision-making and local ownership. Effective resource management supported financial efficiency and improved access to resources. Strategic vision and goal alignment played a central role by ensuring coherence with national development priorities and improving motivation among stakeholders. These results highlight the importance of integrating strategic planning elements into rural agricultural projects. The study recommends that future agricultural initiatives institutionalize these practices to enhance scalability, sustainability, and long-term success.

Keywords: Community Engagement, Project Management, Resource Planning, Rural Development, Strategic Alignment.

How to Site: Jean Paul Simbarikure; Dr. Wilson Gachiri; (2025) Contribution of Strategic Project Planning on Project Success. A Case Study of “Rwanda Dairy Development Project Phase I, In Gatsibo District, Rwanda (2021-2023). *International Journal of Innovative Science and Research Technology*, 10(6), 124-133. <https://doi.org/10.38124/ijisrt/25jun036>

I. INTRODUCTION

Strategic project planning has emerged as a cornerstone of successful development initiatives across the globe. In an increasingly complex and resource-constrained world, projects that adopt clear goals, stakeholder engagement, and effective resource allocation are more likely to achieve sustainable outcomes. This is particularly true in rural agricultural settings, where the alignment of project goals with community needs and national development priorities can significantly impact livelihood improvement and economic growth. Globally, countries such as Vietnam, Germany, and Kenya have demonstrated how robust planning frameworks can drive project efficiency, local ownership, and long-term success across sectors including health, infrastructure, and agriculture.

In Rwanda, agriculture remains a vital pillar of the economy, contributing significantly to employment, food security, and rural development. As part of efforts to modernize and commercialize this sector, the Rwanda Dairy Development Project (RDDP) was launched with the goal of enhancing milk production, improving farmer incomes, and ensuring food safety. Despite the achievements recorded in

Phase I of the project—particularly in Gatsibo District—there remains a need to critically assess the role that strategic project planning played in these successes. While similar projects in Rwanda have experienced mixed results, it is unclear to what extent planning components such as community engagement, resource management, and strategic vision contributed to the success or failure of development interventions.

This study aims to bridge this gap by examining the contribution of strategic project planning to project success within the context of Phase I of the Rwanda Dairy Development Project. By focusing on community engagement, resource management, and strategic vision and goal alignment, the research provides a nuanced understanding of how each element influenced outcomes in the Gatsibo District. The findings will not only contribute to the academic literature on rural project management but also offer practical recommendations for policymakers and development practitioners seeking to scale up agricultural initiatives in Rwanda and similar contexts.

II. STATEMENT OF THE PROBLEM

Strategic project planning has been proven effective worldwide in enhancing project outcomes, with countries such as Vietnam, Germany, China, Ghana, Kenya, and Tanzania demonstrating significant improvements in productivity, community engagement, and resource management. These successes emphasize the critical role of well-structured planning, clear goal alignment, and active stakeholder involvement across various sectors. However, Rwanda faces distinct challenges in replicating and scaling these achievements due to resource constraints, contextual differences, and limited capacity. For instance, while the Rwanda Dairy Development Project Phase I recorded notable increases in milk production and farmer incomes, similar successes have not been consistently observed across other sectors. This disparity highlights the urgent need for research focused on adapting strategic planning models to Rwanda's unique socio-economic environment. A deeper understanding of how to tailor these strategies to local capacities and community needs is essential for enhancing project effectiveness and promoting sustainable development. Addressing this gap will enable Rwanda to overcome existing challenges and leverage strategic planning as a vital tool for broader development and improved project success.

III. LITERATURE REVIEW

➤ Conceptual Review

Strategic project planning involves setting clear objectives, optimizing resource allocation, managing risks, and adapting to dynamic environments (Smith & Jones, 2019). It is composed of several interlinked components:

- *Community Engagement:*

Defined as the active participation of local stakeholders, this ensures that project objectives are aligned with community needs. Research (Davis & Green, 2019; Chen & Martin, 2018) shows that meaningful engagement improves trust, ownership, and long-term sustainability.

- *Resource Management:*

This involves the efficient allocation of financial, human, and material assets. Studies emphasize planning flexibility, sustainability, and the use of technology (Johnson & Lee, 2019; Miller & Taylor, 2022).

- *Strategic Vision and Goal Alignment:*

This component ensures that project goals align with broader development objectives, enhancing coherence and impact. Clear goal setting improves motivation, direction, and accountability (Müller & Klein, 2022).

- *Project Success:*

Traditionally measured by scope, time, and cost, modern definitions also include sustainability, quality, and long-term outcomes (Zhang et al., 2023).

- *Theoretical Review*

Three key theories support the importance of strategic planning:

- *Stakeholder Theory (Freeman, 1984):*

Emphasizes the need to address the interests of all stakeholders, especially the community, to ensure project success.

- According to Barney (1991), the Resource-Based View (RBV) Theory emphasizes that leveraging rare and valuable internal resources enables organizations to achieve a competitive advantage
- especially relevant for agricultural projects with limited assets.

- *Goal Setting Theory (Locke, 1968):*

Argues that specific, challenging goals enhance performance. This supports the need for clear vision and alignment in planning. These theories collectively reinforce the role of participatory planning, efficient resource use, and aligned objectives in ensuring project effectiveness and sustainability.

➤ Empirical Review

Studies across the globe provide strong evidence for the effectiveness of strategic project planning:

- *Community Engagement:*

- ✓ In Vietnam, education outcomes improved by 20% through participatory rural projects (Nguyen et al., 2020).
- ✓ Ghana, Kenya, and Uganda also reported increased employment, agricultural productivity, and access to clean water through community-driven initiatives (Agyapong & Asiedu, 2021; Mwangi & Otieno, 2020; Nsubuga & Kamya, 2021).
- ✓ In Rwanda, community participation in the Dairy Development Project led to a 45% increase in milk production and a 30% rise in farmer incomes (Nshimiyimana & Rugamba, 2020).

- *Resource Management:*

- ✓ Studies from Germany and China show that strategic use of resources leads to economic and technological gains (Müller & Klein, 2022; Zhang et al., 2023).
- ✓ In Africa, projects with resource planning showed reduced delays and operational costs (Kassim & Ahmed, 2022).
- ✓ In Rwanda, resource management led to a 25% cost reduction and a 15% increase in market access for dairy farmers (Mukeshimana & Mugisha, 2021).

- *Strategic Vision and Goal Alignment:*

- ✓ Clear goals enhanced project success in urban development (Germany), technology (China), and health and education sectors across Africa (Müller & Klein, 2022; Zhang et al., 2023).
- ✓ In Rwanda, goal alignment in dairy projects improved productivity, quality, and market integration (Byiringiro & Munzero, 2023).

While these findings are compelling, most studies focus on general development contexts and lack a rural agricultural focus. The integration of planning components and their specific contributions to success in dairy farming remain underexplored.

➤ *Research Gap*

Despite extensive research on strategic planning, a critical gap remains in understanding how community engagement, resource management, and goal alignment independently and interactively influence project outcomes in rural agricultural settings. Most existing studies are:

- Sector-specific (education, health, infrastructure) rather than agriculture-focused.
- Conducted in urban or developed contexts with little insight into rural dynamics.
- Focused on outcomes without isolating the influence of individual planning components.

In Rwanda, while the Dairy Development Project has shown promising results, no study comprehensively analyzes the **relative or synergistic impacts** of these planning elements. Addressing this gap is vital to inform future project design, enhance rural livelihoods, and ensure sustainable agricultural development.

IV. CONCEPTUAL FRAMEWORK

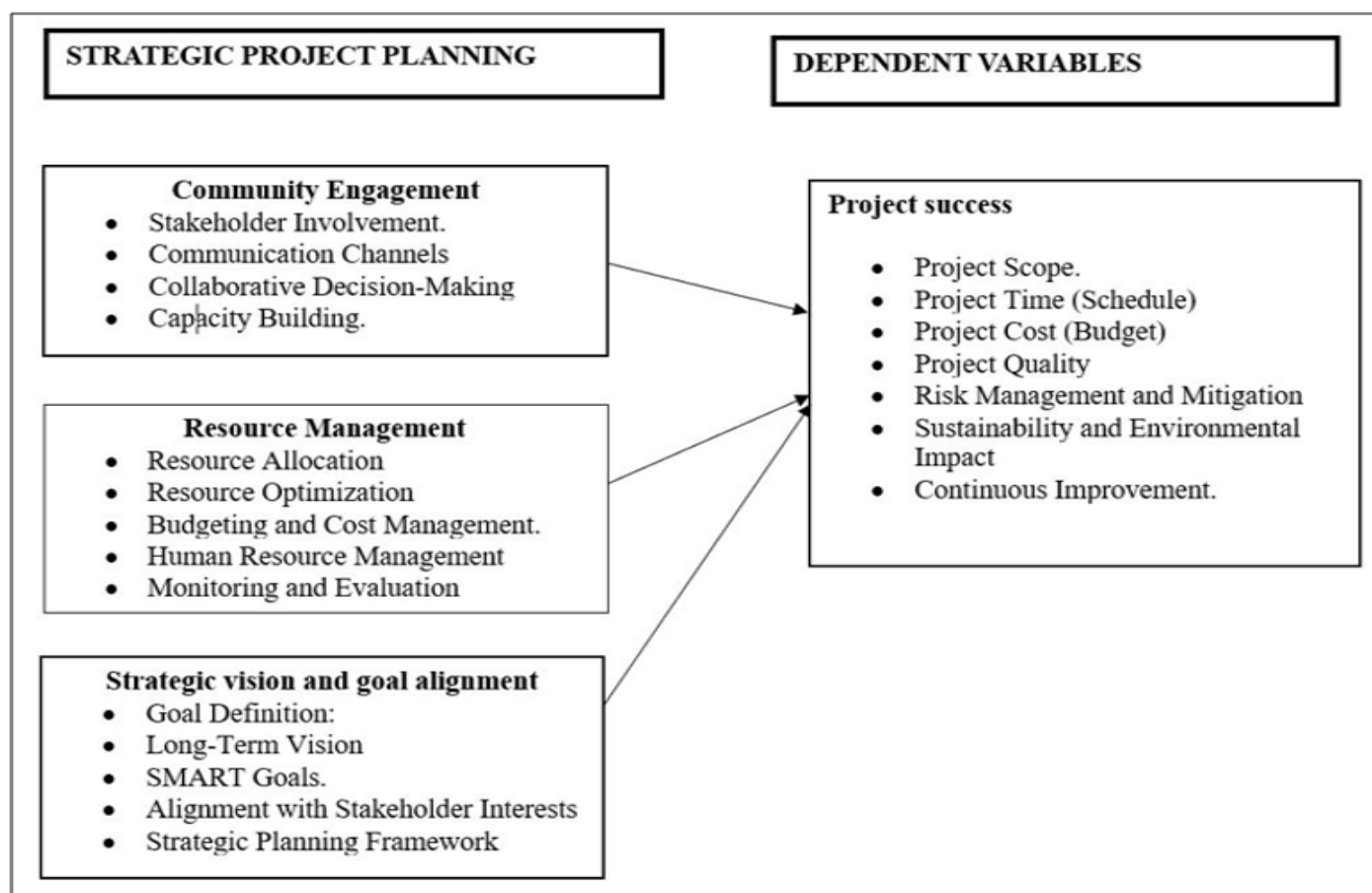


Fig 1 Conceptual Framework Source: conceptualization 2025

V. RESEARCH METHODOLOGY

➤ *Pilot Study*

A pilot study was conducted within the Rwanda Dairy Development Project involving 20 respondents to test the reliability and clarity of the questionnaire. Feedback from this pilot was used to refine and improve the instrument, ensuring questions were easily understood and responses were consistent. The pilot confirmed the questionnaire's effectiveness, supporting its use in the full-scale study.

➤ *Data Processing Techniques*

After data collection, systematic processing steps ensured the quality and readiness of data for analysis:

➤ *Editing:*

Data were carefully reviewed for errors, omissions, and inconsistencies. Missing responses were inferred where appropriate to maintain data integrity.

- **Coding:** Qualitative responses were categorized into themes relevant to the research questions, with a coding sheet developed to organize and assign codes systematically.
- **Tabulation:** Data were sorted and organized into categories and frequencies using Excel, setting the stage for interpretation.

➤ *Data Analysis*

The research adopted a combined approach, using both qualitative insights and quantitative data to examine the subject

➤ *Descriptive Statistics*

Descriptive statistics summarized quantitative data, focusing on:

- **Mean values**, interpreted within set ranges to assess agreement levels (from very low to very high).
- **Standard deviation**, measuring variability; a value under 0.5 indicated consistent responses, while above 0.5 suggested diverse opinions.

➤ *Inferential Statistics*

- **Spearman (Pearson) correlation** assessed relationships between variables. Correlations ranged from very weak to very strong based on the coefficient value.
- **Regression analysis** evaluated the influence of strategic planning components on project success. The model was:

$$Y = B_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon \quad Y = B_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

where Y = project success; X_1 = community engagement; X_2 = resource management; X_3 = strategic vision and goal alignment.

Data analysis was conducted using SPSS, providing a robust platform for Including statistical methods for summarizing and interpreting data.

➤ *Limitations of the Study*

The research faced several challenges:

- **Time and budget limitations**, especially in accessing busy staff from local government and educational sectors.

- **Language and cultural barriers**, addressed by translating surveys and hiring trained local data collectors.
- **Risk of socially desirable responses**, minimized by anonymizing surveys and applying mixed methods.
- **Limited data access**, mitigated through building trust and ensuring confidentiality agreements.

The researcher used flexible strategies such as working weekends and phone follow-ups to overcome these constraints.

➤ *Ethical Considerations*

Ethical principles guided the research throughout:

- Participants were treated fairly without discrimination.
- **Informed consent** was secured, and confidentiality maintained by using codes instead of names.
- The study ensured transparency by regularly updating participants on progress and results.
- Ethical issues identified during the pilot were addressed before full implementation.
- Data were reported responsibly, avoiding sensationalism, and all sources were properly cited.

VI. DISCUSSION AND RESULTS

To present and interpret the research outcomes, the researcher utilized tables, figures, frequencies, and percentages as methods for data analysis. The responses were gathered from a sample of 202 respondents, including staff from departments such as Project beneficiaries, Project implementers, Local authorities, Partner organization, Community members, Experts and academics, Market shareholders and Consumer. The researcher was confident that the data obtained through questionnaires and document reviews were sufficient to provide the necessary information to achieve the study's objectives.

Table 1 Distribution by education level

| Education level | Frequency | Percentage |
|-----------------|-----------|------------|
| Secondary | 29 | 14.29 |
| University | 123 | 60.71 |
| Masters | 50 | 25 |
| Total | 202 | 100 |

Source: Primary data (2025)

The findings show that most respondents in the study Demonstrate a high level of education, with the majority (60.71%) having attained a Bachelor's degree 14.29% having a Bachelor's plus professional certification, and 25% possessing a Master's degree. This high level of education suggests that the Rwanda Dairy Development Project (RDDP) Phase I engaged knowledgeable individuals capable of providing reliable insights into the project's strategic planning and success. Educated respondents They possess crucial competencies such as evaluating situations critically, addressing challenges, and making informed decisions,

which are vital for effective project management. Additionally, many Bachelor's degree holders were pursuing further studies, indicating a culture of Sustained efforts to improve knowledge and professional capabilities within the organization. This commitment to learning supports better project outcomes, as it keeps the workforce updated on industry best practices. Overall, the Respondents' educational qualifications enhances the credibility of the study's findings and highlights the importance of a skilled workforce for successful project implementation.

Table 2 Distribution by age

| Ageof respondents | Frequency | Percentage |
|-------------------|-----------|------------|
| Between18-29 | 67 | 33.2 |
| Between 30- 39 | 54 | 26.7 |
| Between 40- 49 | 42 | 20.8 |
| Between 50- 64 | 39 | 19.3 |
| Total | 202 | 100.0 |

Source: Primary data (2025)

According to the data presented in Table 2 a significant portion of the respondents were young adults, with 33.2% falling within the age range of 18 to 29 years. This group was followed by 26.7% of respondents in the 30 to 39 age range, 20.8% in the 40 to 49 range, and 19.3% in the 50 to 64 range. This distribution suggests that the research involved participants from a broad age spectrum, providing a comprehensive perspective on the topic being investigated.

The age distribution of the respondents provides a solid foundation for the Dependability of the findings. Saunders et al. (2009) highlight that studies are generally more reliable when participants come from diverse backgrounds, including differences in age, which allows for a broader range of perspectives. The presence of younger respondents (18-29 years) implies that the study is relevant to the younger demographic involved in agriculture, while the inclusion of older age groups ensures that insights from more experienced individuals were also gathered. This alignment with diverse

age groups strengthens the study's credibility, as each age group brings its own unique viewpoint and experience to the research, which contributes to more balanced and trustworthy findings.

Moreover, the fact that the study included a considerable proportion of mature respondents indicates that the data collected is likely to be impartial and reliable, as individuals in these age ranges are generally considered to possess greater life experience and maturity. This aligns with findings from Walle (2006), who argued that mature respondents are more capable of providing unbiased and informed opinions due to their extensive experience and perspective. Thus, the age distribution of respondents in this study enhances the Ensuring that no single age group disproportionately influences the data improves both the validity and reliability of the research, leading to more dependable results.

Table 3 Distribution by working experience

| Working experience | Frequency | Percentage |
|--------------------|-----------|------------|
| Lessthan one year | 78 | 38.6 |
| 1 to 2years | 56 | 27.7 |
| 3 to 5years | 42 | 20.8 |
| More than 5 years | 26 | 12.9 |
| Total | 202 | 100.0 |

Source: Primary data (2025)

According to Table 3 participants in the Rwanda Dairy Development Project (RDDP) possess varying farming experience levels: 38.6% have less than a year, 27.7% have one to two years, 20.8% have three to five years, and 12.9% have more than five years. This diversity aligns with research highlighting the importance of farming experience in agricultural project success. Experienced farmers tend to have better knowledge, resource access, and problem-solving skills, which enhance project outcomes. Additionally, more experienced farmers are often more open to adopting innovations, contributing to improved project performance. The mix of experience levels in RDDP facilitates mentorship and knowledge transfer, boosting the overall effectiveness of the project. Thus, the varied experience of respondents

supports successful implementation and sustainability of the project.

VII. DESCRIPTIVE STATISTICS

This research aimed to achieve three goals: examining the role of community participation in project success in Rwanda, investigating the influence of resource management on project performance, and evaluating how strategic vision and goal alignment affect project success

➤ Objective one:

Assess the Contribution of Community Engagement on project success in Rwanda.

Table 4 Respondents' level of Agreement on Community Engagement in farming project success

| Community engagement | N | Mean | Stanard Deviation |
|--------------------------------------------------------------------------------------------------------------------------------------|---|------|-------------------|
| Stakeholder involvement in the dairy development project has been sufficient to ensure the project model can be scaled successfully. | | 4.29 | 0.45 |
| Effective communication channels between project stakeholders have | | 4.25 | 0.61 |

| | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|--|------|------|
| contributed to the adaptation of the dairy development model to local contexts | | | |
| Collaborative decision-making has been crucial in identifying and addressing barriers to scaling the dairy development project | | 4.00 | 0.53 |
| The capacity-building Efforts in the dairy development project have been adequate to support the scaling and a daptation of the project model. | | 4.43 | 0.49 |
| The dairy development project has effectively met its scope and has been successfully replicated in other regions or communities. | | 4.52 | 0.60 |
| Risks associated with scaling and adapting the dairy development model have been effectively managed and mitigated. | | 4.34 | 0.47 |
| Sustainability and environmental impacts have been considered in the scaling and adaptation of the dairy development project | | 4.77 | 0.42 |

Source: Primary data (2025)

The researcher aimed to assess strategic planning in RDDP Phase I, focusing on community engagement and project success. As shown in Table 4 most respondents agreed or strongly agreed with the statements, with only a few undecided on issues like effective communication (8.9%), collaborative decision-making (14.3%), and project replication success (5.4%). This suggests some gaps in community impact awareness but overall reflects effective community engagement during RDDP implementation. Key aspects such as capacity-building (mean = 4.43), sustainability and environmental considerations (mean =

4.77), stakeholder involvement (mean = 4.29), and risk management (mean = 4.34) scored high to very high means, indicating strong evidence of these factors in project scaling and adaptation. These findings align with Smith et al. (2021), who emphasized that community engagement enhances local ownership, aligns projects with community needs, and boosts sustainability and adaptation success.

➤ *Objective two:*

Analyze the The contribution of effective resource management to successful project outcomes in Rwanda

Table 5 Respondents' level of agreement on Resource Management and project success at Rwanda dairy development project phase I, in Gatsibo.

| Resource Management | Strongly Agree | | Agree | | Undecided | | Disagree | | Strongly Disagree | | Total | | Mean | Standard Deviation |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------|-------|------|-----------|-----|----------|---|-------------------|---|-------|-----|------|--------------------|
| | F | % | F | % | F | % | F | % | F | % | F | % | | |
| Effective resource allocation has been key to successfully scaling the dairy development project. | 155 | 76.8 | 13 | 23.2 | 0 | 0.0 | 0 | 0 | 0 | 0 | 202 | 100 | 4.77 | 0.42 |
| Resource optimization strategies have been successfully implemented to enhance the scalability and adaptability of the dairy development project. | 69 | 33.9 | 37 | 66.1 | 0 | 0.0 | 0 | 0 | 0 | 0 | 202 | 100 | 4.34 | 0.47 |
| Budgeting and cost management practices have ensured that the dairy development project remains financially sustainable during scaling and adaptation efforts | 40 | 19.6 | 155 | 76.8 | 7 | 3.6 | 0 | 0 | 0 | 0 | 202 | 100 | 4.16 | 0.45 |
| The management of human resources has been adequate to support the scaling and adaptation of the dairy development project. | 87 | 42.9 | 97 | 48.2 | 18 | 8.9 | 0 | 0 | 0 | 0 | 202 | 100 | 4.34 | 0.63 |
| Monitoring and evaluation processes have been regularly used to identify challenges and adjust the dairy development project to local needs, enhancing its scalability. | 47 | 23.2 | 155 | 76.8 | 0 | 0.0 | 0 | 0 | 0 | 0 | 202 | 100 | 4.23 | 0.42 |
| Capacity-building initiatives have been effective in preparing project stakeholders to manage the scaling of the dairy development project successfully | 87 | 42.9 | 115 | 57.1 | 0 | 0.0 | 0 | 0 | 0 | 0 | 202 | 100 | 4.43 | 0.49 |

Source: Primary data (2025)

The researcher sought to understand how resource management affects the success of RDDP Phase I. Data showed strong agreement among respondents that effective resource allocation (mean = 4.77), resource optimization strategies (mean = 4.34), and capacity-building initiatives (mean = 4.43) have positively influenced the project's scalability and adaptability. These high mean scores indicate strong consensus on the positive impact of resource management. Monitoring and evaluation processes also received a high mean score (4.23), reflecting their role in identifying challenges and adapting the project to local needs. The low standard deviations (below 0.5) suggest consistent responses among participants. However, respondents were

undecided about whether budgeting and cost management (3.6% undecided) and human resource management (8.9% undecided) have supported financial sustainability and scaling efforts, indicating some uncertainty in these areas. These findings align with Johnson and Lee (2020), who emphasized that efficient resource management is key to project success by optimizing time, funds, and personnel, ultimately reducing costs and improving scalability and sustainability.

➤ *Objective three:*

Evaluating the Effectiveness of strategic vision and goal alignment on project success in Rwanda.

VIII. REGRESSION ANALYSIS

Table 6 Model Summary Output

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| 1 | 0.954 | 0.911 | 0.904 | 0.183 |

Table 6 provides a summary of the multiple regression analysis involving the predictors: community engagement, resource management, and clear vision and goal alignment, with project success as the dependent variable. The correlation coefficient ($R = 0.954$) demonstrates a strong positive relationship between these combined predictors and project success. Additionally, the coefficient of determination ($R^2 = 0.911$) reveals that about 91.1% of the variation in project success can be accounted for by the joint influence of these three factors.

These results are consistent with Carlos et al.'s (2014) conceptualization of strategic project planning, which highlights the critical role of effective resource allocation and utilization during project execution. The regression analysis confirms a significant and positive association between community engagement, resource management, clear vision and goal alignment, and project success, underscoring the essential role that strategic planning plays in achieving favorable project outcomes.

Table 7 ANNOVA

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|---------|-------|
| 1 | Regression | 17.415 | 3 | 5.805 | 671.875 | 0.000 |
| | Residual | 1.710 | 198 | 0.00864 | | |
| | Total | 19.125 | 201 | | | |

The results presented in Table 7 reveal that the regression model, indicated by an F-value of 671.875 and a significance level (Sig.) of 0.000, which includes community engagement, resource management, and clear vision and goal alignment as predictors, has a statistically significant impact on project success. This suggests that the influence of strategic project planning on the success of the Rwanda Dairy Development Project (RDDP) is highly unlikely to be due to chance.

These findings align with Baraka and Shukla's (2019) research, which highlights critical factors such as project scope, schedule, budget, quality, risk management, sustainability, environmental considerations, and continuous improvement—elements closely tied to the key role of resource management in delivering successful projects. The consistency between their study and this regression analysis reinforces the significant contributions of community engagement, resource management, and strategic alignment to project success.

Table 8 Coefficients

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------------------------------------|-----------------------------|------------|---------------------------|--------|--------|
| 1. (Constant) | B | Std. Error | | | |
| Community Engagement | -0.226 | 0.246 | - | -0.918 | 0.3625 |
| Resource management | 0.290 | 0.098 | 0.283 | 2.940 | 0.0049 |
| strategic vision and goal alignment | 0.120 | 0.05 | 0.111 | 2.40 | 0.020 |
| | 0.855 | 0.138 | 0.702 | 6.171 | 0.000 |

The table 8 provided appears to display the coefficients from a regression analysis with Project success as the dependent variable and several independent variables

(Community Engagement, resource management and strategic vision and goal alignmentResource management: (β : 0.120, t : 2.40, Sig.: 0.020) Resource management also has a

positive effect with Project success. For every one-unit increase in Resource management, Project success is estimated to increase by 0.120 units. strategic vision and goal alignment: β : 0.855, t: 6.171, Sig.: 0.000) strategic vision and goal alignment have a strong positive effect with Project

success. For every one-unit increase in strategic vision and goal alignment, Project success is estimated to increase 0.855 units.

➤ *Dependent Variable:*

Table 9 Project success

| | | Project success | Community Engagement | Resource Management | strategic vision and goal alignment |
|----------------------------------------------------------|---------------------|-----------------|----------------------|---------------------|-------------------------------------|
| Project success | Pearson Correlation | 1 | .89** | .44** | .31** |
| | Sig. (2-tailed) | | .000 | .000 | .000 |
| | N | 202 | 202 | 202 | 202 |
| Community Engagement | Pearson Correlation | .89** | 1 | .63** | .71** |
| | Sig. (2-tailed) | .000 | | .000 | .000 |
| | N | 202 | 202 | 202 | 202 |
| Resource Management | Pearson Correlation | .44** | .63** | 1 | .63** |
| | Sig. (2-tailed) | .000 | .000 | | .000 |
| | N | 202 | 202 | 202 | 202 |
| Strategic vision and goal alignment | Pearson Correlation | .31** | .71** | .89** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | |
| | N | 202 | 202 | 202 | 202 |
| Correlation is significant at the 0.01 level (2-tailed). | | | | | |

IX. CORRELATIONS

Table 9 illustrates the correlation coefficients between Community Engagement, Resource Management, Strategic Vision and Goal Alignment, and Project Success, along with their respective significance values (Sig.), which indicate the strength and reliability of each relationship. Notably, there is a significant positive correlation between resource management and project success ($r = 0.44$, Sig. = 0.000), highlighting the crucial role that efficient resource allocation plays in institutional performance. In addition, strategic vision and goal alignment are also positively and significantly associated with project success ($r = 0.31$, Sig. = 0.000),

demonstrating the importance of clear direction and unified objectives in driving project outcomes.

These statistically significant relationships emphasize the integrated impact of strategic planning elements on the overall success of the Rwanda Dairy Development Project Phase I. The findings are aligned with those of Landau (2023), who emphasized that strategic planning is a critical determinant of project effectiveness. The observed correlations further underscore the relevance of project scope, timeline, budgeting, quality assurance, risk mitigation, sustainability, environmental responsibility, and continuous improvement in enhancing project performance.

Table 10 Hypotheses summary results

| Hypotheses | P Value | Conclusion |
|----------------------------------------------------------------------------------------------------------------------|------------|------------|
| H_{a1} Community engagement has no significant impact on project success in Rwanda. | $p < 0.05$ | Accepted |
| H_{a2} Resource management does not play a significant role in enhancing project success in Rwanda. | $p < 0.05$ | Accepted |
| H_{a3} Strategic vision and goal alignment have no significant influence on project success in Rwanda | $p < 0.05$ | Accepted |

The outcomes of the hypothesis analysis indicate a clear and statistically significant correlation between strategic project planning practices and the successful implementation of the Rwanda Dairy Development Project Phase I. As indicated in Table 10, all three null hypotheses (Ho1, Ho2, and Ho3) were rejected, with p-values less than 0.05, confirming that community engagement, resource management, and strategic vision and goal alignment each significantly contribute to project success.

The findings align with earlier regression and correlation analyses, showing community engagement as the most impactful factor, with a standardized coefficient ($\beta = 0.290$) and a strong Pearson correlation of 0.89, emphasizing its key role in project success through stakeholder involvement, communication, and collaboration. Similarly, resource management ($\beta = 0.120$, $r = 0.44$) also showed a

statistically significant effect, affirming that optimized resource allocation, human capital development, and financial management support scalability and sustainability. Most notably, strategic vision and goal alignment had the strongest coefficient ($\beta = 0.855$), underlining how a well-defined direction, SMART goals, and alignment with stakeholder interests act as a backbone for long-term success.

Thus, based on these hypothesis results, the study affirms that strategic project planning—comprising community engagement, efficient resource management, and clear goal alignment—is a key driver of successful project outcomes in Rwanda's dairy development sector. These components not only contribute individually but also interactively reinforce each other, as seen in their inter-correlations, further amplifying their collective impact on institutional success.

X. CONCLUSION

The study aimed to assess the contribution of strategic project planning to the success of Rwanda's Dairy Development Project (RDDP) Phase I, focusing specifically on community engagement, resource management, and clear strategic vision and goal alignment. Although the hypotheses were rejected based on significance values (Sig. < 0.05), the findings revealed that all three factors significantly impact project success, confirming that effective strategic planning is crucial. These results support Stakeholder Theory, Resource-Based View (RBV) Theory, and Goal Setting Theory, highlighting the importance of aligning stakeholder interests, managing resources efficiently, and setting clear strategic goals to achieve successful project outcomes.

RECOMMENDATIONS

Researchers, policy makers, and future project managers are encouraged to prioritize and deepen the integration of community engagement, resource management, and clear strategic vision alignment to improve agricultural project success, especially within Rwanda's Dairy Development Project (RDDP). Researchers should explore these factors across diverse agricultural contexts to understand their interactions and long-term impacts on project sustainability and scalability. Policy makers ought to institutionalize these principles through frameworks and regulations that promote stakeholder involvement, transparency, and professional training for project managers. Meanwhile, future project managers should adopt advanced planning tools, maintain strong stakeholder communication, and implement robust risk management strategies to enhance project execution, avoid delays, and ensure the successful scaling and sustainability of agricultural initiatives.

REFERENCES

- [1]. Adeyemi, A., & Ojo, A. (2024). The impact of strategic planning on technology initiatives in Nigeria: A focus on startups and job creation. *Journal of Technology Management & Innovation*, 19(1), 78-92.
- [2]. Agyapong, D., & Asiedu, A. (2021). The impact of strategic planning on infrastructure projects in Ghana: A case study. *African Journal of Economic Review*, 9(1), 50-65.
- [3]. Agyapong, D., & Asiedu, S. (2021). Goal setting and success in infrastructure projects in Ghana: The role of clear project objectives. *Construction Management and Economics*, 39(4), 322-335.
- [4]. Byiringiro, R., & Munezero, A. (2023). The role of strategic planning in improving dairy product quality and reducing post-harvest losses in Rwanda. *Journal of Rural and Community Development*, 18(2), 151-163.
- [5]. Chen, H., & Green, F. (2024). Planning for sustainability and resilience in resource management. *Journal of Sustainable Management*, 37(2), 145-158.
- [6]. Chen, J., & Patel, M. (2024). Collaboration among stakeholders in value chain development. *Development Policy Review*, 42(1), 89-104.
- [7]. Chen, L., & Martin, R. (2018). Ongoing dialogue and collaboration in community engagement. *Journal of Public Affairs*, 19(3), 232-244.
- [8]. Davis, R., & Green, J. (2019). The role of community engagement in shaping and implementing projects. *Community Development Journal*, 54(2), 143-158.
- [9]. Johnson, K., & Lee, H. (2019). Strategic planning and allocation in resource management. *Journal of Resource Management*, 33(2), 56-68.
- [10]. Kassim, A., & Ahmed, M. (2022). Applying Goal Setting Theory to Health Projects in Tanzania: Improving Service Delivery and Cost Reduction. *International Journal of Health Project Management*, 18(2), 150-162.
- [11]. Kassim, S., & Ahmed, I. (2022). Health project efficiency through strategic planning in Tanzania: Results and insights. *Health Policy and Planning*, 37(5), 663-674.
- [12]. Kenneth, D. (2005). Examining the effectiveness and ineffective transformational leadership. *Team Performance Management. Internal Journal*, 11(3/4), 68-103.
- [13]. Kim, Y., & Hernandez, R. (2023). Measuring socioeconomic impacts through education and health indicators. *Journal of Development Studies*, 59(4), 674-689.
- [14]. Lee, C. (2018). Forecasting and scenario planning in strategic project management. *Strategic Management Review*, 15(4), 200-215.
- [15]. Locke, E. A., & Latham, G. P. (2019). Goal setting: A motivational technique for increasing performance. *Organizational Behavior and Human Decision Processes*, 159, 24-36.
- [16]. Messer, E., & Townsley, P. (2019). Understanding socioeconomic impact: Changes in income and quality of life. *Economic Development Quarterly*, 33(2), 113-124.
- [17]. Miller, J., & Taylor, B. (2022). Technological tools and data analytics in resource management. *Technology Management Review*, 41(3), 185-198.
- [18]. Moyo, M., Tinega, T., & Chirwa, E. (2023). Renewable energy projects and strategic planning in Zambia: Socioeconomic impacts and sustainability. *Renewable Energy*, 210, 1093-1105.
- [19]. Mukeshimana, C., & Mugisha, J. (2021). Enhancing dairy farming practices through strategic planning in Rwanda: A case study. *Dairy Science & Technology*, 101(3), 289-302.
- [20]. Müller, R., & Klein, A. (2022). Strategic Vision and Goal Alignment in Project Management. *Journal of Project Management Studies*, 36(4), 125-138.
- [21]. Müller, R., & Klein, J. (2022). Strategic project planning in urban development: Evidence from Germany. *Urban Studies*, 59(7), 1487-1505.

- [22]. Müller, R., & Klein, M. (2022). Strategic Resource Management in Project Planning: Key to Competitive Advantage and Success. *International Journal of Project Management*, 40(6), 945-956.
- [23]. Müller, R., & Klein, M. (2022). Strategic project planning in urban development: Evidence from Germany. *Urban Studies*, 59(7), 1487-1505.