INFLUENCE OF PROJECT MANAGEMENT PRACTICES ON PERFORMANCE OF AGRICULTURE PROJECTS IN RWANDA: A CASE OF POST-HARVEST AND AGRI-BUSINESS SUPPORT PROJECT (PASP)

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ABSTRACT:

The study assessed the influence of project management practices on the performance of the agriculture projects in Rwanda. Specific objectives were to establish the influence of project planning on performance of Post-Harvest and Agri-Business Support Project (PASP); to investigate the extent how project implementation influences the performance of Post-Harvest and Agri-Business Support Project (PASP); to find out the influence of project M&E practices on performance of Post-Harvest and Agri-Business Support Project (PASP); and to examine the extent to how project communication influences the performance of Post-Harvest and Agri-Business Support Project (PASP). Target population was 185 staff, and the sample size was 126 respondents, and the study used the stratified and simple random sampling methods. The results revealed that project planning has positive and significant effect on performance of Post-Harvest and Agri-Business Support Project (PASP), as ($\beta1= 0.105$, $t= 1.203$; p-value= 0.001 less than 10%). Project monitoring and evaluation had positive and significant effect on performance of Post-Harvest and Agri-Business Support Project (PASP), where ($\beta2= 0.422$, $t= 3.267$ and p-value= 0.001 less than 10%). The results also indicated that Project communication has positive and significant effect on performance of Post-Harvest and Agri-Business Support Project (PASP), as ($\beta3=0.449$, $t= 3.827$; p-value= 0.000 less than 10%). Findings indicated that Project implementation has positive and significant effect on performance of Post-Harvest and Agri-Business Support Project (PASP), ($\beta4= 0.049$, $t= 0.455$ and p-value= 0.000 less than 10%).

Key Words: *project management, performance, agriculture projects, post-harvest and agri-business support project*

INTRODUCTION

The agriculture sector has a direct contribution to Gross Domestic product (GDP) of 25% and indirectly contributes a further 27% through linkages with Agro-based and associated industries (KARI, 2014).

The sector employs about 75% of the total labour force, generates 60% of export earnings, and provides 75% of industrial raw materials and 45% of Government revenue. Due to the major role, the sector has placed a lot of emphasis on agricultural projects. One of the strategies adopted by the government is the funding of youth and women to form groups which are then funded to run agricultural projects. These project groups, however, have not performed as expected. (Ministry of Agriculture report, 2011).

The post-harvest and agri-business support project goal is to develop a post-harvest system that is efficient, driven by private sector to reduce post-harvest losses and ensure food security particularly staple crops. This project's other task is to increase competitiveness by decreasing marketing costs along the supply chains value and enhancing farmers' access to strengthen their linkages with markets. The PASP also acts as an instrument for implementation of the post-harvest staple crop strategy and the handling task force as key counterpart.

In Rwanda, one of the major sources of inefficiency in agriculture production is the post-harvest losses   and the project comes to offer

STATEMENT OF THE PROBLEM
Agriculture is at the crux of the Rwandan economy it accounts for 29% of the total GDP, and 66.5% of the working population is engaged in agriculture and related sectors. The sector is the largest employment sector in Rwanda, and the second largest sectoral contributor to the GDP behind services, a broad sector that includes government. Agriculture projects have contributed to economic development and they are instruments for measuring economic growth unfortunately, when their performance is poor it leads to their failure. There are various factors that cause this failure such as unclear objectives, creep, scope, poor communication and lack of visibility (Nilofur *et al.,* 2014).

solution to this problem. PASP's primary target group is comprised of poor smallholder farmers engaged in production and primary processing in the priority CIP crops and dairy, including poor farmers with some production potential and members of cooperatives who owned small land plots and smallholders who supplemented their income through agricultural wage work.

The target group was selected among the Ubudehe categories II (the very poor), III (the poor), and IV (the resource poor) and corresponded to the Third Integrated Household Living Conditions Survey (EICV3) income group of small-scale farmers (61.8% of the population) and wage farm laborers (9.8% of the population). The project is implemented in three districts of north western province, four districts in southern province and four districts in Eastern.

During the last 10 years Rwanda has experienced one of the most exciting and fastest periods of growth and socio-economic progress in its history. It was 10th fastest growing economy in the world during the decade from 2000. There were key lessons learned from the first Economic Development and Poverty Reduction Strategy (EDPRS 1) Self-assessment report from both success and shortcomings that have shaped the Second Economic Development and Poverty Reduction Strategy (EDPRS 2) elaboration (Government of Rwanda, 2013).

In international development policy makers consider projects as instruments of choice for economic growth but in reality, some of these projects have failed due to poor performance.

According to Nilofur (2014) the reasons for project failure are unclear objectives poor communication and scope creep and lack of visibility of projects. Further research is needed to understand the reasons for project failures in agriculture sector. The performance measurement in general has traditionally focused on metrics based on information. The project management skill as having the most significant impact on achieving project success which is equated to achieving project objectives.

Cooke-Davies, (2010) consistently shows well-trained teams deliver more benefit to project management than undertrained teams. The above studies looked at isolated issues of project management practices, therefore, there is a need to address all management practices and establish their joint influence to project performance. However, this study assessed the influence of project management practices on performance of the agriculture projects in Rwanda.

OBJECTIVES OF THE STUDY
The study was to assess the influence of project management practices on the performance of the agriculture projects in Rwanda. while specific objectives were:

[1] To establish the influence of project planning on performance of Post-Harvest and Agri-Business Support Project (PASP);
[2] To investigate the extent how project implementation influences the performance of Post-Harvest and Agri-Business Support Project (PASP);
[3] To find out the influence of project M&E practices on performance of Post-Harvest and Agri-Business Support Project (PASP);
[4] To examine the extent to how project communication influences the performance of Post-Harvest and Agri-Business Support Project (PASP).

CONCEPTUAL REVIEW
Project Planning
According to Taylor (2006), project planning is a roadmap of how the project should progress. It is the heart of project management. The phase involves the preparations for the project to take off smoothly. It is the creative and demanding activity that 6 incorporates project initiation, definition, and appraisal. The project planning activities provide graphical representation of predicted tasks milestones, dependencies resource and requirements.

Project planning activity can be considered to be the achievement of a specific objective, which involves a series of activities and tasks which consume resources. It has to be completed within a set specification, having definite start and end dates which leads to Cost reduction, time reduction, increased quality (McKinsey, 2010).

Project monitoring and evaluation
Monitoring as "the continuous assessment of project implementation in relation to agreed schedules and the use of inputs, infrastructure, and services by project beneficiaries. Evaluation is defined as "the periodic assessment of the relevance, performance, efficiency, and impact (both expected and unexpected) of the project in relation to stated objectives."

Monitoring and evaluation (M&E) are integral tools for managing and accessing the efficiency and effectiveness of investments in agricultural research and extension systems (The World Bank, 2005).

Project Communication
According to Nyende (2011), information communication and management is also an important aspect of project management. Poor management of information on marketing of agriculture products has also highly affected agricultural performance. The situation leaves marketing in East Africa region characterized by very long chains of the transaction between the farmer and the consumer. Poor access to reliable and timely market information leads to wastage of produce and limits small holder farmers to low prices for their products. There is need therefore to create more effective linkages between research, extension, and farmers who are the ultimate beneficiaries by improving their marketing awareness. Republic of Kenya report (2005) records that infrastructure including poor rural roads, markets, and transport systems result in high transactions costs for farmers and inaccessibility to input and output markets are among the main concerns for the sector.

According to Madhuri (2018), Good communication is an important component in project management, allowing projects to progress smoothly and on time. It ensures team members are aligned on project goals and understand exactly what's expected of them. It also helps build trust so everyone works better together from project start to finish. Communication in project management refers to the sharing of ideas and opinions between professionals who are working on similar or related tasks.

Project Implementation

Project implementation includes hiring the required skills, training some of the people without necessary skills, assigning responsibilities, and establishing performance standards as well as the reporting process. Project management is a distinct area of management that helps in handling projects. Morris (2004) concurs, stating that the poor project management practices often lead to projects being completed late or over budget, do not perform in the way expected, involve severe strain on participating institutions and or are cancelled prior to the completion after the expenditure of considerable sums of money.

Performance of Agriculture Projects

The performance of agriculturally based projects varies from one country to another but in Kenya agriculture performance has remained unstable with a major decline experienced after the post-election violence of 2008 (Ministry of Agriculture report, 2011). Project performance has been defined differently by various scholars, Kezner (2007) notes that a project is said to be performing when it has achieved the project objectives, within time, within cost at the defined performance level while utilizing the assigned resources effectively and efficiently.

THEORETICAL REVIEW

According to Silvius and Köhler (2009) believe that project performance makes good business sense, efficiently using and managing natural resources not only improves the bottom lines, but also helps shape the future in a positive manner for future generations. The concerns about performance indicate that the current way of producing, organizing, consuming and living may have effects on the future. Some things have to change and since change in organizations, whether it is a new production plant, a new product, a new business process or a new resource, is in many cases organized as projects, it can be concluded that sustainable society requires projects.

Theory of Execution

There are two types of critique against the dispatching theory of project management. The first strand of criticism addresses the assumption that the inputs to a task and the resources to execute it are ready at the time of authorization. This criticism starts from the theory of planning management as planning. In that approach, the unproblematic realization of tasks pushed by the plan to the execution is assumed. However, as discussed, it is very difficult to maintain an up-to-date plan, and thus the tasks pushed by the plan do not correspond to reality, i.e., their prerequisites in terms of predecessor tasks (or other inputs) do not necessarily exist. This leads to the situation that a major share of tasks to be commenced, when pushed by the plan, chronically lack one or more of their inputs. The dispatching model could be compared to starting an engine, which will run at a known rate utilizing planned resources; commitment of those responsible is implicitly presumed. This starting is achieved through communicating the authorization, that is giving orders to the responsible. However, this view has been challenged by the language/action perspective (Winograd and Flores, 1986).

They argue that the work in organizations is coordinated through making and keeping commitments. The commitment cycle begins with an offer or a request, followed by a promise, performance, and declaration of completion. Thus, action is coordinated by the commitments people make rather than by central control acting through commands. (In the language action view, orders are understood as strong requests and even here commitment arises from the promise to follow it.). The language action perspective reveals two basic shortcomings of the dispatching

model. Firstly, in dispatching, there should be two-way communication between the controller and the executors. Secondly, it is necessary to consider the commitment of the executor; a job actually is started and completed only if the executor is committed to realize it.

Theory of Control

In addition to the thermostat model, there is another theory of control, one that addresses learning and improvement. The question was originally about an experiment for quality improvement, where the validity of a specific hypothesis is checked. Then, according to the outcome of the experiment, the improvement method is possibly amended (Shewhart and Deming 1939): let us recall the three steps of control: specification, production, and judgement of quality.

In fact, these three steps must go in a circle instead of in a straight line. It may be helpful to think of the three steps in the mass production process as steps in the scientific method. The specification, production, and inspection correspond respectively to making a hypothesis, carrying out an experiment, and testing the hypothesis. These three steps constitute a dynamic scientific process of acquiring knowledge.

However, this can be generalized: all operations can be treated as hypothesis testing, rather than those specified as experiments in advance. In this way, the root causes for problems can be found, and performance improved. This "scientific experiment" theory of control reveals a fatal shortcoming of the thermostat model, which addresses returning to the standard performance using the resources at hand, but with different

intensity. The thermostat model does not address finding reasons for deviations, and eliminating those root causes.

Stakeholders Theory

Stakeholder Theory is a view of capitalism that stresses the interconnected relationships between a business and its customers, suppliers, employees, investors, communities and others who have a stake in the organization. The theory argues that a firm should create value for all stakeholders, not just shareholders.

In 1984, R. Edward Freeman originally detailed the Stakeholder Theory of organizational management and business ethics that addresses morals and values in managing an organization. His award-winning book strategic management: A stakeholder Approach identifies and models the groups which are stakeholders of a corporation, and both describes and recommends methods by which management can give due regard to the interests of those groups. The theory has become a key consideration in the study of business ethics and has served as a platform for further study and development in the research and published work of many scholars, including those featured on this website.

The project manager should shoulder the view of each stakeholder and should consider their interest for the success of the project. This enables the project managers appreciate involvement of stakeholders in projects and consider them as valuable in their own rights. Through the theory relationships between stakeholders are considered which leads to more appropriate project organization hence boosting project's success (Silvius & Tharp, 2013).

EMPIRICAL REVIEW

Ihesiene (2014) analyzed a survey-based study of project management practices in Small and Medium Scale Enterprises (SMEs) in Nigeria. The study aimed at a survey-based investigation of project management problems in Warri and by extension their impact on national development as well as recommending deliberate steps vital for efficient project delivery in SMEs such as political frameworks and establishment of project management offices (PMOs) in SMEs as statutory requirement, incentives such as

subsidizing cost of software and removal of multiple levies, dealing with over-bearing owner-managers that challenge project management process, establishment of project monitoring and evaluation units at local government level, engagement of project management professionals in projects among other steps. The results indicate that project management competencies are the greatest problem of management of projects within SME context.

Abednego, Sylvester and Walter (2014), analyzed the role of servant leadership competency in project management in Kenya. The general objective of the study was to investigate the relationship between servant leadership competencies and project outcomes. The study was a quantitative descriptive inquiry examining whether the application of servant-leadership influence project successes. The study found that, the discipline of project management is a key strategy to manage change in organizations. Project management techniques may be a partial solution to the problem of implementing of strategic change. This study determines to what extent servant leadership competency can contribute to project success. The outcome of this study indicates that servant-leadership is present in a majority of successful projects.

Hyväri (2006), analyzed performance of projects in different organizational conditions in Finland. The main purpose of his study was to evaluate the critical success factors in project management and to examine the relationships between critical success factors and organizational background variables. The study aaims to gain an understanding of how project clients, owners, and sponsors present their needs and expectations to ensure project success. On the basis of the survey responses received, it is possible to identify critical success factors in project management that are significantly related to company or organization size, project size, organization type, and project managers' work experience. The project implementation profile is also analyzed on average and by phases. The results indicate the importance of project communication that is related to company size.

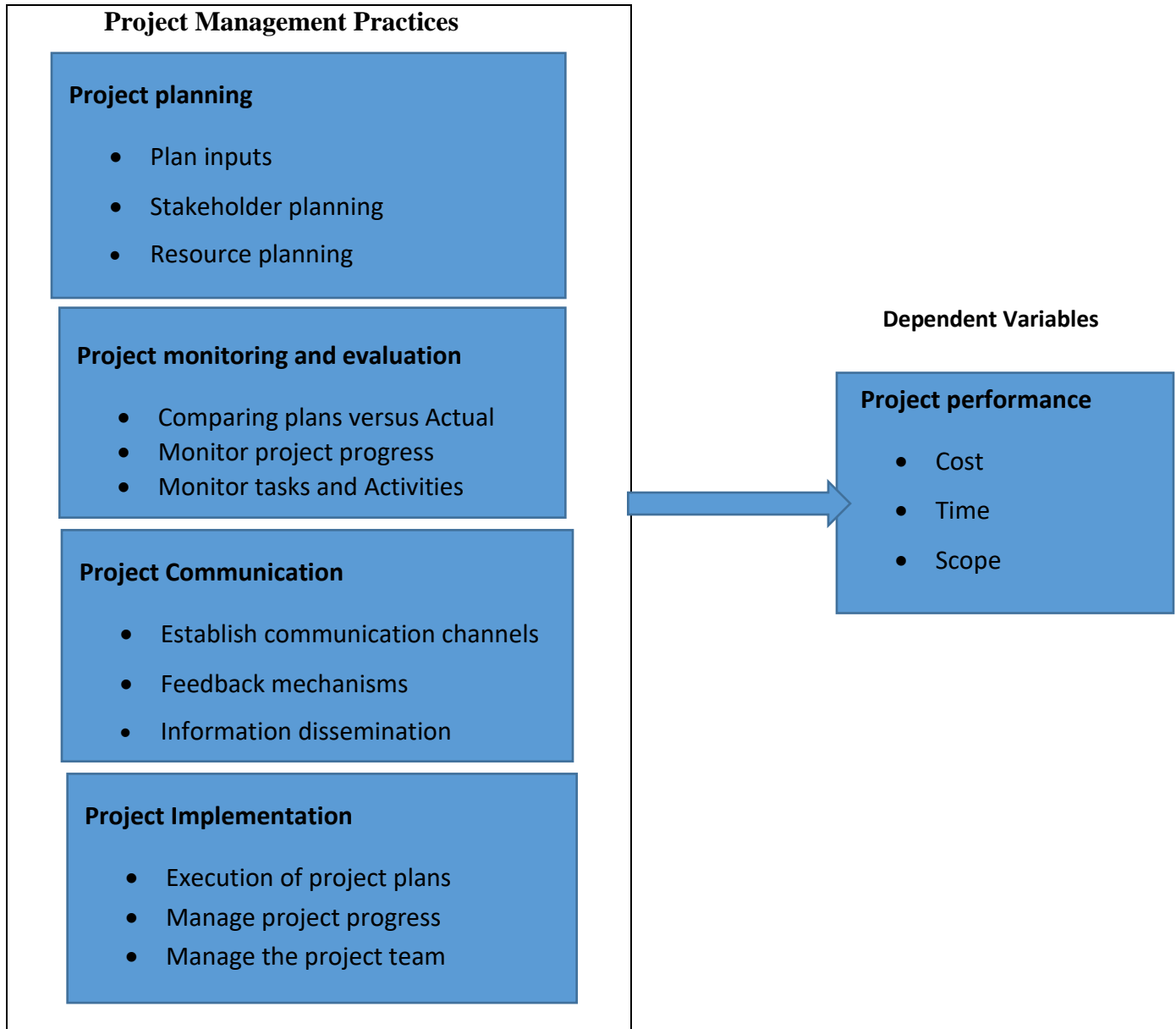Chan, & Yudi (2009), analyzed critical factors that influence the project performance amongst manufacturing companies in Malaysia. The purpose of their study was to investigate the critical factors that influence a successful project among manufacturing companies in Penang, Malaysia. Through the literature review process, it was found that project mission, top management support, client consultation, technical task, personnel competency, client acceptance, trouble shooting, project plan monitoring and effective communication are among the critical factors identified. From the 79 respondents who responded to 79 successfully completed projects, this study revealed that project success in the manufacturing context was in two dimensions, which the study classified as micro and macro project success. The study also demonstrated empirically that project personnel competency and project mission are critical factors influencing the micro project success and as for macro project success, top management support and project mission are two main critical factors.

Kamwana (2014), analyzed the effects of financial management on performance of World Bank funded agriculture projects in Kenya. The general objective of the research was to determine the effects of financial management on performance of World Bank funded projects in Kenya. The study targeted 500 employees of Kenya Power in Nairobi. Questionnaires were used to collect data for this study and statistical package for social science was used to analyze data. The findings were presented in inform of tables and charts. The study found that majority of the respondents agreed that financial planning, financial monitoring, financial evaluation and financial controls contribute to project performance.

CONCEPTUAL FRAMEWORK

Independent Variables

Project Management Practices

Project planning

- Plan inputs
- Stakeholder planning
- Resource planning

Project monitoring and evaluation

- Comparing plans versus Actual
- Monitor project progress
- Monitor tasks and Activities

Project Communication

- Establish communication channels
- Feedback mechanisms
- Information dissemination

Project Implementation

- Execution of project plans
- Manage project progress
- Manage the project team

Dependent Variables

Project performance

- Cost
- Time
- Scope

Source: Researcher (2022)
Figure 2: Conceptual Framework

RESEARCH METHODOLOGY

The study utilized the cross-sectional survey design that used both qualitative and quantitative approaches. A population is the totality of persons or objects with which a study is concerned. Then, target population was composed of 185 staff from Ministry of Agriculture and Animal Resources (MINAGRI, 2022). Respondents from MINAGRI was categorized as SPIU staff (100), PASP field staff (55) PASP HQ (30) as detailed in the below table.

The study used simple random sampling to select M&E staff and project officers. Simple random sampling is a form of respondents' selection which is done in order to avoid bias (Mugenda and Mugenda, 2003). A list of project staff was sought from the Human Resource Department to help in determining the respondents. Names of respondents of each category was written on pieces of papers and contacted to be involved in the study.

N= population size
K= Constant (1)
e= level of precision (0.05).
n= sample size
n= 185

$$n= \frac{185}{1+185\ (0.0025)}$$
$$n= \frac{185}{1+0.4625}$$
n= 126

Before analyzing the data, errors first have identified and eliminated as far as possible in order to enable the researcher to cross examine the relationship between the questions and the corresponding responses so as to ensure accuracy, consistency, and uniformity. This was done immediately after administering the questionnaires in order to guard against omission. The data analysis was done using Statistical Package for Social Sciences (SPSS) version 23.0. The statistical analysis was used, descriptive statistic to analyze responses made to each research question, the frequency and percentage was used for respondent's profile and other general information related to the research objectives. While inferential statistics (regression analysis and Pearson correlation coefficient) was used to establish relationship between variables.

FINDINGS AND DISCUSSIONS

The questionnaires were distributed to 126 respondents in total, and they were given two weeks of responding to the questions. The participation rate was 100.0% of filling questionnaires. Data were analyzed quantitatively using computer software of SPSS IBM 22.0 version, the results were presented and interpreted in accordance with research objectives.

Table 1: Distribution of respondents by Ages

Ages of respondents	Frequency	Percentages
18 – 22 years	13	10.3
23 – 27 years	27	21.4
28 – 32 years	31	24.6
33 -37 years	18	14.3
38 – 42 years	18	14.3
43 -47 years	19	15.1
Total	**126**	**100.0**

Source: Data from the field, (2022)

Findings in Table 1 present distribution of respondents by ages. The results indicated 13 (i.e., 10.3%) of respondents participated in the study are between 18–22 years old; 27 (i.e., 21.4%) of respondents have ages between 23–27 years old; 31 (i.e., 24.6%) respondents have between 28–32 years; 18 (i.e., 14.3%) respondents have ages between 33 -37 years and 38–42 years old while 19 (i.e., 15.1%) of respondents have 43-47 years.

Table 2: Gender distribution of respondents

Gender	Frequency	Percentages
Male	87	69.0
Female	39	31.0
Total	**126**	**100.0**

Source: *Data from field, (2022)*

Findings in Table 2 present gender distribution of respondents from post-harvest and agri-business support project (PASP). The results show both involvement of males and females in this project. This was justified by 87 (i.e., 69.0%) of respondents were males, while 39 (i.e., 31.0%) of respondents were females.

Table 3: Distribution of respondents by experience

Experience	Frequency	Percentages
1- 4 years	31	24.6
4 - 6 years	59	46.8
Above 6 years	36	28.6
Total	**126**	**100.0**

Source: *Data from the field, (2022)*

The findings indicated the distribution of respondents by experience in Table 3 confirmed that 31 (i.e., 24.6%) of respondents have experience of 1-4 years; 59 (i.e., 46.8%) respondents have between 4-6 years of experience, while 36 (i.e., 28.6%) of respondents have above 6 years of experience in post-harvest and agri-business support project (PASP).

Table 4: Education level Distribution of Respondents

| Education level	Frequency	Percentages
Diploma	39	31.0
Bachelor's Degree	36	28.6
Secondary School	25	19.8
Professional courses	12	9.5
Master's Degree and above	14	11.1
Total	126	100.0

Source: Data from the field, (2022)

Table 4 shows that there is no illiterate in the participants involved in this survey; this is justified by 39 (i.e., 31.0%) of respondents have a diploma level but most of them are still studying university; 36 (i.e., 28.6%) of respondents have bachelor's degrees; 25 (i.e., 19.8%) of respondents have secondary school; 12 (i.e., 9.5%) of respondents have professional courses while 14 (i.e., 11.1%) of respondents have Master's degree and above.

The extent of management skills in relation to the performance of PASP

Figure no1 illustrates the extent of management skills in relation to the performance of PASP where project planning skills, communication skills, and financial management Skills are mostly stated as management skills in relation to the performance of PASP.
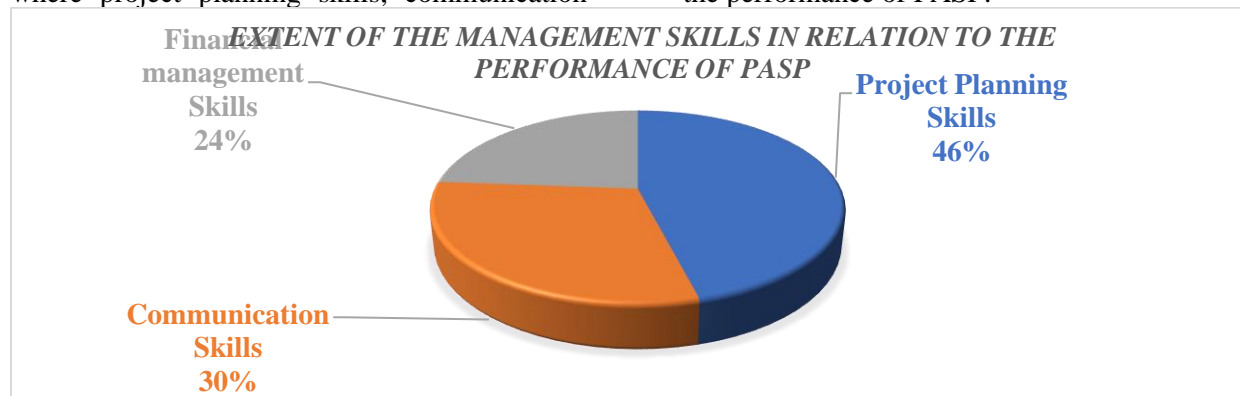
Figure 1: Opinions of respondents on the extent of management skills in relation to the performance of PASP;
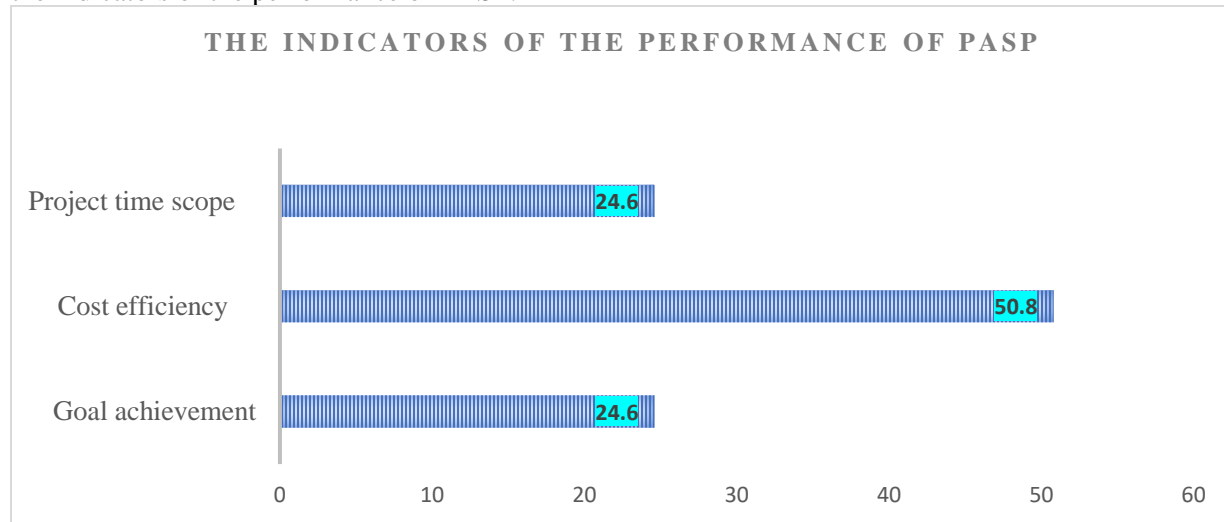
Source: *Data from the field, (2022)*

Figure no1 present opinions of respondents on the extent of management skills in relation to the performance of PASP where project planning skills confirmed on 46%, communication skills were on 30%, while financial management Skills are on rate of 26% as mostly stated as management skills in relation to the performance of PASP.

Opinion of respondents on the indicators of the performance of PASP
Figure 2 indicated the opinion of respondents on
the indicators of the performance of PASP.

THE INDICATORS OF THE PERFORMANCE OF PASP

Project time scope — 24.6

Cost efficiency — 50.8

Goal achievement — 24.6

Figure 2: Opinion of respondents on the indicators of the performance of PASP
Source: *Data from the field, (2022)*

Findings indicated the opinions of respondents about the elements indicating the performance of PASP, where more than 24.6% presented that project time scope is well respected, 50.8% of respondents stated that performance of PASP indicated by cost efficiency where planned budget is well spent in the project and also 24.6% confirming PASP reached on goals as indicator of the performance.

Findings on Correlation Coefficient Matrix Analysis
This part gives exactly relationship between each sub-variable from independent variable to the dependent variables.

Table 5: Findings on Correlation Coefficient Matrix between variables

		Project planning	Project monitoring and evaluation	Project communication	Project Implementation	project management practices	performance of agricultural projects
Project planning	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	126					
Project monitoring and evaluation	Pearson Correlation	.786**	1				
	Sig. (2-tailed)	.000					
	N	126	126				
Project communication	Pearson Correlation	.659**	.846**	1			
	Sig. (2-tailed)	.000	.000				
	N	126	126	126			
Project Implementation	Pearson Correlation	.645**	.818**	.846**	1		
	Sig. (2-tailed)	.000	.000	.000			
	N	126	126	126	126		
Project management Practices	Pearson Correlation	.847**	.949**	.925**	.912**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
	N	126	126	126	126	126	
performance of agricultural projects	Pearson Correlation	*.554**	*.760**	*.779**	*.706**	*.772**	*1*
	Sig. (2-tailed)	*.000*	*.000*	*.000*	*.000*	*.000*	
	N	*126*	*126*	*126*	*126*	*126*	*126*

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

From the correlation matrix table 5 shows that there is a significant, and positive strong correlation between Project planning in project management practices and performance of agricultural projects as Pearson correlation are 0.554[**] with p-value of 0.000, which is less than standard significance level of 0.01. This designates that, out of other factors considered in project management practices which influence performance of the agriculture projects in Rwanda, only project planning has a significant impact of 55.4% on performance in Post-Harvest and Agri-Business Support Project (PASP).

The findings revealed that there is a significant, and positive very strong correlation between project monitoring and evaluation, and project performance as Pearson correlation is 0.760[**] with p-value is 0.000, which is less than standard significance level of 0.01, and this indicates that, out of considered other factors of project management practices, only project monitoring and evaluation has a significant relationship of 76.0% on project performance of Post-Harvest and Agri-Business Support Project (PASP). The results indicated existence positive and very strong correlation between project communication in project management practices, and performance of the agriculture projects in Rwanda as Pearson correlation is 0.779[**] with the p-value is 0.000, which is less than standard

significance level of 0.01. This indicates that, out of the considered other factors affecting project performance, only project communication has a significant relationship of 77.9% to performance of Post-Harvest and Agri-Business Support Project (PASP).

Findings confirmed that there is a significant positive and very strong correlation between Project implementation and performance of the agriculture projects in Rwanda as Pearson correlation is 0.706[**] with the p-value is 0.000, which is less than standard significance level of 0.01. This indicates that, out of the considered other factors affecting performance of the agriculture projects in Rwanda, only Project Implementation has a significant relationship of 70.6% on performance of Post-Harvest and Agri-Business Support Project (PASP).

As general findings showed that there is a significant positive and very strong correlation between project management practices and project performance as the Pearson correlation is 0.772[**] with the p-value is 0.000, which is less than both standard significance levels of 0.05 and 0.01. This indicates that effective Project management practices influence performance of Post-Harvest and Agri-Business Support Project (PASP), as it has a significant relationship of 77.2%.

Findings on Multiple Linear Regression Analysis

Through a linear regression analysis and descriptive statistical methods applied to analyze the data, the current study shows that $Y = a + bx$, so, X is the explanatory variable, and Y is the dependent variable i.e.: performance of the agriculture projects in Rwanda where the

independent variable which is project management practices which is represented by x1 represents project planning, x2 represents Project monitoring and evaluation, x3 is Project communication, x4 is Project Implementation, and ε represents standard error in the model.

Table 6: Model Summary between the variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.804[a]	.647	.635	2.58652

a. Predictors: (Constant), *Project Implementation, Project planning, Project communication, Project monitoring and evaluation*

The results in table 6 designates that $R^2 = 0.647$ which is represented by 64.7% change from performance of the agriculture projects in Rwanda that come from project management practices represented by x1 represents Project

planning, x2 represents Project monitoring and evaluation, x3 is Project communication, x4 is project implementation, and ε represents standard error in the model. This means 35.3% of performance of the agriculture projects in

Rwanda come from other variables which are not included in this Model of the current research.

Table 7: ANOVA^a between the variables

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1480.569	4	370.142	**55.327**	**.000^b**
1	Residual	809.499	121	6.690		
	Total	2290.069	125			

a. Dependent Variable: performance of agricultural projects
b. Predictors: (Constant), Project Implementation, Project planning, Project communication, Project monitoring and evaluation

The results from table 7 indicated that the F-test= **55.327** and p-value = **0.000**. This indicates that independent variables are jointly significant. Therefore, we confirmed that there are great significant and positive influences of project planning; project implementation; project M&E practices and project communication to the performance of Post-Harvest and Agri-Business Support Project (PASP).

Table 8: Coefficients^a among the variables under study

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	.428	1.042		.411	.002
	Project planning	.221	.184	**.105**	**1.203**	**.001**
1	Project monitoring and evaluation	.862	.264	**.422**	**3.267**	**.001**
	Project communication	.872	.228	**.449**	**3.827**	**.000**
	Project Implementation	.101	.222	**.049**	**.455**	**.000**

a. Dependent Variable: performance of agricultural projects

The results in Table 8 revealed that Project planning has positive and significant effect on performance of Post-Harvest and Agri-Business Support Project (PASP), as ($\beta 1= 0.105$, t= 1.203; p-value= 0.001 less than 10%). $Y= \beta 0+\beta 1x1+ \beta 2x2+\beta 3x3+\beta 4x4+\varepsilon$. Project monitoring and evaluation has positive and significant effect on performance of Post-Harvest and Agri-Business Support Project (PASP), where ($\beta 2= 0.422$, t= 3.267 and p-value= 0.001 less than 10%). The results also indicated that Project communication has positive and significant effect on performance of Post-Harvest and Agri-Business Support Project (PASP), as ($\beta 3=0.449$, t= 3.827; p-value= 0.000 less than 10%). The findings indicated that Project Implementation has positive and significant effect on performance of Post-Harvest and Agri-Business Support Project (PASP), ($\beta 4= 0.049$, t= 0.455 and p-value= 0.000 less than 10%).

CONCLUSION AND RECOMMENDATIONS
The research problem was resolved, the research objectives were met, and the research questions were addressed as a result of the findings. Communication remains an investment for every organization because it needs budget, they should plan and implement it because even though they take the experienced professionals, they need also strong communication between them to enhance their projects success. Several policy recommendations can be derived from the findings of this study. In the process of project planning the government and other management organs are advised to incorporate a few farmers that undertake the project to avoid rolling down already planned projects that may not do well in some regions.

The management should also include expected risks in their project plan and give possible mitigation methods so that the contingence funds set aside for risks are estimated and allocated. This helps to cup uncertainties that may reduce on yields. The study found out that project monitoring and evaluation and project communication has influenced performance of agriculture projects in Rwanda.

Based on this finding, managers of different organizations which sponsor projects should continually modify management aspects to improve performance of agriculture projects. The monitoring and evaluation were not highly addressed especially in government sponsored organizations which leaves many farmers with no clear directions on how to use farm inputs instead they even purchase them off. Government has, therefore, a duty to closely monitor all the projects from start to end. Also, the government is advised to of employ highly qualified managers especially field officers and Supervisors to help exercise their management skills while supervising and implementing projects for better performance. The qualified human recourse should also ensure that it practices all the recommended management practices involve improving the monitoring and evaluation skills through effective supervision, ensuring that the good communication with the workers within projects.

The Ministry of agriculture and Animal Resources sponsors should also increase grants and loans to farmers to improve financially related activities that enhance quick accessibility of management to projects and supervision of the project groups through constructing better roads and communication networks.

The management should also include expected risks in their project plan experienced in the field during monitoring sessions and give possible mitigation methods so that the contingence funds set aside for risks are estimated and allocated. Finally, the sponsors should work on clear means of marketing of the products of the farmers. Most of the farmers have been left to look for ways of marketing their crops on their own making some to sell their yields at very low prices.

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