



Effect of resources management practices on project performance: A case of Seed Potato Fund-ikigega project supported by BDF in Musanze district, Rwanda

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1. Introduction

Resources are managed by the procedure for organizing, scheduling, forecasting, and improving all aspects of the resource lifecycle for the successful finalizing projects. By maximizing each resource's potential, it increases business profitability and combats market instability (Freidi, 2014). The project's success depends on a number of resources, including human and financial capital, technology, and physical capital (Ofori, 2013).

For such a project to be completed, it is important to understand the degree of influence made by the resources management practices in some organization (Botchie, 2000).

Inadequate marketing information management of agriculture products has also highly affected agricultural projects performance. The situation leaves marketing in East Africa countries being characterized by great distance of the deal between producers and buyers. Having limited access to timely and accurate market information leads to wastage of produce and confines small-scale farmers to selling their products for poor prices. There is need therefore to create more effective relationships research, extension, and farmers who are the ultimate beneficiaries by improving their marketing awareness (Nyende, 2011).

According to Nyende's (2011) research on building a network for market access to rural areas conducted in east Africa showed that marketing of farm products is distinguished by a myriad of constraints. However, the study was concerned with agricultural sector, not agriculture projects. The above studies looked at isolated issues of project management practices, therefore, there was need to address all management practices and establish their joint influence to project performance. Based on the facts, this research is chosen with the aim to evaluate the contribution of resources management on performance of SPF project funded by Business Development Funds (BDF) in Musanze district.

2. Statement of the problem

In many countries including Rwanda, county government's projects face problems, despite their great importance in terms of support provided to the national economy. It is noticed that these undertakings typically face comparable obstacles and difficulties. Given the country's high risk of project failure and the crucial role that county projects play there, it becomes vital to research on the factors required to enable the projects to survive and indeed progress to the organizational life cycle's growth phase (Kamunge et al., 2014).

Project management techniques have mainly contributed to either the success or failure of most of the projects. The poor practices of management of projects 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 canceled beforehand to the completion after the expenditure of considerable sum of money (Morris, 1988).

As continued to be reported, in some Rwandan projects SPF-ikigega included, the common factor under failure was that several projects fail mainly due to poor resource planning and management (Ndayisaba, 2018). Resource planning should be a priority, efficient workforce planning and the scheduling of resources is essential to the project's success (Amponsah, 2012). Various researches offered various explanations for why certain initiatives should function well while others fail, with the World Bank's project failure rate in Sub-Saharan Africa being above 50% (Denis, 2012).

The study of Ofori (2013) revealed that the performance of the project depends on funds management, The results of his research point out that top management support was one of the important factors that contributed to a project's success, effective communication, clarity of project purpose and goals, and project stakeholder participation. Despite Prabhakar's (2008) observation that most programs overspend, are delayed, or are simply mediocre, various managers reported that those projects had functioned effectively; hence gaps of data and information about the Ikigega project resource management status. And then, according to different reports of SPF, resource management practices especially financial resource plays a leading role only in project implementation. This study intends to fill the gap by identifying effect of all resources management on project performance.

3. Objectives of the study

This study is chosen with the aim to evaluate the effect of resources management on seed potatoes fund-ikigega project performance in Musanze district of Rwanda.

This research was also based on the following specific objectives:

1. To evaluate the impact of resources management on seed potatoes fund –ikigega project performance in Musanze district,
2. To assess the impact of human resources management on SPF-Ikigega project execution in Musanze district
3. To evaluate the result of financial resources management on seed potatoes fund-Ikigega performance of a project in Musanze district,
4. To assess the result of time management on seed potatoes fund-ikigega project execution in Musanze district,

4. Hypotheses

For achieving the objectives set up, the following hypotheses were tested:

H₀. There is a significance influence of resource management practices on project performance of seed potatoes fund-ikigega in Musanze district.

H₀₁. There is a significant effect of resources planning on project performance of seed potatoes fund-ikigega in Musanze district.

H₀₂. Effective resource scheduling significantly affects seed potatoes fund project performance.

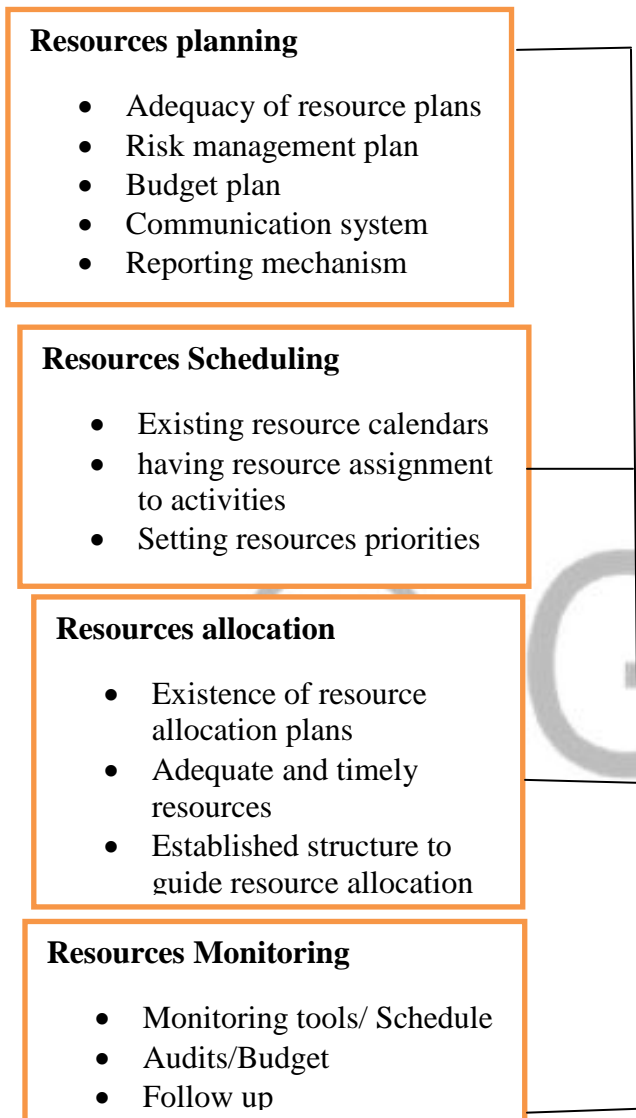
H₀₃. Adequate resource allocation significantly affects project performance of seed potatoes fund-ikigega in Musanze district.

H₀₄. Adequate resource monitoring significantly influences seed potatoes fund-ikigega project performance in Musanze district.

5. Conceptual framework of the study

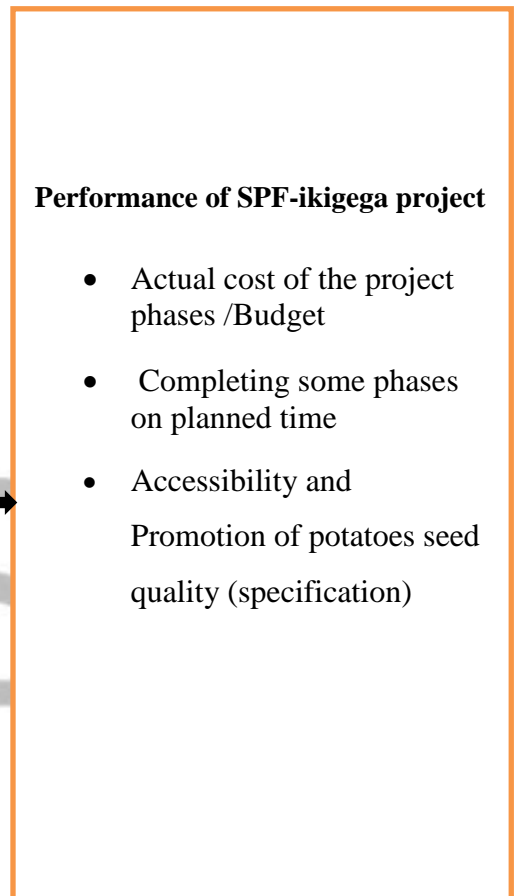
Independent variables:

Resource management practices



Dependent variables:

Project performance



Source: our work, 2022

6. Research methodology

6.1. Research Design

In order to carry out the research, descriptive and correlational research design methods were applied to investigate and collect quantitative data.

6.2. Target Population

Our population mother was 60 employees composed (by 16 top management employees from BDF, 14 senior managers from SPF ikigega project, 30 management staff from three agricultural cooperatives working with SPF-ikigaga project) and 42 cooperatives members who are potatoes seed producers in Musanze district

6.3. Sample size

By census enquiry method; all these 102 employees constitute our target respondents

6.4. Data Collection Instruments

During our research, we have put an effort on the following tools: Questionnaire, Interview guide, Observation, Documentary review

6.5. Data processing and Analysis

The study used descriptive and inferential statistics in analyzing data. The research also used regression analysis to establish the connection between variables (independent and dependent variables).

7. Research findings

7.1. Effect of resource planning on Seed Potato Fund ikigega project performance

The study's primary goal was to ascertain how the Musanze district's seed potato fund-ikigega project performance was impacted by resource planning.

Table 1. Effect of resource planning on Seed Potato Fund ikigega project performance

	SA	A	N	D	SD		
	%	%	%	%	%	Mean	Std. Deviation
When preparing for SPF project resources inside the district, project management teams are guided by defined structures.	44.1	29.4	19.6	4.9	2.0	4.08	1.00
All the resources required to carry out the SPF project in the district have been carefully planned.	42.2	28.4	13.7	6.9	8.8	3.88	1.27
The district's resource budget plans followed during the SPF cycle are highly adequate.	45.1	27.5	8.8	8.8	9.8	3.89	1.33
The district's entire project resource planning process is highly formalized thanks to effective communication.	29.4	41.2	11.8	7.8	9.8	3.72	1.24
The district's entire project resource planning process is highly standardized thanks to an effective reporting system already in place.	15.7	38.2	24.5	9.8	11.8	3.36	1.20
Average Score	35.3	32.94	15.68	7.64	8.44	3.79	1.21

Source: Primary data, 2022

The findings, which are shown in the above table, suggest that resource planning has an average mean of 4.21, with a standard deviation of 1.21, and that 33.3% of respondents strongly agreed, 32.94% agreed, 15.68% agreed but weren't sure, 7.64% disagreed, and 3.79% strongly disagreed.

7.2. Effect of resource scheduling on Seed Potato Fund ikigega project performance

The study's second goal was to ascertain how resource scheduling affected the success of the SPF-ikigega project in the Musanze district.

Table 2: Effect of resource Scheduling on project performance

	SA	A	N	D	SD		
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	%	%	%	%	%	Mean	Std. Deviation
Resource calendars are widely used when working on SPF projects in the district.	25.5	33.3	19.6	10.8	10.8	3.51	1.27
Throughout the district's SPF project cycles, resources are effectively assigned to the various project activities.	45.1	28.4	10.8	7.8	7.8	3.95	1.26
When competing resource demands exist, resources have been effectively prioritized.	28.4	42.2	14.7	8.8	5.9	3.84	1.28
Project managers have always been successful at rearranging SPF project tasks and resources in order to accomplish project goals with constrained budgets and resources.	41.2	27.5	13.7	9.8	7.8	3.78	1.13
Average Score	35.05	32.85	14.7	9.3	8.07	3.77	1.23

Source: Fieldwork data, 2022

The average mean of 3.774, with a standard deviation of 1.23, indicated that resource scheduling affects the performance of SPF operated in the Musanze district. Of the respondents, 35.054% strongly agreed, 32.85% agreed, 14.7% neutral, 9.3% disagreed, and 8.075% strongly disagreed with this statement.

7.3. Effect of resource allocation on Seed Potato Fund ikigega project performance

The performance of the seed potato fund-ikigega project in the Musanze district was examined as the third goal of this study.

Table 3: Effect of resource allocation on project performance

	SA	A	N	D	SD		
	%	%	%	%	%	Mean	Std. Deviation
Plans for the distribution of resources have been devised, and they direct resources toward the district's seed potato projects.	29.4	27.5	23.5	8.8	10.8	3.55	1.29
The district has allocated the resources it needs in a timely manner to carry out seed potato programs.	48.0	23.5	8.8	8.8	10.8	3.89	1.37
There are defined frameworks that have been built to direct the complete resource allocation process in the district's implementation of SPF.	30.4	41.2	12.7	7.8	7.8	3.78	1.19
Average Score	35.93	30.73	15	8.46	9.8	3.74	1.28

Primary data, 2022

Table 4.5's findings in general reveal that a standard deviation of 1.28 and an average mean of 3.74 indicate that resource allocation has an impact on SPF project performance. 35.93% of respondents strongly agreed, compared to 30.733% who agreed, 15% who were indifferent, 8.46% who disagreed, and 9.8% who strongly disagreed.

7.4. Effect of Resource monitoring on Seed Potato Fund ikigega project performance

Assessing the impact of resource monitoring on the success of the seed potato fund-ikigega project

Table 4.: Effect of resource monitoring on project performance

	SA	A	N	D	SD		
	%	%	%	%	%	Mean	Std. Deviation
The SPF offers a well-known framework and tools for tracking how resources are being used to carry out seed potato programs.	39.2	46.1	8.8	2.0	3.9	3.55	0.94
The evaluation of the seed potato project's physical and financial development in comparison to defined resource plans is ongoing.	44.1	33.3	10.8	6.9	4.9	3.89	1.12
In the Musanze district, resource audit follow-ups are carried out throughout the life of seed potato initiatives.	41.2	46.1	7.8	2.0	2.9	3.74	0.89
Average score	41.5	41.83	9.13	3.63	3.9	3.73	0.99

Source: Fieldwork data, 2022

The SPF ikigeza project's performance was found to be impacted by resource monitoring, with a standard deviation of 0.99, according to the average mean of 3.73 in the table above. 46.9% of respondents strongly agreed, 20.8% agreed, 1.1% neutral, 6.6% disagreed, and 11.7% strongly disagreed with the statement, which supports the outcome.

Determination coefficient

The calculated determination coefficient proves the test of hypothesis. The obtained results are presented in below table:

Table 5: Determination coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	4.051	.429		9.453	<.001	3.200	4.901
	Resource Planning	.809	.207	.111	.526	.006	.302	.519
	Resource scheduling	.223	.175	.134	.704	.048	.470	.224
	Resource allocation	.390	.191	.040	.205	.038	.340	.418
	Resource monitoring	.712	.216	.169	.790	.031	.600	.258

a. Dependent Variable: Project performance

Source: Fieldwork data, 2022

The linear regression analysis considers the linear connection between one dependent variable and one or more independent variables. The analysis yields result for the equation below:

$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \epsilon$ Where y represents dependent variable “project Performance” and x values represent variables of independent variables, such as resource planning (X1), Resource scheduling (X2), Resource allocation (X3) and Resource monitoring (X4). With values from the analysis the function become like:

$$Y = 4.051 + 0.809X_1 + 0.223X_2 + 0.390X_3 + 0.712X_4$$

This suggests that, when all the study's variables are kept constant, the SPF ikigega project will be carried out at the intercept, which is 4.051. This suggests that, when all the study's variables are kept constant, the SPF ikigega project will be carried out at the intercept, which is 4.051. The SPF ikigega project's implementation increased by 0.223 with a unit improvement in project scheduling when all other factors remained the same, whereas the SPF project's implementation increased by 0.809 with a unit improvement in project planning.

Similar to this, when all other variables are held constant, an increase in project resource allocation results in an improvement of 0.390 in the implementation of the SPF project in the Musanze district, while an increase in project monitoring results in an improvement of 0.712 in

the implementation of the SPF project in Rwanda. In a nutshell, the study also shows a strong and close association between project management techniques and the success of the SPF project financed by BDF in Rwanda's Musanze district. In addition, it showed that resource planning ($p=0.006<0.05$), resource scheduling ($p=0.048<0.05$), resource allocation ($p=0.038<0.05$), and resource monitoring ($p=0.009<0.05$) are statistically significant to increase performance of Seed potato Fund ikigega project. Here, the researcher accepted the hypothesis (H01) that the success of the seed potato fund-ikigega project in Musanze district is significantly influenced by resource planning. The performance of seed potato fund projects is greatly impacted by effective resource scheduling, according to the second hypothesis (H02). The performance of the seed potato fund-ikigega project in the Musanze district is greatly impacted by adequate resource allocation, according to the third hypothesis (H03). The researcher then agreed with the fourth hypothesis (H04), which claimed that the success of the seed potato fund-ikigega project in the Musanze district is greatly influenced by adequate resource monitoring.

8. Conclusion and Recommendations

8.1. Conclusion

The study's findings support the assertion that there is a strong correlation between resource management and project performance. Implementers are accomplishing project success through resource planning, resource scheduling, resource allocation, and resource monitoring. Practices for managing project resources appear to be essential to achieving project goals, such as finishing some project phases on schedule and under budget while still meeting customer quality requirements.

8.2. Recommendations

- The study advises that project planning and implementation should be double-checked in order to keep a project on schedule and within budget.
- Every project must incorporate monitoring and evaluation utilizing a participatory strategy that makes it simple to discuss setbacks and success during the project's execution.
- The study also recommended that project planning should be such as to cope efficiently with the project's needs.
- When the date of delivery is specified and the work needs to be planned or scheduled to fulfill the deadline, the study recommended that project managers employ backward

scheduling strategies. Schedules were set and projected throughout the life cycle of the project.

- The study's advice for resource allocation was that project managers should be aware of the project's scope since the bigger the project, the more they will decide how to allocate the funding.
- The study's recommendations for resource management during plan implementation should include approaches to quality standards, deadlines and deliverables, cost-control tactics, and more.
- Further studies that seek to illustrate how much of the variation in project performance can be explained by the various resource planning practices within SPF ikigega project should be conducted. This will give direction to the project management on which practice to invest more on for better performance.

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