

EFFECT OF PROJECT PLANNING ON THE IMPLEMENTATION OF GREEN GICUMBI PROJECT, RWANDA

By: GAHONGAYIRE GENEVIEVE

Master's Student (MBA/Project Management), Graduate School, University of Kigali, Rwanda

ABSTRACT

This study's purpose was to determine the effect of project planning on the implementation of Green Gicumbi Project, Rwanda. The study was guided by the following specific objectives: to assess the effect of communication planning on implementation of Green Gicumbi project; to determine the effect of scope planning on implementation of Green Gicumbi project; to examine the effect of resource planning on implementation of Green Gicumbi project; and to investigate the effect of stakeholders' involvement on implementation of Green Gicumbi project. The study adopted descriptive and correlational research designs whereby both descriptive and inferential statistics were used. In addition, for the study to realize the accomplishment of the above objectives, a combination of questionnaires, interviews, documentary reviews and other reports were used. The study used a sample size of 441 respondents and these comprised of project's beneficiaries, partners and staff who were given research forms while the project manager was interviewed. After data collection and with the help of SPSS, the study used correlation analysis and regression analysis to determine the relationships that lie between project planning and project implementation as independent and dependent variables respectively. Firstly, regarding the communication planning, 81.0% of the respondents strongly agreed that the management transmits information about goals, policies and procedures of the Green Gicumbi project. Secondly, as regards to scope planning, 71.4 of the respondents strongly agreed that project management hires human resources that have the required competences in running the Green Gicumbi project. Thirdly, about resource planning, the study results discovered that 66.7% of the respondents agreed that project management of Green Gicumbi project supports decision-makers to review the existing activities so as to justify and detail them during the budgeting process. Lastly, 85.7% of the respondents agreed that the project stakeholders participate in supervision of the project from the beginning. Besides, the ANOVA test discovered that P-value of 0.000 was less than alpha (5%), is the significance level. From the study results, we therefore, reject null hypotheses that indicated no significant relationships between variables. Regarding the coefficients table, it was revealed that holding communication planning, scope planning, resource planning and stakeholder involvement to a constant zero, project implementation would be 1.347. Concerning the issue of unethical behaviors such as fraud and embezzlement, the top management should put in place strong measures to punish the culprits. Regarding the lack of proper internal control processes in, the top management should look into it and be made a culture by the responsible personnel at the district. As regards to untimely deliveries, officials who delay project activities and processes should also be handled individually so as other staff could avoid doing similar mistakes in future.

GENERAL INTRODUCTION

Background of the Study

Modern project management, from which the concept of project planning stems, was developed in the late 19th century. However, significant advancements were made at that time in project planning, particularly in the areas of project scheduling, resource allocation, and task and deliverable management, thanks to the introduction of the work breakdown structure (Christensen, 2017). The Gantt chart, created by Henry Gantt in the early 20th century, is also an integral part of the user interface of all contemporary project planning programs, such as Primavera Project Management and Microsoft Project (Reed, 2018). During this time, communication speeded up because to improvements in the telecommunications infrastructure, which in turn improved the efficiency with which projects could be planned. Relationships, connections, and trust established through time were the foundations on which organizations ran before project planning existed (Agbemabiese, 2018).

The transcontinental railroad, which began construction in the early 1870s in the United States (US), was the first major project that required planning. Leaders in the corporate world were suddenly tasked with the Herculean task of coordinating the production and assembly of historically large quantities of raw materials and the manual labor of thousands of workers. Not until the 1950s did businesses begin to systematically apply project management tools and procedures to large-scale endeavors. The United States Navy was instrumental in the development and documentation of cutting-edge project management practices (Reed, 2018). The Manhattan project was just one example of a landmark undertaking that helped pave the way for the development of what are now considered to be industry standards in project management. Technologies emerged in the 1970s that allowed businesses like Oracle to begin developing project management software (Caird, 2018).

In the European Union countries, the implementation of projects performance is inherently complex, partly due to the need to satisfy multiple project sponsors. Considering this, the diversity of knowledge and values of the community have to be taken into consideration and it is necessary to ensure that there is project planning in decision-making processes and implementation (Daft, Choi, Keilla & Fish, 2017). In international projects, the participatory engagement of project sponsors occurs and the cultural context for participation best practice, such as the early involvement of project sponsors in the decision-making process, ensuring that the project sponsors can influence the end results of the process and formulating clear objectives in the participatory process. The method of project planning influences the end result of the process and participation procedures are appropriate to integrate the top-down sustainable development

indicators used at European scale with those bottom-up indicators relevant at a regional and city scale (Reed, 2018).

Project Planning in most nations in Asia is considered as a very important part of a project regarding project performance and project success. It is a continuous process throughout the delivery of a project. Numerous empirical studies of project management success factors suggested planning as one of the major contributors to project success. All the project managers are required to prepare a solid project plan and follow this plan all the way to success (Gordon, 2021). At the heart of the project life cycle is project planning, which provides the roadmap to everyone involved in the project with the directions for each task to be performed in order to achieve project goals. At this stage, the project plans are documented, the deliverables and requirements are defined, and the project schedule is created ((Lee, 2017). The project manager should therefore work with the beneficiaries of the project to establish quantifiable project schedule, cost, and quality measures to determine project satisfaction and successful 6 completion and for monitoring and evaluation purposes (Sligo, Gauld, Roberts & Villa, 2017).

Project implementation in Sub-Saharan Africa is undisputed that planning is the most essential aspect of any successful project. However, even with the most elaborate plans, it still remains difficult to turn the plans into tangible actions, and consequently numerous projects irrespective of their sizes and industry continue to fail (Reed, 2018). Implementation of public funded in Africa in a view of Christensen (2017) is more important than strategic planning because even with an elaborate plan, no results can be realized without proper implementation, the plan is useless. To effectively implement a project plan, an implementation plan is advised. Implementation involves breaking down the work into manageable steps or tasks, costing, scheduling, follow up, control. Successful implementation is an art that is learned through experience. The main components of project implementation include; inputs, transformation, and outputs relating to products or services (Christensen, 2017).

The Government of Rwanda (GOR), through its accredited entity MOE, got a funds from the Green Climate Fund (GCF) to escalate the resilience of vulnerable societies to climate change in Gicumbi District in Northern Rwanda. The project received a total of USD 32,794,442 of GCF grant funds over six years (National Fund for Environment in Rwanda, 2021). The project envisioned to restore and boost ecosystem facilities in one of the sub-catchments of the ruined Muvumba watershed, rise the capacity of communities to restart and sustainably cope forest resources and back smallholders to adopt climate resilient agriculture. The project will also devote in climate resilient settlements for susceptible families currently living in zones prone to landslides and floods and back community-based adaptation planning and livelihoods diversification. Knowledge and capacity developed during implementation will be mainstreamed at the local and national level (CGF, 2021).

The project encompasses four intertwined outputs: sub-catchment B of the Muvumba watershed restored and small-scale farmers supported to adopt climate resilient practices; communities reinforced to implement sustainable forest management and adopt fuel-efficient cooking methods; human settlements developed and/or modified to increase climate resilience; and successful adaptation and mitigation approaches communicated and mainstreamed at the national level (National Fund for Environment in Rwanda, 2021). There are two expected outcomes from the project, linked to both mitigation and adaptation: improved management of land or forest areas contributing to emissions reductions (M9.0); and strengthened adaptive capacity and reduced exposure to climate risks (CGF, 2021). The ascendable project will make a noteworthy involvement in taking forward the implementation of Rwanda's Green Growth and Climate Resilient Strategy (2017) as part of GoR's commitment to addressing climate change risks. The project will range to around 150,000 exceedingly vulnerable recipients, as well as providing wider reimbursements to over 380,000 individuals through mainstreaming interventions (CGF, 2021). Thus, a study is required to assess the effect of project planning and its core effect on the implementation of Green Gicumbi Project.

Research Problem

Many projects around the world that keep failing or resulting in loss of millions of dollars for organizations due to poor planning. For stance, since the time it was implemented, the Green Gicumbi Project went through many iterations to become the success it is today. Some of the adjustments included revision of projects targets, activities timeframe, as well as budget reallocation between components.

However, according to PAC 2021 report, the authorities in Northern Province failed to effectively plan for the public funded projects in the area and this led to failure to follow up on the implementation and supervision of 35.3 percent of the projects. In addition, Transparency International Rwanda 2021 report cited that in spite the number of projects sponsored by FONERWA in Rwanda, there is shortage of documentation on project implementation process.

Therefore, the above motivated me to carry out this study.

Objectives of the study

The general objective of the study was to assess the effect of project planning on the implementation of Green Gicumbi project, Rwanda, with their Specific Objectives:

- To assess the effect of communication planning on implementation of Green Gicumbi project;
- To determine the effect of scope planning on implementation of Green Gicumbi project;
- To examine the effect of resource planning on implementation of Green Gicumbi project;
- To investigate the effect of stakeholder involvement on implementation of Green Gicumbi project

Research Hypotheses

Based on the above specific research objectives, the study findings guided me determine these hypotheses:

- **Ho1:** There is no significant effect of project planning on project implementation of Green Gicumbi project;
- **Ho2:** There is no significant effect of the scope planning on implementation of Green Gicumbi project;
- **Ho3:** There is no significant effect of resource planning on implementation of Green Gicumbi project;
- **Ho4:** There is no significant effect of stakeholder involvement on implementation of Green Gicumbi project.

Empirical Review

The part analyzes the research carried out by various researches in the project planning sector and the successful implementation of the project. The focus areas are the connection between project planning in communication planning, scope planning resource planning and participation of stakeholders and project implementation.

Afroze and Khan (2017) studied the influence of successful communication practices and project complexities on the management of public development projects. The effects practices on project success in communication and complexity were assessed by means of a survey tool. The research findings indicated that these activities have important and beneficial effect on project efficiency; the complexity of the project has limited impact on the relationship between communication and performance. In such a situation, if the main stakeholders are not aware of the project goal that it is intended to improve national unity and integration, the project will not succeed, because they need to be told, because they will play a critical role in the progress and sustainability of the project. In another study conducted by TISA (2010) on ESP projects, the study agrees with the NACCSC on the level of awareness and involvement.

Novo, Landis and Haley (2017) studied leadership and its role in the success of project management. The study was conducted to discover the skills of project managers and their leadership skills and how they can lead to the success of the project. The results of the study showed that the leadership characteristics are directly related to the competence of the project manager. Similarly, the leadership skills and success of project managers are strongly correlated. It has been established that the project manager's ability to give direction is the best style of leadership and contributes to the best artistic quality of the project and also leads to better inter-functional relationships.

Njogu (2016) studied the effect of scope planning effectiveness in project success in automotive projects in Kenya. The study established that stakeholder involvement in the implementation of the project enhances the development of human resources and enhancement of projects in the automotive sector in Kenya. The study indicated that the involvement of stakeholders in projects led to cost-efficiency, customer satisfaction and a reduction in project costs. The company or stakeholders were the main sources of human resources and therefore provided project management with technical capacity. The integration of stakeholders has made it possible for the project to have access to sufficient human resources.

Wambua (2013) carried out a study on the effects of human resource factors on project performance in Nairobi County in Kenya: A case of selected organizations in Westlands. The research design used in this study was descriptive survey. Regression and correlation analysis were used to analyze data. The study found that HRM practices have an effect on project performance. The study found that the personal performance measurement, capacity building and human capital availability was lacking in majority of the projects. The proxies of personnel management planning were, capacity building, human capital availability and performance measurement. Yang, Huang and Wu (2011) carried out a study on the association between project management style, teamwork and project success. Obegi and Kimutai (2017) studied the impact of resource planning on project performance by international non-profit organizations in Nairobi City County, Kenya. In the data analysis, the study used descriptive statistics to describe the characteristics of each variable. The study found that there was a periodic budget monitoring to measure expenditure against the budget, with project staff completing their tasks as allocated. Umulisa, Mbabazize and Shukla (2015) studied the effects of project resource planning practices on the performance of the Agaseke Project in Kigali, Rwanda. A descriptive research design was used and data was collected using questionnaires analyzed using a descriptive research design. Financial resource planning practices have been identified to influence the performance of the project. Practices such as budgeting, forecasting and having money generation plans have been identified in the project.

Atrill (2016) found that the Fund Management Practice is a management accounting strategy that focuses on maintaining an efficient balance between the two components of the Fund, current assets and current liabilities.. It is important to the financial health of businesses of all sizes as the amounts invested in working capital are often high in proportion to the total assets employed. Kress (2014) examine the impact of material planning on project implementation through a survey of selected construction firms. The study focused on construction projects not completed in London on time. The study found that the primary objective of project management is to meet or exceed the material use expectations of the project sponsors.

Plenert & Best (2018) studied the impact of material level on project performance. The study consisted of a survey of construction companies. Descriptive analysis was used and the study found that most of the cost

advantages of JIT occurred when large inflation increases resulted in large increases in the cost of carrying inventory. The study recommended that firms should be able to focus our scheduling solely on what materials are needed and when they are needed.

Planning and Project Implementation Kihuha (2018) conducted a study on monitoring practices and performance of global environmental facility projects in Kenya, a UN Environment Program case. The research sought to evaluate the impact of participation of stakeholders in planning phase and success of UNEP projects in Kenya. An exploratory design of research was adopted and analysis was carried out using descriptive statistics. The analysis revealed that participation of stakeholders in the funding allocation planning process and all the stages of the project improved the project performance, and the projects where stakeholders were not involved did not perform well. The study recommended that strategic plans be developed to identify internal process on project planning and stakeholder engagement process restructuring.

Sulemana, Musah and Simon (2018) performed an evaluation at the Savelugu-Nanton Municipality Assembly, Ghana on stakeholder interest in the monitoring of district assembly projects. A case study methodology and descriptive empirical statistics were adopted for the research. The study found that the involvement of stakeholders in project M&E was strong among the leaders of Municipal Planning and District Assembly but small among the group levels and this had a negative effect on the project sustainability. The report concluded that the stakeholders had scarcely been interested in project M&E.. Mburu (2018) conducted a report on participatory monitoring and evaluation, stakeholder capacity building and fish farming project performance. Results of the findings showed that the involvement of stakeholders in monitoring during project design and implementation contributed to progress in Nyeri County fishery projects. The study recommended that the level of stakeholder involvement in M&E should be increased at all stages starting from project design, implementation and utilization of M&E results to ensure capacity building and consequently project success.

Micah (2017) conducted an investigation into the impact of monitoring systems on the performance of non-governmental projects in Kenya using a case of maternal health projects in sub-county Bungoma south, Kenya. The study agreed that one-way organizations can increase the efficacy of their actions is by improving their monitoring processes and this can be done effectively through the involvement of stakeholders. Descriptive survey design was adopted, and statistics used for research were descriptive. The study found that participation of stakeholders in M&E ensured good project performance but too much involvement of stakeholders in M&E had a negative impact on long-run project results. Mutua (2017) performed an inquiry on factors affecting the success of community development projects using an INADES (African Institute for Social and Economic Development) case in Machakos County, Kenya. The

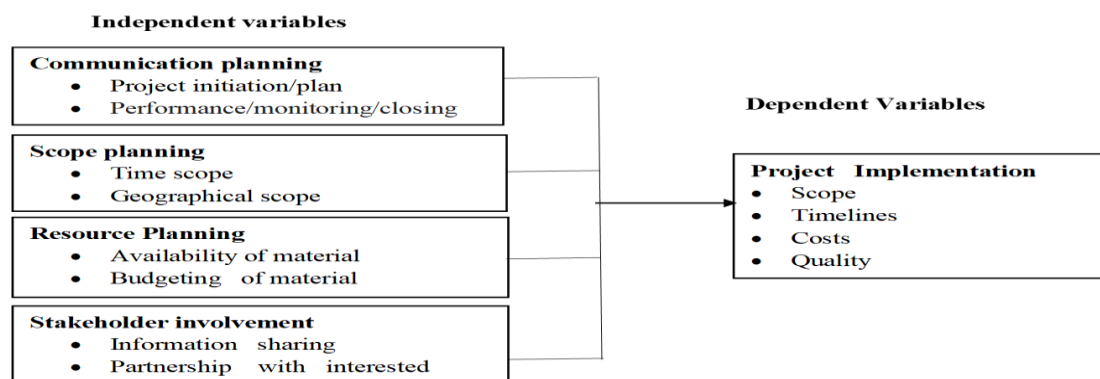
study adopted a descriptive research design to determine how community involvement in project planning affects community development project performance. Descriptive measures were used for research, and the findings showed that the success is essential to the participation of key development professionals and the community in project planning. The study suggested a variety of undertakings; that management and staff at INADES Formation Kenya follow up on community engagement right from the planning stages.

Ruwa (2016) conducted a study on the impact of stakeholder participation on the performance of donor-funded projects using the Kinango Integrated Food Security and Livelihood Project in Kwale County, Kenya. The study acknowledged that the role of stakeholder participation in project performance cannot be overlooked and therefore sought to determine the impact of stakeholder participation in project planning on the performance of the project. Exploratory study design was adopted, and statistics used for analysis were descriptive. The study found that stakeholder participation in project planning had a positive impact on the performance of the project and that there was satisfaction. The study recommended the participation of stakeholders in project planning should be adopted by project managers and other performance indicators, such as cost, time and sustainability, should always be considered in project planning.

Research framework

This study has two variables: the dependent variables, project implementation of Green Gicumbi Project, Rwanda, for which has 4 indicators (project scope, project timelines, project costs and quality) were examined: communication planning, scope planning, resource planning and stakeholder involvement. The following figure shows the relationship between the two variables.

Figure 2.1: Conceptual Framework



II. RESEARCH METHODOLOGY

Research design presents how the data are analyzed and interpreted (Cooper & Schindler, 2013). The study used both descriptive and correlational research designs. Descriptive research design described how, where and what of the activity to be represented in the study. Therefore, descriptive research design was used to describe project planning used by Gicumbi Green project and its effect on project implementation. Descriptive design helped to describe the respondent's perception and opinion regarding the study variables. Besides, correlational research design was used to determine the relationship between project planning and project implementation.

In addition, qualitative and quantitative approaches were used. According to Graham & Marshal (2015) to better understand ideas, perspectives, or experiences, qualitative researchers collect and examine information that is not numeric in nature (such as text, video, or audio) and it can help you learn more about the issue at hand or come up with fresh research questions. Quantitative research, on the other hand, uses sampling techniques and the distribution of digital surveys, polls, and questionnaires to gather data from actual and future use. That yields quantifiable findings that can be shown graphically (Mugenda & Mugenda, 2013). , the sample size of this study was 457 respondents. In determining the sample of this formula of this study, the researcher used the table that was developed by Krejcie and Morgan.(will be attached)

According to Krejcie & Morgan (1970) a table was developed to help the researcher determine (with 95% certainty) the sample size. Thus, based on the Krejcie and Morgan sample size determination table, this study's population size of (360,624) was represented by a sample size equivalent to 384 respondents; a population size of (13) was represented by a sample size of 10 respondents whereas a population size of (77) were represented by a sample size of 63 respondents. For clarity, the table is attached in the appendices of this work. In this study's table 3.1 as presented below indicates respondents' category, population size and the sample size determined by the Krejcie and Morgan sample size table.

III. RESULTS

This study findings were stretch to in line with the study's objectives:

- Firstly, 81.0% of the respondents strongly agreed that the management transmits information about goals, policies and procedures of the Green Gicumbi project; whereas 57.1% of the respondents agreed that project management encourages communication channels that improve workplace relations.
- Secondly, 71.4% of the respondents strongly agreed that project management hires human resources that have the required competences in running the Green Gicumbi project; 69.8% of the

- respond was agreed that project managers train and develop the skills needed amongst the

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total		Mean	Standard Deviation
	F	%	F	%	F	%	F	%	F	%	F	%		
Project has open communication channels to reduce any misconstrued messages	42	9.5	189	42.9	210	47.6	0	0	0	0	441	100	3.36	0.40
There is a systematic and orderly flow of information	63	14.3	238	53.9	0	0	140	31.7	0	0	441	100	3.38	0.37
Management transmits information about goals, policies and procedures	84	19.0	357	81.0	0	0	0	0	0	0	441	100	4.55	0.46
Project management encourages communication channels	189	42.9	252	57.1	0	0	0	0	0	0	441	100	4.51	0.44

workforce in the managing the Green Gicumbi project

- Thirdly, 66.7% of the respondents agreed that project management of Green Gicumbi project supports decision-makers to review the existing activities so as to justify and detail them during the budgeting process; while 47.6% of the respondents agreed that project staff effectively correctly records and reconciles all project expenditures.
- More so, 85.7% of the respondents of the respondents strongly agreed that the project stakeholders participate in supervision of the project from the beginning; whereas 58.3% of the respondents strongly agreed that GGP stakeholders participate in project objectives formulation and setting.
- Finally, as regards with the regression equation results, the findings indicated that all the involved p-values were less than 0.05% and this is an indication that all the research sub-variables positively and significantly affect project implementation of Green Gicumbi project. Hence, all the study's null hypotheses were not accepted.

Table 1: Respondents' level of agreement on communication planning

Source: Primary data (2022)

From the above findings in table 4.9, respondents revealed outstanding communication planning in general in this project as a result of project planning strategies. The practice which was most agreed by the respondents was that the management transmits information about goals, policies and procedures of the Green Gicumbi Project by 81.0% of the respondents; whereas 57.1% of the respondents agreed that project management encourages communication channels that improve workplace relations and the same statement was strongly agreed by 42.9% of the respondents. In addition, the fact that Green Gicumbi Project have open communication channels to reduce any misconstrued messages was agreed by 42.9% of the respondents and it was undecided on by 47.6% of the respondents. Finally, the practice which stated that there is a systematic and orderly flow of information in the project was agreed by 53.9% of the respondents though it was still disagreed by 31.7% of the respondents.

Based on the findings revealed in table 4.9, the researcher confirmed that there is strong influence of communication planning and project implementation of Green Gicumbi Project in Rwanda. This was derived at due to the fact that most of the statements were agreed and strongly agreed. In addition, the findings in form of mean and standard deviation presented in the above showed that all the standard deviation values were above 0.37. Besides, results in terms of mean indicated 3.36, 3.38, 4.55 and 4.51; which showed very high mean, which explains that there is strong evidence of the existence of the fact amongst the respective practices. Hence, the practices of communication planning were witnessed and seem not smooth as they are supposed to be like in any performance wanting project during implementation. Like it was discovered in the project planning and the communication planning as revealed by this study's respondents as presented in table 4.9 was somehow effective at the project.

Table 2: Respondents' level of agreement on scope planning

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total		Mean	Standard Deviation
	F	%	F	%	F	%	F	%	F	%	F	%		
Management hires human resources that have the competences	126	28.6	315	71.4	0	0	0	0	0	0	441	100	4.44	0.48
Project personnel have the right technical and soft skills	147	33.3	252	57.2	0	0	42	9.5	0	0	441	100	3.98	0.38

Project managers train and develop the skills needed	133	30.2	308	69.8	0	0	0	0	0	0	441	100	4.35	0.45
Project personnel are motivated for increased productivity	189	42.9	252	57.1	0	0	0	0	0	0	441	100	3.91	0.44

Source: Primary data (2022)

For this question, the researcher intended to assess the appreciation level of respondents on scope planning in Green Gicumbi project. As indicated in table 4.10 and from the presented study results, since all the statements set were both agreed and strongly agreed, it is enough to understand that there is evidence of strong influence of project planning in ensuring that human resource planning is well carried out within the Green Gicumbi project in Rwanda. This was imitative at due to the fact that most of the statements were agreed and strongly agreed. In addition, the findings in form of mean and standard deviation presented in the above showed that all the standard deviation values were above 0.38. Besides, results in terms of mean indicated 4.44, 3.98, 4.35 and 3.91; which showed very high mean, which explains that there is strong evidence of the existence of the fact amongst the respective practices.

Table 3: Respondents’ level of agreement on resource planning

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total		Mean	Standard Deviation
	F	%	F	%	F	%	F	%	F	%	F	%		
Resource plans support decision makers to review activities	91	20.6	294	66.7	56	12.7	0	0	0	0	441	100	4.40	0.43
Resource plans provides adequate financial data	126	28.6	168	38.1	147	33.3	0	0	0	0	441	100	3.42	0.34
Project leaders eliminates programs which are longer in public needs	203	46.0	210	47.6	28	6.3	0	0	0	0	441	100	4.35	0.41
Project staff effectively correctly records and reconciles all projects expenditures	189	42.9	210	47.6	42	9.5	0	0	0	0	441	100	3.51	0.38

Source: Primary data (2022)

As revealed in table 3, all presented statements about resource planning were strongly agreed and agreed, whereas each of them was undecided about – an indication of some gaps in resource planning within the project. Therefore, the findings in form of mean and standard deviation presented in the above showed that all the standard deviation values were above 0.34. Besides, results in form of mean indicated 4.44, 3.98, 4.35 and 3.91; which showed very high mean, which explains that there is strong evidence of the existence of the fact amongst the respective practices. The findings realized are in line with the existing challenges that were reported in different reports about the projects in the district. This could affirm the influence between resource planning and the implementation of the project. This was imitative at due to the fact that most of the statements were agreed and strongly agreed.

Table 4: Respondents’ level of agreement on stakeholder involvement

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total		Mean	Standard Deviation
	F	%	F	%	F	%	F	%	F	%	F	%		
Project stakeholders participate in needs project intervention	126	28.6	315	71.4	0	0	0	0	0	0	441	100	4.52	0.33
Stakeholders participate in objectives formulation	147	33.3	200	45.4	0	0	94	21.3	0	0	441	100	3.71	0.44
The project stakeholders participate in supervision of the project	63	14.3	378	85.7	0	0	0	0	0	0	441	100	4.57	0.47
Project stakeholders participate in management and in follow up	175	39.7	189	42.9	0	0	77	17.5	0	0	441	100	3.88	0.34

Source: Primary data (2022)

Based on the study findings presented in table 4, all the practices regarding stakeholder involvement were agreed though some were disagreed – and indication of some gaps within the issue of project stakeholder involvement. Most of them were strongly agreed. In addition, the discoveries in form of mean and standard

deviation presented in the above presented that all the standard deviation values were above 0.33. Besides, findings were presented in form of mean and they were specified as 44.52, 3.71, 4.57 and 3.88; which showed very high mean and this explains that there is strong evidence of the existence of the fact amongst the respective practices.

Table 5: Respondents’ appreciation on implementation in Green Gicumbi project

Statements	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		Total		Mean	Standard Deviation
	F	%	F	%	F	%	F	%	F	%	F	%		
Green Gicumbi project ensures all elimination of long processes	168	38.1	168	38.1	35	7.9	70	15.9	0	0	441	100	3.72	0.33
No bureaucracy in collecting required reports information	147	33.3	294	66.7	0	0	0	0	0	0	441	100	4.51	0.44
Green Gicumbi reports are always controlled timely	357	81.0	84	19.0	0	0	0	0	0	0	441	100	4.68	0.47
Green Gicumbi project ensure rejection of unclear strategies	105	23.8	336	76.2	0	0	0	0	0	0	441	100	4.28	0.34

Source: Primary data (2022)

Based on the study findings presented in table 5 all the practices regarding Green Gicumbi Projects were agreed though some were disagreed – and sign of some breaches within the issue of performance of project implementation. Nonetheless, each of the statement was strongly agreed or agreed. In addition, the discoveries in form of mean and standard deviation presented in the above presented that all the standard deviation values were above 0.32. Besides, findings were presented in form of mean and they were specified as 3.72, 4.51, 4.68 and 4.28; which showed very high mean and this explains that there is strong evidence of the existence of the fact amongst the respective practices.

6. Correlation analysis

Variables		C	S	R	SI	Scope	Quality	Timeliness	
Spearman's rho	Communication(C)	<i>r</i>	1.00	.844	.721	.660	.873	.452	.832
		<i>p</i>	.	.001	.000	.000	.001	.000	.000
Scope (S)		<i>r</i>	.844	1.00	.671	.543	.678	.688	.751
		<i>p</i>	.001		.000	.000	.000	.000	.001
Resource (R)		<i>r</i>	.721	.671	1.00	.871	.584	.576	.711
		<i>p</i>	.000	.000	.	.000	.004	.000	.000
Stakeholder (SI)		<i>r</i>	.660	.543	.871	1.00	.560	.603	.684
		<i>p</i>	.000	.000	.000	.	.003	.000	.000
Scope		<i>r</i>	.873	.678	.584	.560	1.00	.436	.814
		<i>p</i>	.001	.000	.004	.003	.	.000	.000
Quality		<i>r</i>	.452	.688	.576	.603	.436	1.00	.745
		<i>p</i>	.000	.000	.000	.000	.000	.	.000
Timeliness		<i>r</i>	.832	.751	.711	.684	.814	.745	1.00
		<i>p</i>	.000	.001	.000	.000	.000	.000	.

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

This section of the chapter was tackled with the assistance of SPSS. The section articulates the significance relationship between the research variables which include project planning strategies and implementation trend of Green Gicumbi Project.

As it is revealed in table 6 all p-values were found to be less than alpha and this explains that there is strong positive correlation between project planning strategies and the implementation trend of Green Gicumbi Project. Based on the spearman test therefore, the researcher learnt that project planning strategies in terms of communication planning, scope planning, resource planning and stakeholder involvement have strong relationship on the implementation of public funded projects in Rwanda and in particular, Green Gicumbi Project.

Table 4.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.914 ^a	.665	.619	.3460

a. Predictors: (Constant) Communication planning, Scope planning, Resource planning and Stakeholder involvement

Table 4.2: Analysis of Variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.151	5	.630	6.000	.000 ^a
	Residual	41.706	395	.105		
	Total	44.857	440			

a. Dependent Variable: Implementation

b. Predictors: (Constant), Communication planning, Scope planning, Resource planning and Stakeholder involvement

As it is presented in table 4.16, the ANOVA findings revealed that independent variables are statistically significant to the dependent variable. The ANOVA test discovered that P-value of 0.000 less than alpha (5%), is the significance level. This means that the given data fit well with the multiple regression models which is an indication that communication planning, scope planning, and resource planning and stakeholder involvement of Green Gicumbi project. Hence, the significance value which was also less than 0.05 is an indication that the model used in the study was statistically significant.

Table 4.3: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.347	.827		1.628	1.000
Communication planning	.679	.322	.410	2.108	.013
Scope planning	.757	.439	.558	1.724	.067
Resource planning	.612	.344	.206	1.779	.000
Stakeholder involvement	.843	.694	.425	1.214	.020

a. Dependent Variable: Implementation

From the study presented in table 4.17, the established regression equation was: PI (Project implementation) = $\alpha + \beta_1 \text{COP (Communication planning)} + \beta_2 \text{SCP (Scope planning)} + \beta_3 \text{REP (Resource planning)} + \beta_4 \text{STP (Stakeholder involvement)} + \epsilon$ (Error)

$$PI = 1.702 + 0.410 (COP) + 0.558 (SCP) + 0.208 (REP) + 0.428 (STP) + 0.827$$

There is positive and significant effect of resource planning on project implementation of Green Gicumbi project ($\beta = 0.206$; t-test = 1.779; p-value < 5%). This implies that a unit increase in resource planning would lead to an increase in project implementation by a factor of 0.206. And there is positive but insignificant effect of stakeholder involvement on project performance of Green Gicumbi project ($\beta = 0.425$; t-test = 1.214; p-value < 5%). This implies that a unit increase in stakeholder involvement would lead to an increase in project implementation of Green Gicumbi project by a factor of 0.425.

IV. Conclusion

This research's interest was to analyze the effect of project planning on the project implementation in Rwanda. The findings made a picture that project planning strategies in terms of communication planning, scope planning; resource planning and stakeholder involvement are well reinforced by the management of Green Gicumbi project and the entire staff involved in the electrification projects. From the Spearman test therefore, the researcher learnt that project planning has strong relationship on the project implementation performance trend of the funded projects in Rwanda and in particular Green Gicumbi project. In order to ensure performance of the projects in Green Gicumbi project, there must be effective project planning strategies. However, concerning timely completion of the projects, 19.0% of the respondents disagreed about the issue. In addition, 14.3% of the respondents disagreed on the statement that Green Gicumbi project staffs take part in costs decision making processes. When enquired from some of the project managers, they asserted that there are a number of other factors that could lead to untimely completion of the projects rather than project planning strategies such as inadequate funding and delayed disbursement of the funds.

Finally, this study discovered some loopholes in project planning and management processes besides the ones that were highlighted by Office of Auditor General and Public Accounts Committee reports such as unethical behaviors of the public servants. This study learnt that despite project planning strategies in place, still some cases of incorrect records and reconciliation; and embezzlement and fraud continue to exist. Lastly, it was learnt that the projects are also affected by unsystematic and disorderly flow of information in the project within different departments which could affect the performance of the projects. Thus, this requires strong supervisory team in place against such unethical behaviors of the staff in public funded projects.

V. Recommendations

Referring to the study results, the following are the suggestions and recommendations:

Concerning the issue of unethical behaviors such as fraud and embezzlement, the top management should put in place strong measures to punish the culprits. This could be done through empowerment of the human resources.

Regarding the lack of proper internal control processes in, the top management should look into it and be made a culture by the responsible personnel at the district.

As regards to untimely deliveries, officials who delay project activities and processes should also be handled individually so as other staff could avoid doing similar mistakes in future.

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