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Abstract

Project resource and personnel management, stakeholders' involvement and beneficiaries' satisfaction are the key requirements for project performance. According to Burke (2013), 18% of projects are finished within the allotted budget, and 50% of them cost more than expected, and 30% of them are abandoned before completion due to cost concerns. The goal of this project is to evaluate the project planning practices for project performance for Sustainable Agricultural Intensification and Food Security Project in Rwanda. The research objectives were to examine the effects of project material resource on project performance, to determine how personnel management contribute to the project performance, to assess the stakeholders' involvement and beneficiaries' satisfaction on project performance. The research used a self-administered questionnaire to gather data and then data were evaluated through SPSS. The intended audience under this study was concentrated to 80 project beneficiaries from 8 sites, project planning officers (14) operating in planning and implementation department, Project Manager (1) of SAIP. 95 respondents were taken as the sample. The study adopted a method of choosing the respondents called purposive sampling. The research findings indicated that the effective project practices lead to the successful performance of project and the findings urged that SAIP has been successfully performed as planned in terms of material resources, personnel, and stakeholders' involvement which lead to the satisfaction of beneficiaries. The research recommended that as the first target is to change the lifestyle of project beneficiaries, and the project practices of SAIP should be extended to a large number or other categories of beneficiaries to promote social and economic transformations among Rwandans. The study recommends that effective project planning practices, encompassing material resource planning, personnel management, stakeholder involvement, and beneficiaries' satisfaction planning, are crucial for enhancing the performance of projects, as demonstrated in the case of the Sustainable Agricultural Intensification and Food Security Project (SAIP) in Rwanda. These practices include clear planning tools, provision of necessary resources and equipment, regular training for staff, and the active involvement of stakeholders in decision-making processes. Furthermore, ensuring that project outcomes meet beneficiaries' expectations and provide high-quality services is essential for achieving project success and satisfaction.

Keywords: *Project Planning Practices, Project Performance, Agricultural Intensification, Food Security Project, Rwanda.*

1.0 Introduction

Planning is the first step that must be taken before starting any project. A well-planned project takes into account the essential project components (tasks, milestones, timetable, risks, communication, and quality, for example) and creates a strategy that the project team can use when carrying it out. Any reasonable project manager would undoubtedly understand the importance of such planning (Zilicus Solutions, 2012). Projects are typically started as a means of advancing organizational performance and meeting business needs (Wayngaag, 2011). They are also made to designate one person with responsibility and authority for the accomplishment of organizational objectives to a single person or when a small group is necessary because the job at hand does not clearly fall under the definition of routine work.

In Rwanda, projects governments are currently facing with various challenges occurring during project implementation and among them contract management, weakness in procurement systems and lastly poor planning and this poor planning impact seriously the national projects such as projects related to the construction (AOG, 2014). In recent years, in order to address issues with public procurement, such as poor performance by contractors and unclear roles and duties for those involved in contract administration, contractor's payment problems due to incomplete documents, budget problem, inappropriate follow up on payment, lack of enough skills to preparation of the documents for tender , etc) , the government of Rwanda via its institution of the Rwanda Public Procurement (RPPA), has begun a system of monitoring the implementation of contracts for those whose value is equal to or greater than 500,000,000 Rwandan francs (RPPA, 2014). In the part on empirical review, extensive empirical research on project planning and its impact on the success of project, implementation will be presented, along with findings and recommendations from both developed and developing nations. The purpose of this study is to assess the factors that can affect how well government projects work, particularly those in the agricultural sector, and to describe how project planning contribute to the efficient execution of government projects. The main objective of this study was to assess the project planning for project performance of Sustainable Agricultural Intensification and Food Security Project in Rwanda. It was guided by the following specific objectives:

- i. To examine the effects of project material resource in influencing on project performance of Sustainable Agricultural Intensification and Food Security Project
- ii. To determine how personnel management planning contributes on project performance of Sustainable Agricultural Intensification and Food Security Project
- iii. To assess the stakeholders' involvement planning on project performance of Sustainable Agricultural Intensification and Food Security Project
- iv. To assess beneficiaries' satisfaction planning on project performance of Sustainable Agricultural Intensification and Food Security Project

2.0 Theoretical Literature

According to Nufei (2014), Project management is the process of directing realization toward project objectives. Approach combines the use of tools and procedures to monitor input quality and quantity to complete the single task within the anticipated time, budget, and quality constraints. Using tools and procedures to keep track of input quantity and quality in order to complete a single assignment within the allotted time, financial, and quality constraints. Project management's responsibilities include identifying the needs, developing the task scope, assigning the required resources, planning to execute tasks, monitoring the evolution and adjusting changes from the plan (PMBOK, 2010).

Phases of project planning

Managing a project is no easy feat, no matter what the scale and scope are. From planning the minutia to handling the ever-changing demands of clients to shipping the deliverables on time, there is a lot that can go wrong. When you divide the project into manageable stages, each with its own goals and deliverables, it is easier to control the project and the quality of the output. If you are somehow in a position where you are expected to manage projects for your organization and are feeling overwhelmed, it is better to start learning the basic stages of the project life cycle phases. According to the Project Management Body of Knowledge (PMBOK) guide by the project management institute, a project management life cycle consists of five distinct phases including initiation, planning, execution, monitoring and closure that combine to turn a project idea into a working product.

Initiation phase of project planning

According to PMBOK (2010), the project initiation phase is the first stage of turning an abstract idea into a meaningful goal. In this stage, you need to develop a business case and define the project on a broad level. In order to do that, you have to determine the need for the project and create a project charter. The project charter is an important document consisting of details like project constraints, goals, appointment of the project manager; budget expected timeline, etc. Once you have the project goals and project scope, identify key project stakeholders means the people who are to be involved in the project. Create a stakeholder register with the roles, designation, communication requirements and influence. While a clear goal of the project is established in this phase, a project charter does not contain any technical details that happen in the planning stage. Consider the example of an automobile manufacturer assigned to develop an electrical vehicle. The selection of the design, capacity and battery power of the vehicle will not be a part of the initiation phase. The only certainty would be that an electric vehicle will be developed within the given timeframe and budget. Initiation phase contains describing and approving a project phase. In the project, initiating a concept phase require to explain the project requirements which must be done throughout each phase of the project. For that, it is not possible to equalize the group stages in relation to project phases.

Planning processes

According to PMBOK (2010), the project planning stage requires complete carefulness as it lays out the project's roadmap. Unless you are using a modern project management methodology like responsive project management, the second phase of project management is expected to take almost half of the entire project's time span. In this phase, the primary tasks are identifying technical requirements, developing a detailed project schedule, creating a communication plan and setting up goals and deliverables. During the planning stage, the scope of the project is defined. There is a possibility of changing the scope of the project demands it but the project manager must approve the change. The project managers also develop a work breakdown structure, which clearly visualizes the entire project in different sections for the team management. In the absence of a working change management plan, scope creep happens and causes huge problems for the project team in the later stages of the project. So, it is best to reduce the possibility of unforeseen changes as much as possible. Planning processes is about developing and keeping a feasible structure for ensuring the project is addressing the organization, requirements. Plans are required at this stage including those for scope, schedule, cost, and procurement management.

Project Execution Phase of Project Planning

According to PMBOK (2010), the project execution stage is where your team does the actual work. As the project manager, your job is to establish efficient workflows and carefully monitor the growth of your team. Another responsibility of the project manager during this phase is to consistently maintain effective collaboration between project stakeholders. This ensures that everyone stays on the same call and the project runs efficiently with no any issues. Execution phase embraces human resources development for carrying out different plans, producing the products of the project as well as the services.

Monitoring and Controlling Of Project Planning

In the project management process, the third and fourth phases are not sequential in nature. The project monitoring and controlling phase run simultaneously with project execution, thereby ensuring that objectives and project deliverables are met. As a project manager, you can make sure that no one deviates from the original plan establishing critical success factors and key performance indicators (PMBOK, 2010). During the monitoring phase of project management, the manager is also responsible for quantitatively tracking the effort and cost during the process. This tracking not only ensures that the project remains within the budget but also is important for the future projects. Monitoring and controlling phase takes in account a periodically assessment and evaluation to ensure that the goals are met. In coordination with other staff, the project coordinator must assess the project's progress in relation to the specified plan. Therefore, a corrective measure is applicable when necessary.

Closing Phase of Project Planning

This is the final phase of the project management process. The project closure stage indicates the end of the project after the final delivery. There are times when external talent is hired specifically for the project on contract. Terminating these contracts and completing the necessary paperwork is also the responsibility of the project manager (PMBOK, 2010). Most teams hold a reflection meeting after the completion of the project in order to contemplate the successes and failures during the project. This is effective method to ensure continuous improvement within the company to enhance the overall productivity of the team in the future. Most teams hold a reflection meeting after the completion of the project in order to contemplate their successes and failures during the project. This is an effective method to ensure continuous improvement within the company to enhance the overall productivity of the team in the future. The final task of this phase is to review the entire project complete a detailed report that covers every aspect. All of the necessary data is stored in a secure place that can be accessed by project managers of that organization (PMBOK, 2010). To the closing phase, the project is officially accepted and administrative activities are done. The main ones are to archive the documents of project and closing out the contracts.

Steps in Project Planning

The project plan, which serves as the basis or cornerstone for carrying out the project, is a paper outlining the preparations and actions that must be made during project implementation. It covers every aspect of the plan and provides a concise summary of the project's goals. This strategy illustrates various options and combines all variables in accordance with their needs and expectation. These requirements include time, money, and high- quality results. What, when, why, where and how the project was completed are the queries that the level for measuring performance looks for answers to (Kejuo, 2012). Author puts forward tens (10) steps in project plan that are: The first stage is to "plan to plan" which means to make a good allocation of resources and a plan for the project's requirements. The second one has to with the plan and timetable (establishing leadership style and communication channels, defining project milestones).

The third stage is to gather and analyze pertinent data in order to create a detailed plan and the planning commission must collect and analyze a large amount in order to handle issues and concern that effect both the present and the future of the community. A strong plan requires quantitative data. Finding issues, concerns, and potential problems is the fourth stage in the analysis of accumulated data. Creating a thorough plan and involving the public through community meeting surveys, focus groups, and advisory committees are crucial parts of this stage. The next step is to create a vision statement, and the sixth is to set precise plan goals and objectives that must be completed within a given time frame. The seven step is to create even to assess alternative plans, and the eight and the final step is to choose and develop a good plan. The final plan's draft is created for this step and present to the planning commission for approval. Nine is the stage where the government accepts the plan, and ten is the step where the outcomes and impacts are monitored. Starting at this point, project activities can begin, necessitating the

assignment of duties. Plans must be made at this time with the intention of implementing change (Grant, 2015).

Role of Project Planning

An essential part of projects control is planning. At this point, goals, needs, and project requirements pertaining to the project work are established. Generally, if they are related to research activities, they originate from the research or the main authors. This information, which the contractor may occasionally supply in a clear manner and which should serve as the basis for creating the project plan, typically takes into account the demands of the client and is especially prepared with those goals in mind (Szopik-Depczynska & Lanfranchi, 2016). Zwikael (2010) studied the importance of nine project management knowledge areas to project success by using an analysis of 783 questionnaires. His findings stated that these knowledge areas had a significant impact on the project's achievement. This indicates that thorough analysis of the planning procedures relating to these knowledge fields helps ensure the project's success. He discovered that since they are used in the project's execution, the knowledge categories that have the smaller effects on a project's success are cost and procurement. Lastly, He claimed that because they are frequently linked to planning phases, risk, time, and scope have the strongest correlation with project success.

Project Planning Variables

The term efficiency in quality management, is referring for doing things right, means that everything must be done in the most suitable way, given the available resources and the term effectiveness is referring to do the right things, means choosing and focusing on production of output when there is a demand. According to O'Donnell (2019), for the organization to be successful, planning process must be exact and effective and six steps have to be taken into account to make planning successful that (1) creating climate for planning by providing a favorable climate and offering necessary information to the staff at various levels (2) The top management support (3) Equal participation of the employees in the planning process with the commitment from everyone in the organization. (4) Proper communication by developing a clear channel of communication in the organization. People must be able to access a developed communication network and be aware of their obligations, when, how and where and a deadline must be communicated in advance. (5) Integration of the plans with the organizational mission statement (6) strict monitoring and regular view of the plans to see if there are changes.

Woldie (2016) has presented the major product for all planning process in relationship with the project management knowledge area. Project Integration is one element of project management knowledge area that coordinates the different milestones for project implementation. In project integration planning, choosing objectives and alternatives is a crucial responsibility. According to Christophe (2013), in order to interact with stakeholders, planners use integrated resource planning, which is a planning technique to define a scope, research available possibilities and choose the most advantageous plans, preparation and evaluation of integrated plans and to create

the mechanisms of monitoring, evaluation and restate plans as conditions change. This method has a proven track record of producing moderate cost and -risk plans that will have little effects on the environment and general public. It also has the ability to adopt a society-wide view and involve meaningful public participation. Integrated resource planning is primarily used in the agricultural sector, where it considers a wide range of developments in the power sector to fulfill growing demand for electricity including energy efficiency and other demand-side strategies on an equal footing with investments in new generation sources, transmission, and distribution. Plans for integrated resource management have a long-term planning horizon (20-30 years) and include a careful consideration of risks.

The next step is to build a timeframe delivery after creating a Work Breakdown Structure (WBS) and once the project scope is established. The project planner's job is to determine a list of activities that must be carried out for each deliverable work point included in the WBS, as well as the amount of time (in days or weeks) and resources needed to execute each activity (Sözüer & Spang, 2014). To set a time schedule and appropriate budget is the important task for the completion of the construction project. Inaccurate budgets can result in subpar project performance; thus the owner's project and the design are necessary to come to an early agreement on the expected cost during the planning stage. The communities that these initiatives are carried out for are the most significant stakeholders in public projects. From project idea to reaping project benefits, they participate in each phase of the project life cycle (Gasik, 2016). Their representatives must be involved in the selection of the project and other ventures. Politicians, governing bodies and communities of interest are only a few examples of the numerous other stakeholders who frequently participate in public initiatives. Because there are so many parties, it's critical to create effective, simple routes for information sharing between project implementers and other stakeholders.

Cause of Delay and Failure to Project Planning and The Success of Project

Construction delays, according to authors, cause events to occur later than anticipated, to be completed later than scheduled, or to not occur in a timely manner (Tanko, 2016). Any scheduled job activity can be delayed, which can cause several issues with parties. Project stakeholders, including clients, contractors, and designers, may be negatively impacted by delays. Due to a shortage of manufacturing facilities or rentable space, the client perceives a loss of revenue when there is a delay. On the other hand, if the project takes longer than expected, delay could result in increase of overhead expenses material coasts and labor for the contractor. To the same study, the delay in Dam project was also investigated in Oman by Gibril, Nasser and Omar (2017), the findings indicated that the main causes of the project delay include climate change, instability of rules and regulations, problem of the ground condition, improper management of site, problem of leadership (bureaucracy), insufficient feasibility study, unplanned circumstances during project works. Shuaib (2018) stated that a project could fail for a number of different reasons. The main ones are unclear objectives, an inadequate project timetable, numerous adjustments, and insufficient control, bad communication, a hazy stakeholder role, or managerial support.

Project Performance and Evaluation of Its Attributes

In the literature review, several definitions of performance have been put forth. It has also been defined as the highly valued output of a system in the form of products and services. Performance refers to how well an operation complies with key requirements in order to satisfy clients (Badu, Baiden & Kuragu, 2016). Devi (2013) claimed that project activities need to be in line with the company's long-term strategic goals, which is the idea behind project performance in project management. Even though project management can fail, effective projects can be thought of as a series of tasks that must be carried out with the use of a company's resources in order to accomplish specific objectives. Various performance indicators, including cost, quality, and customer satisfaction, can be used to evaluate a project's performance and results among other things. However, the main metric for assessing performance criteria are time, cost, quality, and client satisfaction. Mišić and Radujković (2015) have observed planning and scope clarity are important for the project's success, good collaboration between stakeholders, skilled competent project managers and external monitoring and control.

2.1 Theoretical Framework

Theoretical framework is the structure that can support a theory of a research study. Theoretical framework introduces and describes the theory which explains why research problem under study exists. It is the blueprint or guide for a research (Grant & Osanloo, 2014) and is based on an existing theory in a field of enquiry that is related and/or reflects the hypothesis of a research. It helps the researcher to build his/her own house or research inquiry. It serves as the foundation upon which a research is constructed. The theoretical framework offers several benefits to a research work. It provides the structure in showing how a researcher defines his/her study philosophically, epistemologically, methodology and analytically (Grant & Osanloo, 2014). Ravitch and Carl (2016) concur that the theoretical framework assists researchers in situating and contextualizing formal theories into their studies as a guide.

Stakeholder Theory

The stakeholder theory is a theory of an organizational management and business ethics that addresses morals and values in managing an organization. It states that the organization in itself is thought of a group of stakeholders and the purpose of the organization should be to manage their interests, needs and viewpoints. It identifies and models the groups, which are stakeholders of a project, and both describe and recommend methods by which management can be due regard to the interests of those groups. The study conducted by Ocharo and Kimutai (2018) to assess the project management practices and implementation of power projects in Kenya, reference to this theory concluded that the participation of different stakeholders have an effect in successful implementation of projects, monitoring on the performance as well as on evaluation of the projects. It was also concluded that client and stakeholders can be dissatisfied with the project outcomes' if the project stakeholders are not properly managed. This theory is appropriate to this research as it shows the implication of different persons in the project implementation in general and in planning

phase in particular towards the success of the project and stakeholders theory takes in account project donor, project team and government to examine the effect of their decisions on others and make the best decision possible for all people involved. In order to improve stakeholders' management, communication, common goals, objectives and project priorities need to be systematically planned prior to embarking on the project.

Theory of Constraints

The theory of constraints is a management philosophy that is geared towards helping organizations continually to achieve their goals and it began as a production scheduling aid, developed by Eliyahu Goldraft in the early 1970s, terming it as optimized production timetable and was quickly developed in to a software package commonly known as optimized production technology. A constraint means any element of factor that limits the system from doing more of what it as designed to accomplish that is achieving its goal and aims of theory of constraints is to initiate and implement breakthrough improvement through focusing on a contain that prevents a higher level of performance, further noting that theory of constraints paradigm essentially states that every firm must have at least one constraint.

Sebastiano and Ragnhild (2014), revealed that what is considered as a constraint in a project management can be categorized in to four; as political constraints (such as defined vision, mission, scope of the projects), technical constraints (such as competencies technologies, existing infrastructure and natural conditions like geology, landscape and climate), social constraints (such as codes of conducts, organizational hierarchies, personal relationship and accepted/expected behaviors) and administrative constraints (such as budget, project schedules, scope, written contractual agreements among others). In the study conducted by Masila and Gachunga (2016) to investigate factors affecting effective implementation of project found that the financial difficulties are a major cause of poor implementation of projects leading to delay in the timely completion of the expansion of projects.

Resource Based View Theory

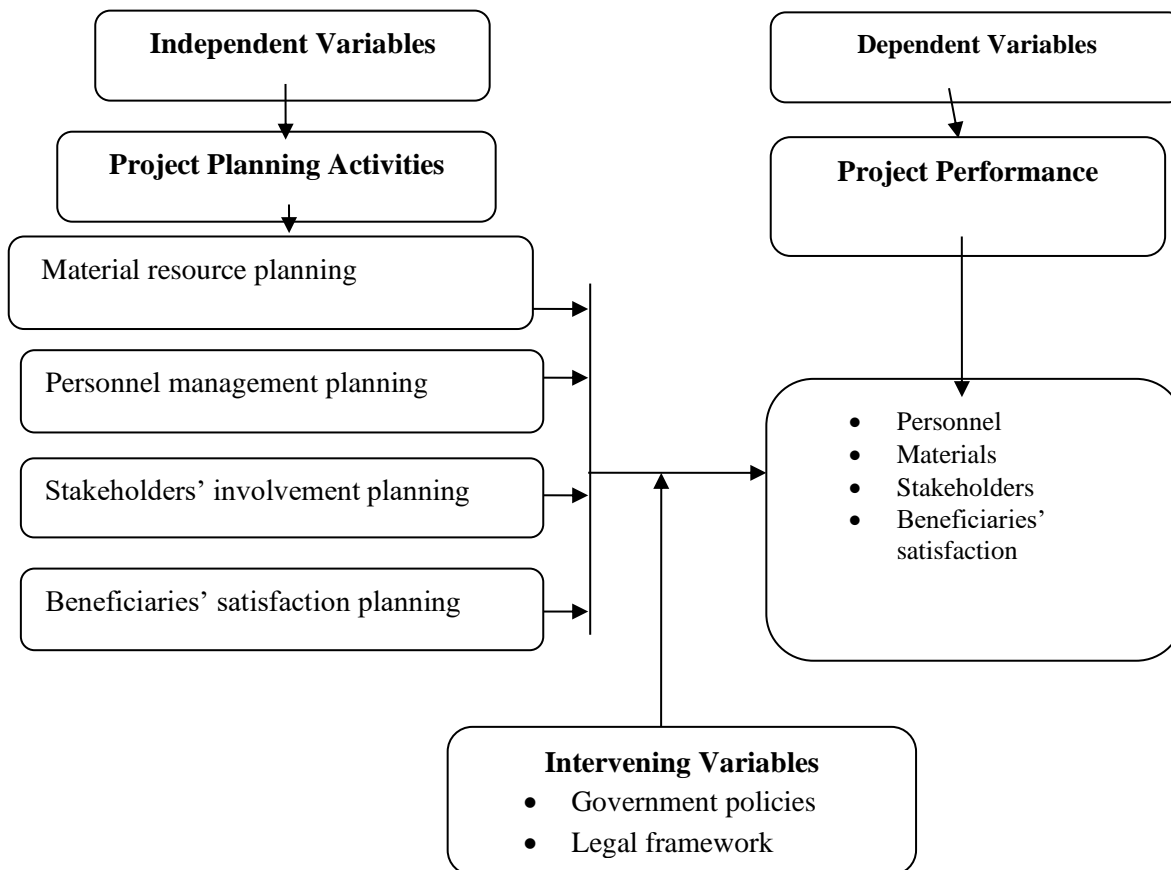
This study was also guided by resource based view theory. The core premise of resource-based view is the organizational resources, capabilities can vary significantly across project, and that these differences can be stable. The theory focuses on the idea of costly-to-copy attributes of the project as a source of business returns and the means to achieve superior performance and competitive advantage (Steven, 2018). The organizational capabilities emanate from lower management, middle and top management and that a project can gain competitive advantage when its resources and capabilities are used properly. It is stated that if these organization capabilities were carefully synchronized and assimilated it could achieve the economies of scale and scope needed to compete in national and international markets. Sustainable competitive advantage is derived from resources that are valuable, rare, imperfectly imitable (due to path-dependence, causal ambiguity and social complexity) and no substitutable. A resource-based view of the project accepts that attributes related to experiences, organizational culture and competences are critical

for the success of the project (Steven, 2018). This theory is relevant to the study because it shows that organizations manage their fund based on their resources and capabilities.

2.2 Conceptual Framework

According to Magher (2017), the conceptual framework helps to understand the place and direction of research carrying out. The project planning variable is evaluated using the results of the following four planning knowledge variables: project scope planning, time scheduling planning, materials resource planning, and stakeholders' involvement planning. Project performance is determined by cost, time, and quality and client satisfaction of activities completed. In this research, the independent variable is project-planning practices whereas the dependent variable is project performance. Therefore, the link between variables is presented below:

Figure 1: Conceptual Framework



Source: Primary data, 2023

3.0 Research Methods and Materials

Research Design

With the aid of questionnaires, the researcher can quickly and affordably gather information from a bigger population using descriptive study, resulting in definite outcomes. In order to obtain

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sufficient and accurate information, the researcher gathered and analyzed data using both qualitative and quantitative methodologies. By combining the two approaches, it was also guaranteed that the data could be understood both quantitatively and qualitatively. It was decided during the SAIP preparation that the implementation concentrated on 8 LWH and RSSP 3 locations; however, this could change throughout the SAIP implementation depending on the needs of the Rwandan government. These sites are located in the districts of Karongi 12 and 13 in Karongi, Nyabihu in Nyabihu in the West, Nyanza 23 in Nyanza in the South, Muzanza in Rulindo in the North, in Gatsibo, Rwamagana and Kayanza in the East.

Sample Size

It describes the methods or processes the researcher would use to pick out the things for the collection. Before gathering data, the sample plan is chosen and sample design that is reliable and suitable for the research being conducted must be chosen or prepared by the researcher (Kothari, 2004). Due to the small size of the research's target community, the researcher would prefer to use 10 beneficiaries per site meaning 80 beneficiaries plus 14 project planning officers and a project manager. Therefore, 95 respondents were taken as the sample.

Data Collection Methods

Devices used to assess the variables of interest are known as research instruments or measurement scales (Bowling 2002:144). The questionnaires were used to gather research quantitative data since, after comparing the available research methods for methodically acquiring information, it has been found that, due to its adaptability, time and money efficiency, and general capacity to get the job done, the questionnaire established itself as a constant favorite and a popular choice among researchers (Ruane, 2005). Consequently, the surveys were employed to get the quantitative data. The questionnaire was employed because it allows the respondents to clarify their individual circumstances without allowing space for extraneous or irrelevant data related to the study issue. After receiving the questionnaires from the research assistants, they were edited, and any missing data were added right away. Immediately following the interviews, the main informants' information was recorded.

Procedures for collecting Data

The investigator took some steps to manage the data's quality. The data gathering tools were tested, piloted, and/or improved during this phase. The language that the respondents used to communicate was also taken into account. Two research assistants/RAB secretariat staff members helped the investigator collect data, especially when employing surveys during the course of the project. They were instructed on how to complete the interview question and guide as well as how to document any additional significant information they discovered in the field. Under the researcher's close supervision and oversight, each research assistant was able to give the respondents both the interview guide and the questionnaire. Daily field notes were created and revised promptly following data collection. Upon receiving the questionnaires from the research

assistants, they were corrected, and any missing data were quickly filled in. Immediately after the interviews, the information from the key informants was recorded.

4.0 Results

4.1 Saip Brief Information Summary

The project development objective of SAIP is to increase agricultural productivity, market access and food security of the targeted beneficiaries in the project areas. Target value chains: vegetables and fruits, maize, Irish potato and beans (for domestic and regional market). The initial target for SAIP was 38,606 householders (estimated 200,000 individual farmers) and after additional financing the targeted households was increased to 45,688 households (estimated 230,000 individual farmers). Project intervention zones are 9 district of the country (Rwamagana, Kayonza, Gatsibo, Ngoma, Nyanza, Rulindo, Karongi, Rutsiro and Nyabihu). Project components include: (1) institutional strengthening, agriculture productivity enhancement and nutrition improvement, (2) irrigation and water use efficiency, (3) market linkages and value additional investment support and (4) project management and technical assistance. Project duration is 6 years starting from 14th December 2018 up to 30th August 2024. The total project cost refers to initial of USD 30,300,000 (USD 26,300,000 from GAFSP and USD 4,000,000 from the Government counterpart and USD 5,985,295 for additional financing making a total of USD 36,285,925. For fiscal year 2022-2023, planned budget is 10,684,283,969 Frw including 531,863,736 Frws from government counterpart funds, used budget so far is 9,134,916,908 Frws (85.4%), lifetime execution equal to 80% while physical progress is 95.04%.

4.2 Demographic Characteristics

Gender of Respondents

Our research considered both male and female answers at the same level. Gender was respected even though the gap or the range, which is between male and female respondents, was too much as shown in the table below.

Table 1: Gender of respondents

| | Gender of respondents | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------------------|-----------|--------------|---------------|--------------------|
| Valid | Male | 65 | 68.4 | 68.4 | 68.4 |
| | Female | 30 | 31.6 | 31.6 | 100.0 |
| Total | | 95 | 100.0 | 100.0 | |

Source: Primary data, 2023

Reference is made to the table 1 explaining that the research used male respondents representing 68.4% while female respondents are represented by 31.6% of the total number of respondents. This implies the research gave opportunity both male and female respondents a chance to provide their views and testimonies in the realization of this research.

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Occupation of Respondents

The research respondents have different duties and responsibilities in realization and project performance of SAIP. The following table indicates the reality.

Table 2: Working Experience of Respondents

| | Occupation of respondents | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---------------------------|-----------|---------|---------------|--------------------|
| Valid | RAB Staff members | 10 | 10.5 | 10.5 | 10.5 |
| | Cooperative agents | 85 | 89.5 | 89.5 | 100.0 |
| | Total | 95 | 100.0 | 100.0 | |

Source: Primary data, 2023

With reference to the findings as presented in the table 2, a great number of research respondents is composed of 85 cooperative agents representing 89.5% while the minority of research informants is 10 RAB staff members occupying 10.5% of the total numbers of research respondents. This implies that research considered both project planners and implementers on one side and project stakeholders and beneficiaries on the other side.

4.3 Presentation of Findings

This part goes with presentation and discussion of the research results related to how the research respondents considered the effects of project planning practices for project performance within Sustainable Agricultural Intensification and Food Security Project in Rwanda. The research informants have expressed their agreement through the use of SD=Strongly Disagree (1), D=Disagree (2), N=Neutral (3), A=Agree (4), and SA=Strongly Agree (5).

Assessment of Project Performance

This subsection deals with the assessment of project performance of Sustainable Agricultural Intensification and Food Security Project in terms of material resource, personnel management, stakeholders' involvement and beneficiaries' satisfaction.

Table 3: Assessment of Project Performance

| Assessment of project performance | Mean | Std. Deviation |
|--|------|----------------|
| Personnel management performance was achieved | 4.98 | .144 |
| Stakeholders' involvement performance was achieved | 4.94 | .245 |
| Quality performance was achieved | 4.95 | .224 |
| Material resource performance was achieved | 4.96 | .202 |
| Overall mean | 4.96 | |

Source: Primary data, 2023

The results from table 3 show a mean of 4.96 and a standard deviation of 0.202 explaining that a big number of research respondents confirmed that material resource performance was achieved to a strongly agreement, a mean of 4.98 and a standard deviation of 0.144 implying that a big number of research respondents reported that personnel management performance was achieved at the level of strongly agreement. A mean of 4.94 and a standard deviation of 0.245 identifying that a big number of research informants decided that stakeholders' involvement performance was achieved at the degree of strongly agreement and a mean of 4.95 and a standard deviation of 0.224 expressing that beneficiaries' satisfaction performance was achieved at the level of strongly performance. Thus the overall mean of 4.96 implies that a big number of research respondents asserted that project performance was achieved to a strongly agreement in SAIP project practices planning.

Material Resource Planning Versus Project Performance

Table 4: Project Material Resource Planning

| Material resource management | Mean | Std. Deviation |
|---|------|----------------|
| Planning tools were clearly outlined (personnel, time, cost, scope, communication, procurement, quality) | 4.94 | .245 |
| Staff members are given project equipment to utilize during project implementation | 4.91 | .294 |
| Periodic budget monitoring is used to compare spending to the budget | 4.94 | .245 |
| The project's implementation budget has been authorized | 4.92 | .279 |
| For the execution of projects, the organization delivers the right quantity of the right material at the right time | 4.89 | .371 |
| Overall mean | 4.92 | |

Source: Primary data, 2023

The findings in the table 4 explain that an average of 4.91 and a standard deviation of 0.245 show that a large number of research respondents agreed that planning tools were clearly outlined in terms of personnel, time, cost, scope, communication, procurement and quality leads to the project performance to a strongly agreement, an average of 4.91 and a standard deviation of 0.294 explain

that a large number of research informants agreed that staff members are given project equipment to utilize during project implementation to a strongly agreement, an average of 4.94 and a standard deviation of 0.245 express that a large number of research respondents agreed that periodic budget monitoring is used to compare spending to the budget to a strongly agreement. The research findings continue to highlight that an average of 4.92 and a deviation standard of 0.279 express that a great number of research informants agreed that the project’s implementation budget has been authorized to a strongly agreement while an average of 4.89 and a standard deviation of 0.371 explain that the research informants agreed that for the execution of projects, the organization delivers the right quantity of the right material at the right time to a strongly agreement. Therefore, since the overall mean is 4.92, it implies that a great number of research informants confirmed that material resource planning has positive and significant contribution on performance of SAIP project.

Table 5: Correlation Analysis between Material Resource Planning and Project Performance

| | | Material resource performance | Personnel management performance | Stakeholders’ involvement performance | Beneficiaries’ satisfaction performance |
|----------------------------|---------------------|--------------------------------------|---|--|--|
| Material resource planning | Pearson Correlation | .807** | .565** | .807** | .807** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 95 | 95 | 95 | 95 |

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

Source: Primary data, 2023

The findings in the table 5 indicated that there is a strong and significant relationship between material resource planning and material resource performance ($r=0.807$ and $sig=0.000$), between material resource planning and personnel management performance ($r=0.565$ and $sig=0.000$), between material resource planning and stakeholders’ involvement performance ($r=0.807$ and $sig=0.000$) and between material resource planning and beneficiaries’ satisfaction performance ($r=0.807$ and $sig=0.000$) at the level of 0.01. Therefore, this indicates that material resource planning has a positive, strong and significant effect in performance of SAIP.

Project Personnel Planning Versus Project Performance

Does project personnel planning contributed to the SAIP performance. The research informants provided their views and testimonies on related issue as presented in the table 6.

Table 6: Project Personnel Planning

| Items related to personnel management | Mean | Std. Deviation |
|---|-------------|----------------|
| The team working on the project implementation has experience with planning | 4.94 | .245 |
| The staff receive regular training on project planning | 4.94 | .245 |
| The project manager has the full authority on project planning and implementation | 4.89 | .341 |
| Motivation of employees | 4.94 | .245 |
| Overall mean | 4.93 | |

Source: Primary data, 2023

The table 6 expresses that a mean of 4.94 and a standard deviation of 0.245 showed that a great number of research respondents agreed that the team working on the project implementation has experience with planning, the staff receive regular training on project planning and motivation of employees to strongly agreement. Again, a mean of 4.89 and a standard deviation of 0.341 explain that a great number of informant agreed that the project manager has the full authority on project planning and implementation to a strongly agreement. Hence, the overall mean of 4.93 shows that a large number of research respondents agreed strongly that personnel management planning had the positive and significant contribution towards the performance of SAIP.

Table 7: Correlation Analysis between Personnel Planning and Project Performance

| | | Material resource performance | Personnel management performance | Stakeholders' involvement performance | Beneficiaries' satisfaction performance |
|-------------------------------|---------------------|-------------------------------|----------------------------------|---------------------------------------|---|
| Personnel management planning | Pearson Correlation | .807** | .565** | .807** | .807** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 95 | 95 | 95 | 95 |

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

Source: Primary data, 2023

The findings in the table 7 highlight that there is a strong and significant relationship between personnel management planning and material resource performance ($r=0.807$ and $\text{sig}=0.000$), between personnel management planning and personnel management performance ($r=0.565$ and $\text{sig}=0.000$), between personnel management planning and stakeholders' involvement performance ($r=0.807$ and $\text{sig}=0.000$) and between personnel management planning and beneficiaries' satisfaction performance ($r=0.807$ and $\text{sig}=0.000$) at the level of 0.01. Therefore, this indicates that personnel management planning has a positive, strong and significant effect in performance of SAIP.

Stakeholders’ Involvement Planning Versus Project Performance

Table 8: Stakeholders’ involvement planning

| Stakeholders’ participation | Mean | Std. Deviation |
|--|-------------|----------------|
| The project’s execution involves stakeholders | 4.94 | .245 |
| Project beneficiaries knew well the project objectives and goals before the implementation | 4.96 | .202 |
| Customers knew the implementation of project before, during and after implementation | 4.95 | .224 |
| Participation of stakeholders increases project support. | 4.89 | .371 |
| Participation of stakeholders enhances the decision-making process. | 4.94 | .245 |
| Overall mean | 4.94 | |

Source: Primary data, 2023

The table 8 explains that a mean of 4.94 and a standard deviation of 0.245 highlight that a large number of research respondents agreed that the project’ execution involves stakeholders, and the participation of stakeholders enhances the decision-making process to a strongly agreement, a mean of 4.96 and a standard deviation of 0.202 express that a large number of respondents agreed that project beneficiaries knew well the project objectives and goals before the implementation to a strongly agreement. The findings continue to explain that a mean of 4.95 and a standard deviation of 0.224 express that a great number of respondents agreed that customers knew the implementation of project before, during and after implementation to a strongly agreement and a mean of 4.89 and a standard deviation of 0.371 show that a great number of respondents agreed that participation of stakeholders increases project support to a strongly agreement. Thus, the overall mean of 4.94 shows that a large number of research informants strongly agreed that stakeholders’ involvement planning had the positive and significant contribution towards the performance of SAIP. Hence, the overall mean of 4.93 shows that a large number of research respondents agreed strongly that personnel management planning had the positive and significant contribution towards the performance of SAIP.

Table 9: Correlation Analysis between Stakeholders’ Involvement and Project Performance

| | | Material resource performance | Personnel management performance | Stakeholders , involvement performance | Beneficiaries , satisfaction performance |
|--|---------------------|-------------------------------------|--|---|---|
| Stakeholders’ involvement planning | Pearson Correlation | .807** | .565** | .807** | .807** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 95 | 95 | 95 | 95 |

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

Source: Primary data, 2023

The findings in the table 9 highlight that there is a strong and significant relationship between stakeholders’ involvement planning and material resource performance ($r=0.807$ and $sig=0.000$), between stakeholders’ involvement planning and personnel management performance ($r=0.565$ and $sig=0.000$), between stakeholders’ involvement planning and stakeholders’ involvement performance ($r=0.807$ and $sig=0.000$) and between stakeholders’ involvement planning and beneficiaries’ satisfaction performance ($r=0.807$ and $sign=0.000$) at the level of 0.01. Therefore, this indicates that stakeholders’ involvement planning has a positive, strong and significant effect in performance of SAIP.

Beneficiaries’ Satisfaction Planning Versus Project Performance

Table 10: Beneficiaries’ Satisfaction Planning

| Beneficiaries’ satisfaction planning | Mean | Std. Deviation |
|--|-------------|-----------------------|
| The project achieved results met the expected results to the beneficiaries | 4.96 | .202 |
| The good quality plan leads to the quality service to beneficiaries | 4.94 | .245 |
| SAIP respond customers’ needs | 4.91 | .294 |
| Overall mean | 4.94 | |

Source: Primary data, 2023

The table 10 explains that a mean of 4.96 and a standard deviation of 0.202 express that a large number of research respondents agreed that the project achieved results met the expected results to the beneficiaries to a strongly agreement, a mean of 4.94 and a standard deviation of 0.245 confirm that a great number of research respondents agreed that the good quality plan leads to the quality service to beneficiaries to a strongly agreement and a mean of 4.91 and a standard deviation of 0.294 indicate that a large number of research informants agreed that SAIP responded customers’ needs to a strongly agreement. Hence, an overall mean of 4.94 shows that a large number of research respondents strongly agreed that beneficiaries’ satisfaction planning had a positive and significant contribution to the performance of SAIP.

Table 11: Correlation Analysis between Beneficiaries’ Satisfaction Planning and Project Performance

| | | Material resource performance | Personnel management performance | Stakeholders’ involvement performance | Beneficiaries’ satisfaction performance |
|--------------------------------------|---------------------|-------------------------------|----------------------------------|---------------------------------------|---|
| Beneficiaries’ satisfaction planning | Pearson Correlation | 1.000** | .699** | 1.000** | 1.000** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 95 | 95 | 95 | 95 |

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

Source: Primary data, 2023

The findings in the table 11 show that there is a strong and significant relationship between beneficiaries’ satisfaction planning and material resource performance ($r=1.000$ and $sig=0.000$), between beneficiaries’ satisfaction planning and personnel management performance ($r=0.699$ and $sig=0.000$), between beneficiaries’ satisfaction and stakeholders’ involvement performance ($r=1.000$ and $sig=0.000$) and between beneficiaries’ satisfaction planning and beneficiaries’ satisfaction performance ($r=1.000$ and $sig=0.000$) at the level of 0.01. Therefore, this indicates that beneficiaries’ satisfaction planning has a positive, strong and significant contribution to the performance of SAIP.

Table 12: Correlation Analysis between Project Planning Practices and Project Performance

| | | Material resource performance | Personnel management performance | Stakeholders , involvement performance | Beneficiaries , satisfaction performance |
|--|---------------------|-------------------------------------|--|---|---|
| Material resource planning | Pearson Correlation | .807** | .565** | .807** | .807** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 95 | 95 | 95 | 95 |
| Personnel management planning | Pearson Correlation | .807** | .565** | .807** | .807** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 95 | 95 | 95 | 95 |
| Stakeholders' involvement planning | Pearson Correlation | .807** | .565** | .807** | .807** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 95 | 95 | 95 | 95 |
| Beneficiaries' satisfaction planning | Pearson Correlation | 1.000** | .699** | 1.000** | 1.000** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 95 | 95 | 95 | 95 |

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

Source: Primary data, 2023

The findings from 12 reported that there is a strong positive and significant relationship between material resource planning and material resource performance ($r=0.807$ and $\text{sig}=0.000$), between material resource planning and personnel management performance ($r=0.565$ and $\text{sig}=0.000$), between material resource planning and stakeholders' involvement performance ($r=0.807$ and $\text{sig}=0.000$), between material resource planning and beneficiaries' satisfaction performance ($r=0.807$ and $\text{sig}=0.000$), between personnel management planning and material resource performance ($r=0.807$ and $\text{sig}=0.000$), between personnel management planning and personnel management performance ($r=0.565$ and $\text{sig}=0.000$), between personnel management planning and stakeholders' involvement performance ($r=0.807$ and $\text{sig}=0.000$), between personnel management planning and beneficiaries' satisfaction performance ($r=0.807$ and $\text{sig}=0.000$), between stakeholders' involvement planning and material resource performance ($r=0.807$ and $\text{sig}=0.000$), between stakeholders' involvement planning and personnel management performance ($r=0.565$ and $\text{sig}=0.000$), between stakeholders' involvement planning and stakeholders' involvement performance ($r=0.807$ and $\text{sig}=0.000$), between stakeholders' involvement planning and beneficiaries' satisfaction performance ($r=0.807$ and $\text{sig}=0.000$), between beneficiaries' satisfaction planning and material resource performance ($r=1.000$ and $\text{sig}=0.000$), between beneficiaries' satisfaction planning and personnel management performance ($r=0.699$ and $\text{sig}=0.000$), between beneficiaries' satisfaction planning and stakeholders' involvement performance ($r=1.000$ and $\text{sig}=0.000$), between beneficiaries' satisfaction planning and beneficiaries' satisfaction performance ($r=1.000$ and $\text{sig}=0.000$) at 0.01 level of significance.

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Hence, this implies that project planning practices play a significant and positive role on performance of SAIP.

Table 13: Model of Summary of Project Planning and Material Planning Performance

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .808 ^a | .652 | .637 | .147 |

a. Predictors: (Constant), Material resource planning, Personnel planning, Stakeholders' involvement planning, beneficiaries' satisfaction planning

b. Dependent Variable: Material resource performance

Source: Primary data, 2023

The results from the table 13 show a regression coefficient of 0.808, regression coefficients square of 0.652, adjusted regression square of 0.637 and a standard error of the estimate of 0.147. Therefore, this implies that a unit of change in predictors of project planning such as materials, personnel, stakeholders' involvement and beneficiaries' satisfaction affect 65.2% of progress of material resource performance.

Table 14: Analysis Of Variance (ANOVA) Of Project Planning and Material Resource Performance

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 3.666 | 4 | .916 | 42.191 | .000 ^a |
| | Residual | 1.955 | 90 | .022 | | |
| | Total | 5.621 | 94 | | | |

a. Predictors: (Constant), Material resource planning, Personnel planning, Stakeholders' involvement planning, Beneficiaries' satisfaction planning

b. Dependent Variable: Material resource performance

Source: Primary data, 2023

The findings from table 14 indicate that the sum of square on regression of 3.666, on residual of 1.955 and the total of 5.621, the degree of freedom is 4 for regression, 90 for the residual and 94 for the total, the mean square of 0.916 for regression and 0.022 for residual, the F value of 42.191 and significance level of 0.000 which is under 0.05. Therefore, there is a strong level of significance as the calculated significance of 0.000 is less than 0.005 ($0.000 < 0.05$), it expresses that the project planning has a positive and significant contribution on material resource performance of SAIP.

Table 15: Coefficient of Project Planning and Material Resource Performance

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------------------------------|-----------------------------|------------|---------------------------|-------|-------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | .090 | .525 | | .171 | .864 |
| Personnel management planning | -2.378 | .147 | .000 | .000 | 1.000 |
| Stakeholders' involvement planning | -.022 | .148 | -.022 | -.152 | .880 |
| Beneficiaries' satisfaction planning | -3.576 | .208 | .000 | .000 | 1.000 |
| Material resource planning | 1.000 | .181 | .826 | 5.540 | .000 |

a. Dependent Variable: Material resource performance
 Source: Primary data, 2023

The findings from the table 15 explain that there is a favorable correlation between material resource planning and material resource performance (b=0.826 and sig=0.000), between personnel management planning and material resource performance (b=0.000 and sig=1.000), between stakeholders' involvement planning and material resource performance (b=-0.022 and sig=0.880) and between beneficiaries' satisfaction planning and material resource performance (b=0.000 and sig=1.000). The formula for regression analysis used was the following:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$$

Where Y=Performance of SAIP

β_0 = Constant

β_1 - β_4 = Model of coefficients

X_1 =Material resource planning

X_2 = Personnel management planning

X_3 = Stakeholders' involvement planning

X_4 = Stakeholders' satisfaction planning

ϵ =Random error assumed as normally distributed

The regression model of $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$ becomes material resource performance which is equal to 0.090 plus 1.000 times material resource planning plus - 2.378 times personnel management planning plus -0.022 times stakeholders' involvement planning plus -3.576 times beneficiaries' satisfaction planning. Therefore, this implies that project planning practices have a significant effect on material resource performance of SAIP.

Table 16: Model of Summary of Project Planning and Personnel Management Performance

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .808 ^a | .652 | .637 | .147 |

a. Predictors: (Constant), Material resource planning, Personnel management planning, Stakeholders' involvement planning, beneficiaries' satisfaction planning

b. Dependent Variable: Personnel management performance

Source: Primary data, 2023

The results from the table 16 show a regression coefficient of 0.808, regression coefficients square of 0.652, adjusted regression square of 0.637 and a standard error of the estimate of 0.147. Therefore, this implies that a unit of change in predictors of project planning such as materials, personnel, stakeholders' involvement and beneficiaries' satisfaction affect 65.2% of progress of personnel management performance.

Table 17: Analysis Of Variance (ANOVA) Of Project Planning And Personnel Management Performance

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 3.666 | 4 | .916 | 42.191 | .000 ^a |
| | Residual | 1.955 | 90 | .022 | | |
| Total | | 5.621 | 94 | | | |

a. Predictors: (Constant), Material resource planning, Personnel management planning, Stakeholders' involvement planning, beneficiaries' satisfaction planning

b. Dependent Variable: Personnel management performance

Source: Primary data, 2023

The findings from table 17 indicate that the sum of square on regression of 3.666, on residual of 1.955 and the total of 5.621, the degree of freedom is 4 for regression, 90 for the residual and 94 for the total, the mean square of 0.916 for regression and 0.022 for residual, the F value of 42.191 and significance level of 0.000 which is under 0.05. Therefore, there is a strong level of significance as the calculated significance of 0.000 is less than 0.005 ($0.000 < 0.05$), it expresses that the project planning has a positive and significant contribution on personnel management performance of SAIP.

Table 18: Coefficient of Project Planning and Personnel Management Performance

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------------------------------|-----------------------------|------------|---------------------------|-------|-------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | .090 | .525 | | .171 | .864 |
| Personnel management planning | -2.378 | .147 | .000 | .000 | 1.000 |
| Stakeholders' involvement planning | -.022 | .148 | -.022 | -.152 | .880 |
| Beneficiaries' satisfaction planning | -3.576 | .208 | .000 | .000 | 1.000 |
| Material resource planning | 1.000 | .181 | .826 | 5.540 | .000 |

a. Dependent Variable: Personnel management performance
 Source: Primary data, 2023

The findings from the table 18 explain that there is a favorable correlation between material resource planning and personnel management performance (b=0.826 and sig=0.000), between personnel management planning and personnel management performance (b=0.000 and sig=1.000), between stakeholders' involvement planning and personnel management performance (b=-0.022 and sig=0.880) and between beneficiaries' satisfaction planning and personnel management planning (b=0.000 and sig=1.000). The regression model of $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$ becomes personnel management performance which is equal to 0.090 plus 1.000 times material resource planning plus -2.378 times personnel management planning plus -0.022 times stakeholders' involvement planning plus -3.576 times beneficiaries' satisfaction planning. Therefore, this implies that project-planning practices have a significant effect on personnel management performance of SAIP.

Table 19: Model of Summary of Project Planning and Stakeholders' Involvement Performance

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .890 ^a | .791 | .782 | .105 |

a. Predictors: (Constant), Material resource planning, Personnel management planning, Stakeholders' involvement planning, Beneficiaries' satisfaction planning

b. Dependent Variable: Stakeholders' involvement performance
 Source: Primary data, 2023

The results from the table 19 show a regression coefficient of 0.890, regression coefficients square of 0.791, adjusted regression square of 0.782 and a standard error of the estimate of 0.105. Therefore, this implies that a unit of change in predictors of project planning such as materials, personnel, stakeholders' involvement and beneficiaries' satisfaction affect 89.0% of progress of stakeholders' involvement performance.

Table 20: Analysis of Variance (ANOVA) Of Project Planning and Stakeholders' Involvement Performance

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 3.748 | 4 | .937 | 85.290 | .000 ^a |
| | Residual | .989 | 90 | .011 | | |
| | Total | 4.737 | 94 | | | |

a. Predictors: (Constant), Material resource planning, Personnel management planning, Stakeholders' involvement planning, beneficiaries' satisfaction planning

b. Dependent Variable: Stakeholders' involvement performance

Source: Primary data, 2023

The findings from table 20 indicate that the sum of square on regression of 3.748, on residual of 0.989 and the total of 4.737, the degree of freedom is 4 for regression, 90 for the residual and 94 for the total, the mean square of 0.937 for regression and 0.011 for residual, the F value of 85.290 and significance level of 0.000 which is under 0.05. Therefore, there is a strong level of significance as the calculated significance of 0.000 is less than 0.005 ($0.000 < 0.05$), it expresses that the project planning has a positive and significant contribution on stakeholders' involvement performance of Sustainable Agricultural Intensification and Food Security Project.

Table 21: Coefficient of Project Planning and Stakeholders' Involvement Performance

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------------------------------|-----------------------------|------------|---------------------------|-------|-------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | .045 | .373 | | .120 | .904 |
| Personnel management planning | 1.213 | .105 | .000 | .000 | 1.000 |
| Stakeholders' involvement planning | -.011 | .105 | -.012 | -.107 | .915 |
| Beneficiaries' satisfaction planning | -6.782 | .148 | .000 | .000 | 1.000 |
| Material resource planning | 1.000 | .128 | .899 | 7.790 | .000 |

a. Dependent Variable: Stakeholders' involvement performance

Source: Primary data, 2023

The findings from the table 21 explain that there is a positive relationship between personnel management planning and stakeholders' involvement performance ($b=0.000$ and $\text{sig}=1.000$), between stakeholders' involvement planning and stakeholders' involvement performance ($b=-0.012$ and $\text{sig}=0.915$), between beneficiaries' satisfaction planning and stakeholders' involvement performance ($b=0.000$ and $\text{sig}=1.000$) and between material resource planning and stakeholders' involvement performance ($b=0.899$ and $\text{sig}=0.000$). The regression model of $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$ becomes material resource performance which is equal to 0.045 plus 1.000 times material resource planning plus 1.213 times personnel management planning plus -

0.011 times stakeholders' involvement planning plus -6.782 times beneficiaries' satisfaction planning. Therefore, this implies that project planning practices play a significant effect on stakeholders' involvement performance of Sustainable Agricultural Intensification and Food Security Project.

Table 22: Model of Summary of Project Planning and Beneficiaries' Satisfaction Performance

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .649 ^a | .421 | .395 | .229 |

a. Predictors: (Constant), Material resource planning, Personnel management planning, Stakeholders' involvement planning, Beneficiaries' satisfaction planning

b. Dependent Variable: Beneficiaries' satisfaction performance

Source: Primary data, 2023

The results from the table 22 show a regression coefficient of 0.649, regression coefficients square of 0.421, adjusted regression square of 0.395 and a standard error of the estimate of 0.229. Therefore, this implies that a unit of change in predictors of project planning such as materials, personnel, stakeholders' involvement and beneficiaries' satisfaction affect 64.9% of progress of beneficiaries' satisfaction performance.

Table 23: Analysis of Variance (ANOVA) Of Project Planning and Beneficiaries' Satisfaction Performance

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 3.428 | 4 | .857 | 16.345 | .000 ^a |
| | Residual | 4.719 | 90 | .052 | | |
| | Total | 8.147 | 94 | | | |

a. Predictors: (Constant), Material resource planning, Personnel management planning, Stakeholders' involvement planning, beneficiaries' satisfaction planning

b. Dependent Variable: Beneficiaries' satisfaction performance

Source: Primary data, 2023

The findings from table 23 indicate that the sum of square on regression of 3.428, on residual of 4.719 and the total of 8.147, the degree of freedom is 4 for regression, 90 for the residual and 94 for the total, the mean square of 0.857 for regression and 0.052 for residual, the F value of 16.345 and significance level of 0.000 which is under 0.05. Therefore, there is a strong level of significance as the calculated significance of 0.000 is less than 0.005 ($0.000 < 0.05$), it expresses that the project planning has a positive and significant contribution on beneficiaries' satisfaction performance of Sustainable Agricultural Intensification and Food Security Project.

Table 24: Coefficient of Project Planning and Beneficiaries’ Satisfaction Performance

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|--------------------------------------|-----------------------------|------------|---------------------------|-------|-------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | .225 | .815 | | .276 | .783 |
| Personnel management planning | -2.361 | .229 | .000 | .000 | 1.000 |
| Stakeholders’ involvement planning | -.056 | .230 | -.047 | -.244 | .808 |
| Beneficiaries’ satisfaction planning | 4.386 | .324 | .000 | .000 | 1.000 |
| Material resource planning | 1.000 | .280 | .686 | 3.566 | .001 |

a. Dependent Variable: Beneficiaries’ satisfaction performance

Source: Primary data, 2023

The findings from the table 24 express that there is a favorable correlation between material resource planning and beneficiaries’ satisfaction performance (b=0.686 and sig=0.001), between personnel management planning and beneficiaries’ satisfaction performance (b=0.000 and sig=1.000), between stakeholders’ involvement planning and beneficiaries’ satisfaction performance (b=-0.047 and sig=0.808) and between beneficiaries’ satisfaction planning and personnel management planning (b=0.000 and sig=1.000). The regression model of $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$ becomes beneficiaries’ satisfaction performance which is equal to 0.225 plus 1.000 times material resource planning plus -2.361 times personnel management planning plus -0.056 times stakeholders’ involvement planning plus 4.386 times beneficiaries’ satisfaction planning. Therefore, this implies that project-planning practices have a significant effect on beneficiaries’ satisfaction performance of Sustainable Agricultural Intensification and Food Security Project.

Discussion of Findings

Material Resource Planning and Project Performance

The first objective is to examine the effects of project material resource in influencing on project performance of Sustainable Agricultural Intensification and Food Security Project. The findings concluded that respondents agreed that planning tools were clearly outlined in terms of personnel, time, cost, scope, communication, procurement and quality leads to the project performance. Research informants highlighted that staff members are given project equipment to utilize during project implementation and periodic budget monitoring was used to compare spending to the budget. These results are confirmed by PMI (2010) revealing that for the project, resource planning is referring to people and staffing management and for the project’s execution, it is required to plan the project’s structure and assign roles to each participant. The authority is necessary

important into the organization as a lack of this can influence the productivity even the project failure.

Personnel Management Planning and Project Performance

The second objective is to determine how personnel management, contribute on project performance of Sustainable Agricultural Intensification and Food Security Project. The findings concluded that the team working on the project implementation has experience with planning; the staff receives regular training on project planning and motivation of employees to strongly agreement. Again, research informants revealed that the project manager has the full authority on project planning and implementation. Hence, the personnel management planning had the positive and significant contribution towards the performance of SAIP. This was supported by the conclusions of Mišić and Radujković (2015) who have observed planning and scope clarity as important factors for the project's success, good collaboration between stakeholders, skilled competent project managers and external monitoring and control.

Stakeholders' Involvement Planning and Project Performance

The third objective is to assess the satisfaction of stakeholders' involvement and satisfaction on project performance of Sustainable Agricultural Intensification and Food Security Project. The findings concluded that research respondents agreed that the project' execution involves stakeholders, and the participation of stakeholders enhances the decision-making process and the project beneficiaries knew well the project objectives and goals before the implementation. The findings continued to explain that stakeholders knew the implementation of project before, during and after implementation and their participation increases project support. Thus, the stakeholders' involvement planning had the positive and significant contribution towards the performance of SAIP. These findings were supported by the study conducted by Ocharo and Kimutai (2018) to assess the project management practices and implementation of power projects in Kenya highlighting that the participation of different stakeholders have an effect in successful implementation of projects, monitoring on the performance as well as on evaluation of the projects. It was also concluded that client and stakeholders can be dissatisfied with the project outcomes' if the project stakeholders are not properly managed.

Beneficiaries' Satisfaction Planning and Project Performance

The findings confirmed that the project-achieved results met the expected results to the beneficiaries and the good quality plan leads to the quality service to beneficiaries' needs. Hence, beneficiaries' satisfaction planning had a positive and significant contribution to the performance of SAIP. This is supported by the study carried out by Badu, Baiden & Kuragu (2016) pointing out that project performance has been defined as the highly valued output of a system in the form of products and services. Performance refers to how well an operation complies with key requirements in order to satisfy beneficiaries.

5.0 Conclusion

According to RDB report (2013), in Rwanda, some governmental project did not perform well and among the reasons of failure are poor planning, inappropriate setting objectives and targets, coordination of activities, mobilization resources and poor feasibility study of project implementation. These reasons of failure pushed the researcher to assess the effectiveness project planning practices for project performance with the case study of Sustainable Agricultural Intensification and food security Project in Rwanda (SAIP). The findings concluded that planning tools were clearly outlined in terms of personnel, time, cost, scope, communication, procurement and quality, staff members are given project equipment to utilize during project implementation and periodic budget monitoring is used to compare spending to the budget. The team working on the project implementation has experience with planning; the staff receives regular training on project planning and motivation of employees, the project manager has the full authority on project planning and implementation. The findings concluded that the project' execution involves stakeholders, and the participation of stakeholders enhances the decision-making process and the project beneficiaries knew well the project objectives and goals before the implementation. The findings confirmed that the project-achieved results met the expected results to the beneficiaries, the good quality plan leads to the quality service to beneficiaries, and SAIP responded customers' needs.

6.0 Recommendations

The study recommends that effective project planning practices, encompassing material resource planning, personnel management, stakeholder involvement, and beneficiaries' satisfaction planning, are crucial for enhancing the performance of projects, as demonstrated in the case of the Sustainable Agricultural Intensification and Food Security Project (SAIP) in Rwanda. These practices include clear planning tools, provision of necessary resources and equipment, regular training for staff, and the active involvement of stakeholders in decision-making processes. Furthermore, ensuring that project outcomes meet beneficiaries' expectations and provide high-quality services is essential for achieving project success and satisfaction. The research recommended that as the first target is to change the lifestyle of project beneficiaries, and the project practices of SAIP should be extended to a large number or other categories of beneficiaries to promote social and economic transformations among Rwandans.

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