

Effect of Planning Practices on the Successful Completion of Projects in Rwanda - A Case of Lake Victoria Water and Sanitation Project in Kayonza District

Nyirabeza Marie Jeanne¹, Dr. Patrick Mulyungi²

¹Student, Jomo Kenyatta University of Agriculture and Technology

²Lecturer, Jomo Kenyatta University of Agriculture and Technology

Abstract: *In developing countries national and regional governments, local and international NGOs and other concerned organizations invest large sums every year for the implementation of rural water supply projects. In Rwanda in 2013 the then called EWSA institution there were notable delays of over 24 months in completion of a project called Gishoma Peat Power project and Water supply to the power plant was not yet completed which imply that REG had to provide generators for CIMERWA to be used by the factory following the delay in completion of that power plant. The power plant was funded by a loan from Bank of Kigali of USD 30,900,000 Frw 19,500,000,000) at interest rate of 15% per annum. Repayment of this loan was expected to be funded from power sales proceeds from September 2014. The general objective of this study was to assess the effect of planning practices on successful completion of water supply project. This research used the descriptive survey design; this is a survey of people who have had practical experience with the problem to be studied. The study was carried out in "Lake Victoria water and sanitation project in Kayonza district". The study targeted 93 people made out by people from government official from the ministries related to the project, program management unit, and town program team and from multi stakeholders forum; all of this people have participated in project planning. This study was used questionnaire and interprets for themselves while interviewer administration was applicable to respondents who preferred that the interviewer reads, interpret and record their responses. The model has a coefficient of determination (R^2) of .713. This means that 71.3% of variation of M&E influence by the variation of sanitation project. The level of significance is 0.05. this means that there is almost zero chances over one thousand that the model as a whole can be removed from predictors without affecting the project completion success. This indicates that there was a statistically significant effect of planning practices on Project completion success in Kayonza District. Multiple regression analysis was conducted to investigate the statistical effect of M&E planning and stakeholder involvement on the successful project completion in Rwanda. Based on the findings of the study, the researcher concludes that, the sources allocation, M & E influence the successful completion of water supply project in Kayonza District. This study sought to establish the effect of planning practices on successful project completion in Rwanda. The managers and others person involved in project management must consider with a high weight the resource planning activities given the fact that it is an important factor of successful project completion.*

1. Introduction

The project management literature is extensive with reference to continued project failures and the notion that over the years projects have increased in complexity. This is accompanied by concern that prescribed industry risk management standards are not effective enough in managing uncertainty and risk, especially in complex project environments (Craig, 2013). It is certainly normal for a product or system to fail after it has been produced. However, when it fails and cannot be repaired because it could be damaged beyond repairs or the resources with which to effect repairs are not available to the user, it is abandoned. Abandoned deliverables and projects are not strange to nationals of developing countries. Indeed, our industrial landscape is littered with abandoned project deliverables in various stages of disrepair. The common thread running through each of them is that they cannot be repaired and therefore abandoned for good. Much money is lost annually because of these failures. Investors in such projects are the countries who own the abandoned projects, the UN, World Bank, international agencies and communities. What is more, it leads to the economic retardation of nations. If not abandoned many project delay to deliver products to beneficiaries.

According to Gleik (2010) most of the water projects fail to achieve the intended objective of providing communities with safe water soon after the funders close the project. In order to make the investment in water supplies more effective, failure rates of these systems should be reduced. According to Gebrehiwot (2010), sustainability of water projects could originate from the project environment, lack of sufficient resources and management related issues. Obtaining sufficient knowledge of the factors, which influence sustainability of water projects, has the potential to positively influence sustainability of the water projects and enhance planning.

African development Fund (ADF, 2010) report shows that about 33% of rural water supply projects in Ethiopia are non-functional due to lack of funds for operation and maintenance, inadequate community mobilization and commitment, less community participation in decision making as well as lack of spare parts. As Harvey and Reed (2007) report showed that community issues like perceived lack of ownership, lack of education on water supply and sanitation, poor management system and limited demand are related to low sustainability rates of water supply systems (Harvey and Reed, 2007). Insufficient water facilities, poor physical structures, low reliability of the service and facility

designs, distance and time needed to collect water and low awareness about their uses are some of the factors that affect the continued functioning of the rural water supply systems. In addition to these inappropriate technologies use is also one of the factors. The sustainability of rural water supply systems is correlated with institutional, social, technical, environmental and financial dimensions (Habtamu, 2012)

Rwanda's rural water supply has traditionally faced such issues as top-down programming of investments, poor cost recovery, limited private sector participation, and high per-capita investment costs for system construction. Early attempts by the World Bank to introduce community participation and ownership of facilities failed in the absence of strong government commitment to decentralization. However, more recent rural projects have begun to yield results (USAID, 2010). However, the report of the auditor general of 2014, there shows notable delays of over 24 months in completion of Gishoma Peat project. Nineteen (19) water projects whose total contract amount was Frw 20,109,813,664 had several issues including delay ranging between 3 months and over 2 years.

The recent study aims at a better understanding of when and why projects at a global marketplace either fail or success as well as what factors are influential (Hamed, 2016).

This study will focus on contribution of planning practices on success of water and sanitation project implementation in Rwanda. Urbanization is placing an enormous burden on the secondary towns around Lake Victoria and its associated catchments. This is becoming a critical issue as all countries strive to achieve the Millennium Development Goals (MDGs) for water and sanitation. The formation of the East Africa Community (EAC)'s Lake Victoria Basin Commission (LVBC) gives a unique opportunity for these five countries to cooperate and share experiences as positive steps are taken towards extending access to safe water supplies, improved sanitation and hence improving the lake's eco-system.

Lake Victoria, the second largest lake in the world and one of the sources of the Nile River, is one of the most important trans-boundary natural resource in Africa. With ten countries in the Nile Basin, several of these depending on the lake for economic survival, the need to adopt a regional approach to the management of the lake, and the activities which impinge on its environmental sustainability has emerged as one of the main developmental challenges. In this regard, the Lake Victoria Water and Sanitation program (LVWATSAN) is one of a number of important programmes which are targeted at the promotion of regional cooperation, partnership-building, institutional and capacity enhancement, and a sense of joint ownership of the resources of the lake basin, all of which are central to the over-arching goal of managing the lake basin as a regional public good. Accordingly, the LVBC has transformed the vision and strategy framework of the stakeholders in the Lake Victoria Basin (LVB), as articulated by the LVBC, into a number of programs as part of a broader agenda to strengthen the shared interest in the lake and regional cooperation. Among these programs is the LVWATSAN, which has the overall objective of supporting secondary

urban centres in the Lake Victoria region to help them meet the water and sanitation related MDGs (ADF, 2010). This study will be conducted in Lake Victoria Water and Sanitation project in Kayonza District. The target population will be made by all the people who had something to do with the planning and implementation of this project.

2. Statement of the Problem

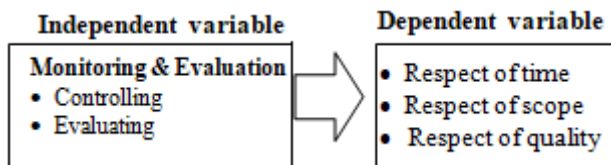
In developing countries national and regional governments, local and international NGOs and other concerned organizations invest large sums every year for the implementation of rural water supply projects (Gebrehiwot, 2006). However, construction of water projects does not help if they fail after a short time. In order to make the investment in water supplies more effective, failure rates of these systems should be reduced. Although many water projects have been initiated or planned in Rwanda, the majority have not been implemented as planned. Moreover the planning practices leading to the low/poor implementation are not well understood and studies on influence of planning practices on project completion are limited.

In Rwanda in 2013 the then called EWSA institution there were notable delays of over 24 months in completion of a project called Gishoma Peat Power project and Water supply to the power plant was not yet completed which imply that REG had to provide generators for CIMERWA to be used by the factory following the delay in completion of that power plant. The power plant was funded by a loan from Bank of Kigali of USD 30,900,000 Frw 19,500,000,000) at interest rate of 15% per annum. Repayment of this loan was expected to be funded from power sales proceeds from September 2014. This option did not materialize and EWSA was utilizing funds from other sources to meet interest and loan repayment obligations. Penalties and fines for delayed loan repayments to the tune of Frw 200,039,274 were incurred by EWSA up to 31 December 2014. Other nineteen (19) water projects whose total contract amount was Frw 20,109,813,664 had several issues including delay ranging between 3 months and over 2 years, contractual terms not complied with leading to defects that cast doubt on the sustainability of the water supply systems. Three (3) of the above 19 projects were relating to construction of 10 water tanks valued at valued Frw 1,293,908,104 which were completed but no water supply connected (OAG, 2016). The audit report (2014) suggested that poor budget planning leads to delayed implementation of the water and sanitation projects. There is a need to confirm the validity of above conclusion. There are limited studies on the influence of planning practices on implementation of water and sanitation projects. This leaves an information gap, which would be investigated in the current study.

3. Objective of the Study

To examine the effect Monitoring & Evaluation on successful completion of water supply project.

4. Conceptual Framework



Research Design

This research used the descriptive survey design; this is a survey of people who have had practical experience with the problem to be studied. The object is to obtain insight into the relationships between variables and new ideas relating to the research problem (Creswell, 2014). People who are competent and can contribute new ideas were carefully selected as respondents (to a questionnaire) to ensure a representation of different types of experience.

Target Population

The target population is the entire set of units for which the survey data are to be used to make inferences. Thus, the target population defines those units for which the findings of the survey are meant to generalize (Paul, 2008). The study was carried out in “Lake Victoria water and sanitation project in Kayonza district”. The study targeted 93 people made out by people from government official from the ministries related to the project, program management unit, and town program team and from multi stakeholders forum; all of this people have participated in project planning.

Data Collection Procedure

After the approval of the research by University, the researcher was given the letter of introduction to different institutions related to this study. The researcher then met Water and Sanitation Corporation (WASAC), management and gain permission to administer the survey instruments. The data collection instruments were both questionnaires and interview. The respondents included in the research were contacted according to their availability and at the place of their choice.

5. Research Findings and Discussion

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.779 ^a	0.713	0.593	0.27679

a. Predictors: (Constant), Monitoring_and_Evaluation.

The Table 1, shows the contribution of M&E on the successful completion of projects in Kayonza District. The model has a coefficient of determination (R^2) is 0.713, means that 71.3% of variation in M& E can influence the success of project completion.

Table 2: ANOVA^b

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	9.421	1	1.241	25.612	.000 ^a
	Residual	4.423	91	0.077		
	Total	12.312	92			

a. Predictors: (Constant), Monitoring_and_Evaluation.
 b. Dependent Variable: Successful_project_completion

The table 2, shows that the prob,(F) or p-value for the ANOVA test ($p = 0.000$), which was much less than the level of significance of 0.05. this means that there is significant relationship between M&E and Successful_project_completion.

Table 3: Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.622	0.231		6.25	0
	Monitoring_and_Evaluation	0.601	0.03	0.321	3.023	0

a. Dependent Variable: Successful of project_completion

Multiple regression analysis was conducted to investigate the statistical effect of M&E planning and Successful_of project_completion. From Table 3 show that, there is positive relationship between M & E planning on Successful_of project_completion.

The model equation in this relationship was:

$$Y = 1.622 + 0.601X_1 + \epsilon; \text{ where}$$

X_1 represents M&E planning

Y represents successful project completion.

6. Conclusion

Based on the findings of the study, the researcher concludes that, M & E influence the successful completion of water supply project in Kayonza District. M&E has a significant influence in the implementation of WS of lake victoria projects in kayonza. However, the M&E exercise has not been well integrated in the whole process just like other factors have been emphasized.

7. Recommendation

In consideration of the findings, the study suggests following recommendations

- The managers and others person involved in project management must consider with a high weight the resource planning activities given the fact that it is an important factor of successful project completion.
- There should be sufficient funds allocated to the projects by both the donors, national government, county government and other stakeholders. There should be identified and known sources of financial resources like defined national budgets, county budgets, external funding and many more set aside to address the situation.
- The study recommend for an integrate M&E process with set policies and regulations to take care of the whole process of the implementation of WS projects. This should be integrated in the process since the planning stage, all through to the implementation and hand over stages.

Monitoring and evaluation is an important factor to successful project completion, therefore project managers and the team in charge of project planning should consider this factor seriously rather than thinking that the monitoring and evaluation is easy and may be done without a pre-

established plan which could lead the completion of the project to disaster.

References

- [1] African Development Fund (ADF). (2010). *Lake Victoria Water Supply and Sanitation Program phase II*, program appraisal report.
- [2] Gebrehiwot, M. (2010). *An Assessment of Challenges of Sustainable Rural Water Supply: The Case of Oflla Woreda in Tigray Region*. Msc Thesis, A.A.U. Ethiopia.
- [3] Gleick, P. (2010). The World's Water 2006-2007. *The Biennial Report on Freshwater Resources*. Island Press, Washington, D.C.
- [4] Habtamu, A.B. (2012). *Factors affecting the sustainability of rural water supply systems: the case of Mecha Woreda, Amhara region, Ethiopia*. Project paper.
- [5] Hamed, T., Abolfazl, K. (2016). Critical factors that lead to projects' success/failure in global marketplace. *ELSEVIER Procedia Technology*. Volume 22, Pages 1066-1075).
- [6] Harvey, A., Reed, A. (2008) Community-Managed Water Supplies in Africa: Sustainable or Dispensable? *Community Development Journal* 42(3), 365–378.
- [7] OAG, (2016), *Projects with people: The practice of participation in rural development*. Geneva: International Labour Office
- [8] Paul, J. L. (2008). *Encyclopedia of survey research methods*. Sage, Thousand Oaks, CA 91320, USA.
- [9] USAID. (2010). *Rwanda water and sanitation profile*