

INFLUENCE OF PROJECT CONCEPTUALIZATION PROCESS ON PROJECT PERFORMANCE IN RWANDA: A CASE OF KARONGI LAND HUSBANDRY AND HILLSIDE IRRIGATION PROJECT

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Abstract: The main problem with most projects is that the selection process of the project idea is grossly mishandled leading to the formulation of wrong interventions that do not address the needs of the major stakeholders, most project practitioners present their own perceived problems and interventions that do not reflect the realities on the ground. This study therefore sought to establish the influence of the project conceptualization process on the performance of the Karongi land husbandry and hillside irrigation project. The specific objectives of the study were; to determine the influence of stakeholder involvement on the performance of Karongi land husbandry and hillside irrigation project, to establish the influence of problem analysis process on the performance of Karongi land husbandry and hillside irrigation project and finally to determine the influence of risk management analysis on the performance of the Karongi land husbandry and hillside irrigation project. This study adopted a cross sectional study design with the Karongi land husbandry and hillside irrigation project as the case of study. The target population of study was one hundred and thirty-five respondents composed of one hundred project beneficiaries, fifteen project staff and twenty programme management staff. The sample size for the study was one hundred and twenty-four respondents. Purposive sampling approach was used for the programme management staffs while the simple random sampling technique was applied for project staff and beneficiaries. Questionnaire were used to collect the required data from the respondents; the questionnaire was physically administered to all the respondents by the researcher. The data analysis technique that was utilized for this study was descriptive and inferential statistics. SPSS was used as the appropriate tool for data analysis. The study established that stakeholder involvement significantly influences performance of Karongi land husbandry and hillside irrigation project in Rwanda ($r=.029$, $p=0.003<0.05$). Also, from the findings problem analysis process would significantly influence performance of irrigation project ($r=.091$, $p=0.004<0.05$). Lastly, the regression results indicate that risk management analysis significantly influences performance of Karongi land husbandry and hillside irrigation project in Rwanda ($r=.375$, $p=0.001<0.05$). This clearly indicated that project conceptualization process has a significant positive influence on Performance of irrigation project. As a result, the study concluded that problem analysis process influenced irrigation project performance. Through project problem analysis, factors contributing to the problem were always analyzed and involve stakeholder forum in problem analysis identifying the community problems. This study concluded that effective problem analysis process enhances conceptualization of the project problem, identifying the right project problem and causes of main problem contributing to the irrigation project performance. Regression results emphasized that there is significant positive relationship between project problem analysis processes would and performance of irrigation project. Based on the conclusions and findings of the study, suggests a research to develop a predictor model for successful construction project implementation. This model should include interplay of risks, success factors and weighted factor for the unknowns in irrigation project conceptualization. This will ensure that a success or failure of a project can be properly managed with more certainties and anticipated outcomes.

Keywords: problem analysis process, Karongi land husbandry, hillside irrigation project, project conceptualization.

1. INTRODUCTION

1.1 Background

Recent studies show that many organizations have been trying to implement their corporate strategies through projects (Englund & Graham, 2009), and that projects under implementation commonly have little or no apparent link to the corporate strategies and goals (Altschuld & Kumar, 2010). Hence, identifying right projects and right mix of projects for the organization is considered as one of the most important tasks for the organization to ensure the achievement of the results within limited resources and capabilities of the organization (Kizlik, 2010). Many discussions in the literature reveal that the right sets of projects for implementation of corporate strategies are importantly resulted from successful conceptualization of project portfolio (PMI, 2014).

Project conceptualization is a process of evaluating individual project or group of projects, and then choosing them so that the objectives of the organization will be achieved (Meredith & Mantel, 2013). Projects should be linked to the right goals and impact at least one of the major stakeholders 'issues, e.g. growth acceleration, cost reduction, social impact or cash flow improvement (Kumar, Saranga, Nowicki & Ramírez-Márquez, 2012). A good project conceptualization is a process itself, if properly carried out, potential benefits to beneficiaries can improve substantially (Pande, Neuman, & Cavanagh, 2010). Project conceptualization may also be related to the project implementation; by contributing to project success and not only to efficiency of the project processes and supports development of the project culture in the organization. Studies from researchers have proposed project selection process models, tools, and key elements in six sigma project selection producing a variety of models (Breyfogle, Cupello, & Meadws, 2011). Because of dynamics of business environment directing us to manage business activities as projects, it often occurs that many of projects are managed parallel at the same time.

Successful organizations do not focus only on results but also on processes (Gošnik, 2008). The lack of market aspects of products can lead to defining wrong project objectives which are not focused on beneficiaries and consequently to unsuccessful end products (Gošnik, 2008). Partial views on the project are related with many risks, as well. Organization 's management has a crucial role in customer focused project management. It enables us to manage projects empowered by high degree of information exchange and to connect different key elements aiming at project performance. According to Larson & Gray, (2011), 30% of all projects are canceled midstream, while over 50% of completed projects end in up to 190% over budget and 220% late because of the poor handling of the project conceptualization process.

The Land husbandry, Water harvesting and Hillside irrigation (LWH) Project is one of the development initiatives designed under the Ministry of Agriculture and Animal Resources (MINAGRI) and partly funded by the World Bank in order to tackle the issues related to food insecurity and rural community's livelihoods income. This study therefore shall seek look into the link between the project conceptualization process and the performance of the projects, by studying the performance of the Karongi land husbandry and hillside irrigation project as the dependent variable and the stakeholder involvement, the problem analysis process and the risk management analysis as the independent variables.

1.2 Problem statement

According to (Harold, 2003), 30% of all projects are canceled midstream, and over 50% of completed projects end in up to 190% over budget and 220% late because of the poor handling of the initial process of conceptualization, there is a link between the project conceptualization process and the performance of the project. Key issues that arise during the conceptualization process include; stakeholder analysis and involvement in the conceptualization process, which if properly managed, enable projects to utilize the knowledge base of the stakeholders (Cohen, 2010). In addition, there is need to create integrated project teams which would have a positive influence on project outcomes (Lahdenperä, 2012).

Problem analysis process, risk management analysis and the conceptualization of the right objectives form the other major areas of interest in the project conceptualization process. Projects are meant to address problems. The conceptualization of a wrong project will cause a waste of valuable time, energy and resources. If the problem is not effectively defined, the project executed will be wrong, objectives and goals wrong and will never address the intended problem. The effort to complete the project within the allowable budget, time and to the required specifications will be fruitless. Due consideration therefore, must be taken into account before implementation. This study will analyze the influence of the project conceptualization process on the performance of the project.

1.3 Objective of the study

1.3.1 General objective

The general objective of this study was to determine the influence of the Project Conceptualization Process on the Performance of Karongi land husbandry and hillside irrigation project in Rwanda.

1.3.2 Specific objectives

The following specific objectives guided the study;

1. To establish the influence of problem analysis process on the performance of Karongi land husbandry and hillside irrigation project

2. CONCEPTUAL FRAMEWORK

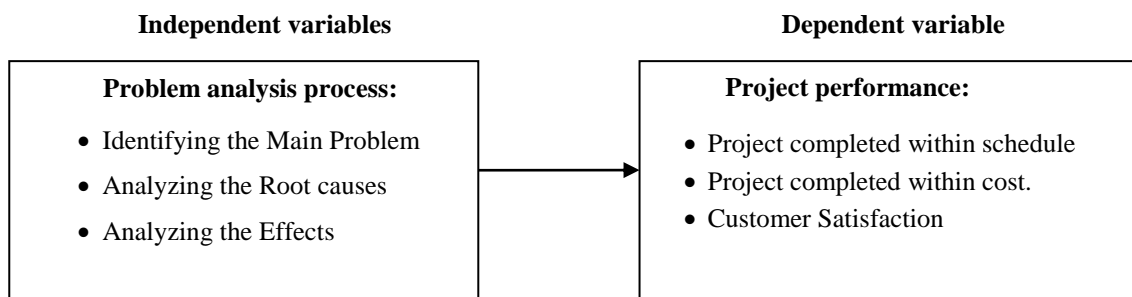


Figure 2.1 Conceptual framework

3. TARGET POPULATION

As argued by Ngechu (2014), a population is a defined set of people, services, elements, and events, group of things or households that are being investigated. This definition doesn't differ much by that provided by Cooper and Schindler (2008), who defines a population as a total collection of elements from which the researcher wishes to make inferences. The target population of this study were one hundred and thirty-five respondents composed of one hundred project beneficiaries, fifteen project staff and twenty programme management staff.

3.1 Sampling size

The study sample size was 124 respondents. The sample size was determined using the formula by Slovin's (1970)

$$n = \frac{N}{1+n(e)^2}$$

Where;

n= desired sample size,

N= estimate of the population size.

Study sample size by applying the formula, (n) sample size is:

$$135/1+135(0.05)^2 = 124$$

4. RESEARCH FINDINGS AND DISCUSSION

4.1 Problem analysis process and project performance

The second objective was to establish the influence of problem analysis process on the Performance of Karongi land husbandry and hillside irrigation project in Rwanda. Table 4.1 gives the findings of the study on problem analysis process and project performance using descriptive statistics.

Table 4.1: Problem analysis process and project performance in projects

Statements	Mean	Std. Dev
The main problem is always selected among other community problems?	2.13	0.98
The factors contributing to the problem are always analyzed?	2.45	0.93
The effects of the problem to the community are always analyzed and noted?	2.58	0.84
The analysis above is always done by a forum of stakeholders?	2.21	0.87
Identifying the right problem contributes to the performance of the project?	3.74	0.74
Identifying the causes of the main problem leads to the success of the project?	3.69	0.69
Identifying the effects of the main problem contributes to the performance of the project?	4.28	0.67

The respondents were requested to indicate the extent to which they agreed on the influence of problem analysis process statement on the Performance of Karongi land husbandry and hillside irrigation project in Rwanda. Respondents moderately agreed that effects of the problem to the community were always analyzed and noted as indicated by a mean of 2.58 with a standard deviation of 0.84. The results also indicated that most respondents disagreed that the factors contributing to the problem were always analyzed and that problem analysis is always done by a forum of stakeholders as indicated by a mean of 2.45 and 2.21 with a standard deviation 0.93 and 0.87 respectively. Most respondents disagreed that the main problem is always selected among other community problems as indicated by a mean of 2.13 supported by a standard deviation of 0.98.

On the extent to which respondents agreed on influence of the problem analysis process and influence on project performance, respondents agreed that identifying the effects of the main problem contributes to the project performance as indicated by a mean of 4.28 with a standard deviation of 0.67. Respondents agreed that Identifying the right problem and causes of main problem contributes to the project performance as indicated by a mean of 3.74 and 3.69 supported by a standard deviation of 0.74 and 0.69. This implied that effective problem analysis process during project conceptualization process influence success of the project to a great extent. The findings, concurred with Thomas & Mullaly, Shi, (2011) proper analysis of the problem that the project intends to address and that improving project success in organizations is assumed to be made through project management improvement initiatives, which include the process of analyzing the main problems in the community and project organizations using various available tools and techniques including the problem tree technique and the fish bone analysis among others.

5. CONCLUSIONS

As a result, the study concluded that problem analysis process influenced irrigation project performance. Through project problem analysis, factors contributing to the problem were always analyzed and involve stakeholder forum in problem analysis identifying the community problems. This study concluded that effective problem analysis process enhances conceptualization of the project problem, identifying the right project problem and causes of main problem contributing to the irrigation project performance. Regression results emphasized that there is significant positive relationship between project problem analysis processes would and performance of irrigation project.

5.1. Recommendations

The study further recommends that management in project should enhance problem analysis process through proper project problem analysis, assessing factors contributing to community problem and involve stakeholder 's forum in problem analysis and identifying the community problems. Efficient problem analysis process would enhance identifying of main project problem, identifying the right project problem and causes of main problem contributing to the project performance.

5.2. Areas for further research

Based on the conclusions and findings of the study, suggests a research to develop a predictor model for successful construction project implementation. This model should include interplay of risks, success factors and weighted factor for the unknowns in irrigation project conceptualization. This will ensure that a success or failure of a project can be properly managed with more certainties and anticipated outcomes.

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