



The Influence of Project Cost Control and Performance of Maize Project in Rwanda: A Case of Nasho Irrigation Project, Kirehe District

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Abstract: This research paper aimed to investigate the influence of project cost control on the performance of maize project in Rwanda, focusing on the Nasho Irrigation Project in the Kirehe District. The study specifically aimed to determine the extent to which project budget planning affects the maize project performance. The research design utilized both qualitative and quantitative approaches, with a sample size of 74 individuals selected through purposive sampling. The respondents included top management, project managers, technical teams, procurement, accounts department, legal team, auditors, and advisors who managed the project budget. The data was collected through questionnaires and analyzed using the Statistical Package for Social Sciences version 23, with the findings presented through descriptive and inferential statistics. The results revealed a strong correlation between planning project budget and the performance of the maize project, with a high Pearson correlation ($r=966$, $p\text{-value}=0.000$). This indicates that planning project budget significantly and positively affects the performance of Nasho Irrigation Project in Kirehe, compared to other factors influencing maize project performance. The study recommends that project management should view financial reports during the project process as a crucial tool that minimizes challenges in project cost control and instills confidence in the project's financial management.

Keywords: Project cost control, Project performance, Irrigation project, Maize project and Kirehe District

How to cite this work (APA):

Kalisa, V. & Aforabi, L. (2024). Influence of project cost control and performance of maize project in Rwanda: A case of Nasho irrigation project, Kirehe District. *Journal of Research Innovation and Implications in Education*, 8(2), 126 – 136. <https://doi.org/10.59765/zytp8524hyr>.

1. Introduction

As a project manager, it's crucial to practice strict cost monitoring to ensure the success of the priority project. The effective management of project costs means having an appropriate level of control over the project budget. In simpler terms, you need to be aware of how money is being spent and be ready to make changes to stay within the allocated budget. According to Wheelen & Hunger (2010), project managers must avoid going over budget without warning. Cost management is an essential part of project

management. If a manager can't manage simple costs, then they'll have an even harder time handling complex projects. The ability to control the budget requires identifying the source of costs in the first place (Wheelen & Hunger, 2010).

Budget discrepancies can still occur in a project, regardless of the experience or skills of the team. However, identifying them early on can reduce their impact and prevent their occurrence in future projects. To effectively manage a project budget and maintain cost control, it is

important to capture the entire scope, collaborate with outside stakeholders, determine the cost categories used in the organization, develop a project management team trust, and act immediately. A project schedule can help monitor the costs closely, and supervisors can identify early on when a budget is in danger of overrunning. Cost control software is also a modern and accurate measure for cost management.

When developing a cost estimate, you need to consider all the resources that will be used by the project such as labor, materials, equipment, services and facilities. For some projects, may even need to consider items such as an inflation allowance or contingency costs. Wafula (2017) states that cost control applicable in China projects that should continue throughout the project life cycle of a project. In agriculture sector, cost control should be continued from the inception of the project until the completion of the project to ensure that the cost of the project is kept within the agreed cost limits. For cost control of agriculture sector, it can be divided into two major stages: the control of cost during design stages and the control of cost by agricultural firms right after the commencement of the planting work of the project.

Chipon (2014) explains cost control in Africa as the regulation, by executive action, of the cost of carrying out the various activities which go to make up a project or a contract. The regulation (for cost control) designed for a specific agriculture sector will need a major modification if it is used in other industry because of the different nature or the business. He also said that for all agricultural projects, costs must be controlled and monitored from all the parties involved including client, consultants and contractor. According to Frazer (2014) refers to performance as the ability to operate efficiently, profitability, survive, grow and react to the environmental opportunities and threats.

In Rwanda, maize is one of the most important staple crops playing a significant role in food security and income generation for smallholder farmers. Over the years, various projects and initiatives have been implemented to improve maize production and productivity in the country. This comprehensive research background aims to provide an overview of the performance of maize projects in Rwanda, highlighting key initiatives, outcomes, challenges, and future prospects. Maize production in Rwanda has experienced significant growth over the past few decades. The crop is cultivated by both smallholder farmers and commercial producers across the country. Maize is primarily grown for subsistence purposes, but there is also a growing market demand for maize products such as flour, animal feed, and industrial use (Jones, 2019).

According to Rwanda Agriculture Board (RAB) report (2022), several projects and initiatives have been implemented in Rwanda to enhance maize production and improve farmers' livelihoods. These projects often focus on areas such as seed quality improvement, agronomic practices, post-harvest management, market access, and value chain development. Some notable projects include: RAB Maize Program: The RAB Maize Program aims to increase maize productivity through the dissemination of improved maize varieties, training on good agricultural practices, and promoting sustainable farming techniques. The program also focuses on strengthening farmers' capacity through farmer field schools and providing access to credit facilities. One Acre Fund is a non-profit organization that provides smallholder farmers with access to finance, training, and inputs. They have implemented various initiatives in Rwanda to improve maize production, including the distribution of high-quality seeds, fertilizer, and training on modern farming techniques. It is upon the above background that the researcher will examine the effect of project cost control on performance of maize projects in Rwanda by use of Nasho Irrigation Project as a case study.

1.1 Statement of the Problem

Akeem (2017) defines cost control in project management as a set of cost accounting methods and management techniques used to improve the cost-efficiency of a project by reducing costs or restricting their rate of growth. Project cost control is essential for monitoring, evaluating, and improving the efficiency of specific areas within a project's operations. Kim (2021) suggests that the primary purpose of controlling costs in an agriculture project should be to actively control final costs for the owner, rather than just recording and registering payments. Efficient cost control preparation is crucial for effective project cost control.

According to a project report by the Ministry of Agriculture and Animal Resources (MINAGRI) in Rwanda in 2023, 36% of the 1821 projects implemented in the country failed to deliver on schedule, 76% failed to deliver within the expected budget, 56% failed to deliver all the expected functionality, 33% did not continue after the withdrawal of the project funder, and 66% failed to deliver the expected quality of functionality. These statistics indicate that poor cost control in Rwandan projects is a significant contributor to project failure. The lack of tracking project costs, poor budget planning, and overestimated costs have resulted in high project costs and hindered the ability to estimate or re-estimate the cost of work yet to be completed (Chege, 2020).

In Rwanda, some agriculture projects are struggling with cost control. They fail to consider the level of detail and

time intervals between cost controls, which should vary depending on the management level for which the reports are prepared (Delmon, 2014). To tackle this issue and improve agriculture in the country, the World Bank and the government of Rwanda are jointly providing \$400m in financial support to the agriculture sector, especially in rural areas (New Times E-paper, 4th May 2023). Effective cost control measures are crucial for project management as they directly impact project success. By ensuring that projects are completed within budget, preventing cost overruns, and maximizing resource utilization, they can be beneficial. However, it is unclear how cost control practices specifically influence the performance of maize projects in Rwanda. Therefore, this study aims to investigate the relationship between cost control practices and the performance outcomes of maize projects in terms of productivity, profitability, and sustainability. The focus will be on the Nasho Irrigation Project in Kirehe District.

1.2 Hypothesis of the study

The study sought to answer the following research hypothesis.

H₀₁: There is no relationship between planning project budget and project performance in Nasho Irrigation Project

2. Literature Review

2.1 Conceptual Review

Project cost control is the practice of identifying and reducing business expenses to increase profits, and it starts with the budgeting process. A project manager compares the project's actual financial results with the budgeted expectations, and if actual costs are higher than planned, management has the information it needs to act. Managers use variance analysis as a tool to identify critical areas that may need change. Every month, a company should perform variance analysis on each revenue and expense account. Management can address the largest dollar amount variances first, since those accounts are most likely to have the biggest impact on company results, (Fathil et al, 2021).

Herroelen (2010) highlight that project management plan provides information on project baselines. The project deviations, which are reported in performance reports, are compared against the project performance baseline. The performance measurement baseline typically integrates the scope, schedule, and cost parameters of the project, but may also include technical and quality parameters. It's an important activity in project communication management. It involves collecting and disseminating project information, communicating project progress, utilization

of resources, and forecasting future progress and status to various stakeholders, as decided in the communication management plan. During the process of performance reporting, the work results of other processes are also analyzed and combined into performance reports. They are typically done in tabular or graphical formats that may be text-based, visual-based (such as charts, graphs, or tables), or most often a combination of both.

Project budgets represent estimates of receipts (income), costs, and profits associated with the production of agricultural products. The information contained in project budgets is used by agricultural producers, extension specialists, financial institutions, governmental agencies, and other advisers making decisions in the food and fiber industry. Many decisions have important financial impacts; farm managers need to analyze alternatives in a consistent fashion. Some alternatives are easily analyzed, and a decision can be made quickly (Hyvari, 2016). In other cases, more time is needed to recognize and evaluate all potential effects of that decision. To do this, a decision framework is needed to help analyze the relevant trade-offs and determine the viability of enterprises. This publication discusses the use of enterprise and partial budgets, two tools that provide the basis for analyzing a wide range of farm management decisions (Lui 2014). Farm and project managers must make decisions every day. Some have vital consequences for the farm business, while others are not as crucial. Some, such as purchasing capital equipment, occur infrequently. Others are made more often choosing when to sell crops or livestock, for example. The choices made today may have an immediate impact on the business, or they may take much longer to have an effect. These decisions may involve any facet of the farm business, including such items as production, personnel, or financing.

According to Joseph *et al.* (2020) states that planning a project budget has several advantages that contribute to the overall success of a project. By carefully estimating and allocating resources, a well-planned budget helps in managing costs, tracking progress, making informed decisions, and ensuring project objectives are met within the allocated financial constraints, (Khodeir, 2019). This comprehensive approach to budgeting provides numerous benefits throughout the project lifecycle. One of the primary advantages of planning a project budget is cost control. By estimating the costs associated with various project activities and deliverables, organizations can identify potential cost overruns early and take necessary measures to mitigate them. A well-planned budget allows for effective monitoring and tracking of expenses, enabling project managers to identify any deviations from the planned expenditure and take corrective actions promptly. This helps in avoiding financial surprises and ensures that

the project stays within its financial boundaries (Lui, 2014).

2.2. Empirical Review

Hussein (2020) conducted a study on the role of project cost control on development program performance. Descriptive survey design was used to establish relationships between independent and dependent variables. The sample size was 49 program management committee members and 160 community members in Tabora, Mwiru, Tanzania, benefitting from the program selected using purposive and systemic random sampling method. Semi structured questionnaires were used for data collection. The findings from the study indicated that communities have not fully participated in program cycle, especially in monitoring and evaluation, training, resource contribution and decision making. However, this is due to limited economic resource and failure for community not to fully understand their roles in program. The study established that project budget through program information sharing, resources contribution, collective decision making, and program governance have contributed extensively towards development program performance.

The study was conducted in Kakui (2011), the literature was reviewed in the light of study on the impact of effective cost control on project performance in Zambia. The specific objectives of the study were to assess the influence of minimum project expenses on performance of project in Mukonokwa irrigation scheme project. Descriptive survey design was used to establish relationships between independent and dependent variables. The sample size was 38 project management committee members and 130 community members in Mukonokwa, Zambia, benefitting from the project selected using purposive and systemic random sampling method. A semi structured questionnaires were used for data collection. The findings from the study indicated that community have not fully benefited in project cycle especially in excessing water for farming. However, findings show due to limited economic resource and failure for some of community members not to fully understanding their benefits of the projects has made the project to delay. The study established that recognition excellent employee through project information sharing and collective decision making has contributed extensively towards project performance. The research recommended that more effective quality and practicality of educated employees had, the more contribution they will have to project performance.

Kwon et al. (2001) carried a study on human environment and project performance of building industries in Chana.

The specific objectives of the study were to assess the influence of good working environment and project performance in Chuich sector. The research used descriptive research design in collecting the data from respondents. A sample of 766 respondents were selected using Tora Yammen Formula. The primary data was collected by using questionnaire. Qualitative data was analyzed using SPSS 23 and Microsoft excel and presented in line with the study. Findings revealed that industrial good working environment combines technics and philosophies that lead to project performance as well the industry to be built in time. The working environment of a workplace has a significant impact on project performance. Research recommended that essential elements that should be considered necessary for a pleasant environment at the workplace to improve project performance are safety, material things like light, ventilation, workspace, strategy manuals, consumable supplies and hardware instruments.

Ronald (2017) studied the relationship between project planning and project performance of Donor Funded Youth Projects in Mbale district, in Uganda. The specific objectives of the study were to examine the influence of budget planning in the entire program cycle and project performance of donor funded youth projects in Mbale district. In his study he used both quantitative and qualitative approaches to collect data and describes working environment as an atmosphere in the working area. The primary data was collected by using questionnaire. Qualitative data was analyzed using SPSS 23 and Microsoft excel and presented in line with the study themes. The findings of the study are anticipated to budget planning and impact project performance. The study was able to obtain a 95% response rate. The study of the correlation analysis indicated there was strong positive effect of budget planning and project performance while the p value results indicated there was a statistically significant relationship between budget planning on the project performance. The study recommended that budget planning combines elements that allow projects to succeed in all aspect of budget.

2.3. Conceptual Framework

Conceptual framework is an estimated show distinguishing the ideas under study and their connections, (Mugenda and Mugenda, 2003). The applied system gives an auxiliary of the relationship between the factors shaping the ideas of the study on the usage of wellbeing contributor subsidized tasks. The free factors are gathered on the left side yet not in any request of significance. Conceptual framework shows the relationship between independent and dependent variables.

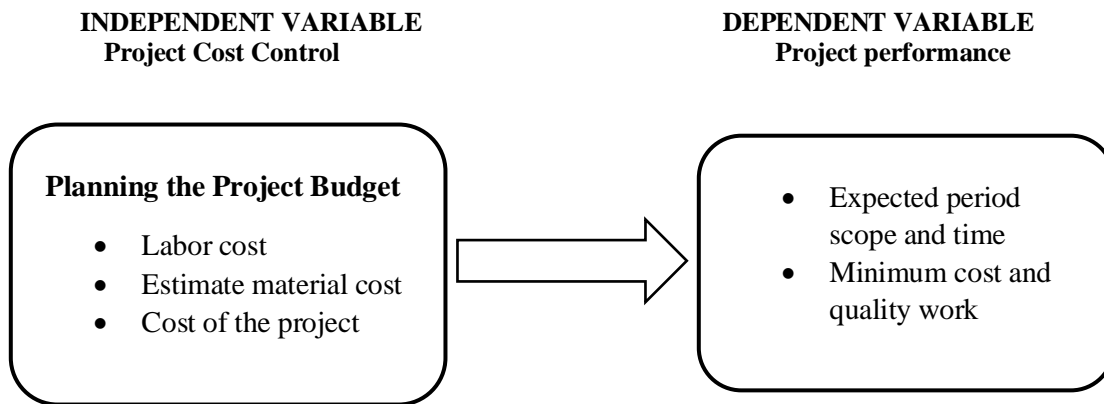


Figure 1 Conceptual Framework

Source: Researcher, 2024

The project control cost and project performance are interconnected components of project management. Effective planning sets the stage for successful execution, while cost control ensures that resources are managed efficiently to achieve desired performance outcomes. By integrating these processes and continually monitoring and adjusting as needed, project managers can enhance the likelihood of project success. Besides, project planning plays a critical role in shaping project performance by providing a roadmap for execution, optimizing resource utilization, managing risks, defining timelines, fostering communication and collaboration, and ensuring quality outcomes. A well-executed project plan sets the foundation for successful project delivery and contributes to achieving desired project objectives within scope, time, and budget constraints.

3. Methodology

The study used a descriptive research design and applied both qualitative and quantitative methods for data collection and analysis. Descriptive and inferential statistical methods were used to analyze the data. The Pearson Correlation approach was used to analyze the relationship between variables while the Regression model was used to assess the impact of project cost control on project performance. The descriptive design was deemed suitable for the study as it effectively addressed the research questions and objectives proposed in the study (McKenney and Reeves, 2018). The study focused on 74 staff members of the Nasho Irrigation Project, who were active participants in the project as both users and developers.

Table 1: Population Size

Variables	Population size	Percentage (%)
Top Management	3	4.0
Project Managers	10	14.0
Technical Team	28	38.0
Procurement	5	7.0
Accounts Department	15	20.0
Legal Team	3	4.0
Auditors	5	7.0
Advisors	5	7.0
Total	74	100.00

Source: Nasho Irrigation Project, 2023

The study aimed to investigate project cost control and targeted top management members and workers who were

responsible for this. All management heads were asked to participate, but priority was given to top management.

The study used stratified random sampling to categorize the respondents into top management, project managers, technical team, procurement, accounts department and legal team, auditors, and advisors. The population was small, so the sample size was used as the population, with 74 respondents selected. The study used purposive sampling and a census to select the required respondents from the top management, project managers, technical team, procurement, accounts department and legal team, auditors, and advisors who managed the project budget and steps.

This study collected primary data which referred to the data the researchers collected from the field themselves. In particular, the study used a structured questionnaire for data collection. The structured questionnaire was characterized by close-ended questions. The structured questionnaire used in the study was for various advantages associated with it, including ease of data collection and analysis. The questionnaire was created using information on indicators taken from theoretical and empirical research. The study also used a five-point Likert-based measuring scale. Besides, this research reviewed literature obtained from the case study organization. This literature included annual reports and other reports. This method was chosen because; it was vital in providing background information and facts about cost control and performance before primary data was collected. Indeed, before field data is collected, a wide collection of data was collected and used to cross check with the primary data that is to be obtained by the field.

The study conducted content validity testing by seeking the opinions of experts on various aspects of the study. The feedback received from experts was utilized to revise the questionnaires and ensure that the study's content effectively represents the research phenomenon. The reliability of the study was tested using the homogeneity or internal consistency reliability method, which was examined using the Cronbach alpha coefficient. The reliability of the study was determined to be reliable when the coefficient produced a score of 0.7 and above.

Additionally, a pilot study was conducted to establish the validity and reliability of the questionnaires to ensure that questionnaire items are clear and well understood by respondents. The survey questionnaire used in the study included both categorical and scale measures. Before the analysis of data using SPSS Version 23, the data underwent cleaning, editing, accuracy checks, and coding. The data was analyzed using descriptive and inferential statistics. Quantitative data collected through the questionnaire was analyzed using descriptive statistics that included percentages, means, standard deviations, and frequencies. The study used a regression model to test the effectiveness of project cost control on the performance of maize projects in Rwanda. This enabled the evaluation of the relationship between the dependent and independent variables of the study. The regression was:

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

Where;

Y = Employee Performance

X1 = Project cost control

β_0 = Constant Term;

$\beta_1, \beta_2, \beta_3, \beta_4$ = Beta coefficients;

ϵ = Error Term.

4. Results and Discussion

4.1 Results

4.1.1 Response Rate

Questionnaires were handed out to 74 respondents who were randomly selected from the entire study population. Out of the 74 questionnaires, 70 were filled and returned, resulting in a response rate of 94.6%. This response rate is sufficient for analyzing and discussing the study. The 5.4% unreturned questionnaires can be explained by the fact that some respondents were delayed in filling out the questionnaires and hence were unable to return them on the collection date due to unavoidable circumstances such as sickness or maternity leave of some staff.

Table 2: Response Rate of the Study

Results	Frequency	Percentage (%)
Respondents	70	94.6
Non-Respondents	4	5.4
Total	74	100.0

Source: Survey Data (2023)

According to Curwin and Slater (2003), a response rate of above 50% is adequate for a descriptive study. They also asserted that return rates of above 50% are acceptable, 60% is good and 70% is very good. Thus, the response rate of 94.6% in this study was very good for the study.

4.1.2 Descriptive Statistics on planning project budget

The objective of the study was to determine the planning project budget on project performance in Nasho Irrigation Project. The study evaluated the respondents' level of

agreement with the various statements on planning project budget using a scale of 1 – 5 where 5- strongly agree, 4- agree, 3- neutral, 2- disagree and 1- strongly disagree. The findings are illustrated in Table 3. This sub-section aims to discuss the reaction of respondents based on this research objective of the study.

Table 3: Level of agreement on planning project budget

Statements	SA		A		D		SD		M	SD
	fi	%	fi	%	fi	%	fi	%		
Labour cost of the project is a challenge to project cost control hence poor performance.	47	67	10	14	2	3	11	16	1.7	1.12
Estimating the material cost of the project leads to performance of the project in terms of efficiency budget cost of work performed	7	10	53	76	6	8	4	6	2.1	0.64
Cost of the project office results to efficiency project budget cost in the managing project	3	4	10	14	32	46	25	36	3.15	0.81
Performance is due to committed to the operation of the project cost control such as effective cost management, planning the project budget and additional steps for projects	49	70	4	5	7	10	11	15	1.7	1.74
Overall Average									2.21	0.93

Source: Field research, 2023-**Key:** SA-Strongly Agree, A-Agree, N-Neutral, D-Disagree, SD-Strongly Disagree, S.D.- Standard Deviation, M-Mean, SD-Standard Deviation

According to the results presented in Table 3, a majority of 81% of respondents agreed that the labor cost of the project presents a challenge to project cost control, leading to poor performance. Conversely, 19% of respondents disagreed with this statement. This indicates that labor cost is indeed a challenge for the project. Additionally, 86% of respondents agreed that accurately estimating material cost leads to efficient budgeting and project performance. On the other hand, 86% of respondents disagreed that the cost of the project office does not affect project budget efficiency. Finally, 75% of respondents agreed that project performance is linked to effective cost management, budget planning, and other project-related steps. Notably, only one question received a disagreement, indicating a significant impact. These results suggest that planning the project budget plays a crucial role in the performance of

the Nasho Irrigation Project in Rwanda. The research findings from the project budget planning reveal that moderate influence ($x = 2.21$) on project performance exists, with a standard deviation of 0.93. These results present evidence of a consistent response pattern. Therefore, the project team can rely on these findings to make informed decisions, ensuring successful project outcomes.

4.1.3 Correlation Matrix Analysis test

The findings of the correlations between the independent variables and the dependent variables are summarized and presented in Table 4

Table 4: Correlation between independent variable and dependent variable

		Planning project budget	Project Performance
Planning project budget	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	74	
Project Performance	Pearson Correlation	.000	1
	Sig. (2-tailed)	.966**	
	N	74	74

** . Correlation is significant at the 0.05 level (2-tailed).

According to the findings displayed in Table 4, the results show that there is a very strong correlation between planning project budget and the performance of maize project in Rwanda as Pearson correlation is .966** with the p-value of 0.000, which is less than standard significance

levels of 0.05. This indicates that, out of the considered other factors influencing performance of maize project in Rwanda, only planning project budget has a significant and positive effect on the performance of maize project in Rwanda.

Table 5: Exploratory Tests of Normality

Kolmogorov-Smirnov ^a			
	Statistic	Df	<i>P-value</i>
Planning project budget	.3825	70	0.86

Source: Survey Data (2023)

The numerical normality tests compare the scores in the sample to a normally distributed set of scores. Kolmogorov-Smirnov Test was used as numerical means of assessing normality. The K-S Test is more appropriate for sample sizes > 50. If the p-value of the K-S Test is greater than 0.05, the data is normal. If it is below 0.05, the data significantly deviates from a normal distribution. Since the p value=0.086 > 0.05, the data set was normally distributed for statistical analysis. Additionally, it is worth considering that in large sample sizes, even minor departures from normality can lead to statistically significant results.

4.1.4 Regression analysis

A multiple regression analysis was performed in this section to identify the predictor and its contribution towards the criterion. It aims to determine the prediction of a single dependent variable from a group of independent variables. The multiple regression analysis was performed with all the assumptions complied with. Table 5 shows the model summary of the results.

Table 6: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.937 ^a	.878	.873	.96606

a. Predictors: (Constant), Planning Project Budget

Table 6 shows the value of R-square in this study is .878 means that the fraction of project performance (dependent variable) is explained by the independent variables (project cost control system) at 87.8%. This indicates that the model is very strong, as the independent variable highly

explains the dependent variable. The adjusted R-square is used to compensate for additional variable in the model. In this case, the adjusted R-square is 87.3% for project performance in Nasho Irrigation Project in Rwanda.

Table 7: Summary of ANOVA results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63.799	3	21.266	158.705	.000 ^b
	Residual	8.844	66	.134		
	Total	72.643	69			

a. Dependent Variable: project performance

b. Predictors: (Constant), Planning the Project Budget

Basing on ANOVA Table 7, p-value is 0.000 which is less than the 0.05, set as standard significance levels with fit level of 158.705. This means that null hypothesis stated that there is no significant influence of project cost control system on performance of Nasho Irrigation Project in

Rwanda, was rejected and goes by the alternative hypothesis, which states that the independent variable influences performance of Nasho Irrigation Project in Rwanda in terms of time and minimum cost and quality work and expected period scope.

Table 8: Summary of regression coefficients result

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.090	.103	.867	.867	.012
	Planning Project Budget	.65	.188	.344	.732	.000

a. Dependent Variable: Project performance

$$Y = \alpha + \beta_1 X_1 + e$$

Y= Dependent variable– Project Performance

α =Constant

e=Error

β =Coefficient of the Disbursement

X1 = Planning the Project Budget

$$Y = 0.90 + 0.65 (\text{Planning the Project Budget}) + 0.474$$

The regression equation shows that performance of rural electrification projects in Rwanda will always depend on a constant factor of 0.90 regardless of the existence of other factors. The other variables explain that; every unit increase in Planning the Project Budget will increase performance of Nasho Irrigation Project in Rwanda by a factor of 0.65.

4.2. Discussion

This section presents the findings according to the research hypothesis. Specifically, the literature is used to interpret the collected data which aimed to evaluate the influence of planning project budget on the performance of Nasho Irrigation Project in Rwanda. The findings revealed that labour cost of the project is a challenge to project cost control hence poor performance and estimating the material cost of the project leads to performance of the

project in terms of efficiency budget cost of work performed. In addition, cost of the project office results to efficiency project budget cost in the managing project and the performance is due to committed to the operation of the project cost control such as effective cost management, planning the project budget and additional steps for projects. By implementing effective cost monitoring and tracking systems, allocating budgets appropriately, optimizing resources, managing risks, ensuring quality control, and maintaining stakeholder relationships, project managers can enhance project performance and achieve desired outcomes efficiently.

These findings are relevant since with Shani (2021) pointed out in his study on the impact of budget participation on managerial performance via organizational commitment that planning project budget is usually developed in the areas of project cost systems. Moreover, the finding was contrary to Wambua (2019) who indicated that budget planning has a positive and significant relation with budget variances effectiveness in the studied NGOs. One aspect of planning that budget facilitates is on the use of resources.

5. Conclusion and Recommendations

5.1 Conclusion

The agricultural projects and cost control methods were essential for economic growth in Rwanda, as per the Rwanda Vision 2020 plan. A robust and healthy nation would provide a vibrant working environment for project cost control. This involves keeping track of project costs, planning project budgets, and managing project expenses, which are all critical performance concerns for projects. A study was conducted to examine the effect of planning project budgets on project performance within minimum time and cost, as well as quality work and expected period scope of maize projects in Rwanda. The study concluded that there was a statistically significant effect of planning project budgets on project performance. However, a minority disagreed with the statements, which affected the planning project budget, but still had a positive impact on project performance.

5.2 Recommendations

Based on the findings of the study, it is recommended that:

1. The management should advise project managers to regularly compare actual costs with budgeted estimates during the project duration to improve performance.
2. The management should understand that providing financial reports during the project process is not just a formality, but a crucial tool that significantly minimizes challenges in project cost control and instils confidence in the project's financial management.
3. The management should be aware that managing project expenses is vital for the project's success. This involves keeping track of project costs and planning the project budget. Proper practice of managing project expenses in the project would always increase project performance.

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