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EFFECT OF DONOR SUPPORT ON SUCCESS OF ENVIROMENTAL PROJECTS IN RWANDA

A Case Study: Climate Change Adaptation Project in Rwanda (2010-2013)

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Abstract: **This study examined the effect of donor support on the success of Climate Change Adaptation project in Rwanda because most donors' projects failed due to poor financial accountability, inadequate capacity to manage the projects and lack of knowledge base technology to manage the projects. The researcher achieved this by use of three specific objectives namely; to assess the effect of financial support and accountability on the success of Climate Change Adaptation Project in Rwanda; to analyse the effect of capacity building on the success of Climate Change Adaptation Project in Rwanda and to analyse the effect of knowledge base information on the success of Climate Change Adaptation Project in Rwanda. The research is beneficial to the researcher, donor, government and JKUAT. The research theoretical review, conceptual and empirical literature on the theory, conceptual framework and research gap. Descriptive method of study based on qualitative and quantitative approach was used in order to get better analysis of the study. The population size was 65 and sample of 65 respondents was taken by use of Universal sampling technique. Both primary and secondary sources with relevant tools like questionnaire and documentary analysis were used in order to come up with required data. Data was processed by use of SPSS and analyzed by use of percentages, mean and standard deviation. The relationship between the variables was established by use of Pearson correlations model and the significant level was measured by a regression analysis based on regression models and Anova table. In the findings it was established that donor support has effect on success of environmental projects in Rwanda. Donor support in form of financial support service shows that donors provided operational funds, donors provided material funds, donors provided training funds and donors provided equipment funds. Findings on capacity building shows that donors have provided experts to advice on the project operations, donors have provided trainings for the project staffs and beneficiaries, donors have provided sensitization and training for community on climate change adaptation and donors have provided information available on climate change adaptation to the beneficiaries. The findings on knowledge base technologies shows that donors have provided technology on meteorological early warning system, donors have provided technology to improve innovations in the projects activities, donors have provided database which contains all information on Climate Change Adaptations and donors have provided technology that has promoted communication among the stakeholders. Donor support has, improved on project performance inform of income and standard of living. Table 4.3, 4.7, 4.10 and gave the relationship between Donor support on success of Climate Change Adaptation project whereby the respondents N is 65 and the significant level is 0.01, the results indicate that independent variable has Positive strong correlation to dependent variable equal to .951** and the p-value is .000 which is less than 0.01. When p-value is less than significant level, therefore researchers conclude that variables are correlated. This means that there is a significant relationship between donor support on success of Climate Change Adaptation project. Researcher can, therefore conclude that Donor support affects project success inform of income and standard of living.**

Keywords: **donor support, Climate Change Adaptation project, financial accountability.**

1. INTRODUCTION

Background of the Study:

In recent years funding aid operations have dramatically increased, along with the concern about the real impact of its initiatives (Crawford & Bruce 2003). Throughout the 90's a wide-range of efforts have been taken to support the blossoming non-profit sector and a considerable amount of money has been invested world widely. Such investment is expressed in figures by some scholars, who also suggest an increasing investment trend in a near future (Bebbington & Collison 2011). Despite the large amount of investment made and a great number of projects already implemented, changes to address global alarming issues have been considered inconsistent or even wholly inefficient (Jepson 2008). As a result, major donors are pressuring Nongovernmental organizations (NGO) to evidence their achievements and legitimate their cause.

Project goals are frequently concerned with social transformations, which are different from projects that are focused on time, cost and standardized quality procedures. NGO's projects are looking for change community perception, legal acceptability, social and environmental impacts, hence, project performance measurement is not straight forward and can be notionally complex (The Earth Watch Institute 2006). For this reason, standard project management practices might be not suitable in NGO's project context and an adapted set of managerial skills might be required (Crawford &Pollack, 2008). In response to the challenges posed by the Millennium Development Goals, the key stakeholders in international development set out a new agenda to improve the effectiveness of aid. This agenda, embodied in the Paris Declaration on Aid Effectiveness, articulates a series of commitments reflected by the following tenets: ownership, alignment, harmonization, managing for results, and mutual accountability. The World Bank's private arm, the International Finance Corporation, found that only half of its Africa projects succeed (Crawford & Bruce, 2008). Many other donors have not done much better. For example the World Bank initiated a $4.2 billion project dubbed Chad-Cameroon oil pipeline to the Atlantic Ocean in Chad. The pipeline was the biggest development project in Africa when it was completed in 2003. It was funded on condition that the money is spent with international supervision to develop Chad. However, President Idris Deby's government announced in 2005 that oil money would go toward the general budget and the purchase of weapons, or else oil companies would be expelled (The Earth Watch Institute, 2006).

In Lesotho, the World Bank, European Investment Bank and African Development Bank initiated a project dubbed Lesotho highlands water project at a cost of $3.5 billion. The project to divert fresh water from the mountains for sale to South Africa and for electricity began in 1986. But the electricity proved too expensive for most people, and the diversion of so much water caused environmental and economic havoc downstream (Associated Press, 2007). The development fund raised from selling the water was shut down in 2003. The courts convicted three of the world's largest construction firms on corruption charges and the project's chief executive were jailed (The Earth Watch Institute, 2006). Tens of thousands of people whose lives were ruined by the diversion are still waiting for compensation.

A project dubbed Office du Niger was funded by France at a cost of more than $300 million over 50 years. More than 30,000 people were forced to move to the desert to work on the largest aid project attempted by French colonial authorities. The African workers largely ignored French attempts to change traditional agricultural practices. By 1982, only 6 percent of the region was developed and the infrastructure was falling apart. The World Bank took over the project in 1985 and has shown limited success with rice farming (Crawford & Bruce, 2008). A project called Roll Back Malaria across Africa was funded by multiple agencies at a cost of about $500 million. Roll Back Malaria, established in 1998, aimed to halve malaria incidence by 2010. The program said Africa needed $1.9 billion a year to slow the disease, but by 2002 donors had only come up with $200 million a year. By 2004 the infection rate had risen 12 percent. Experts say donors rarely followed through with pledges and some programs were subject to political considerations, such as what kinds of insecticides to use, whether to buy cheap generic drugs or how much poor people should pay for mosquito nets.

In East Africa the Lake Turkana fish processing plant was initiated by the Norwegian Government at a cost of $22 million in Kenya. The project was designed in 1971 to provide jobs to the Turkana people through fishing and fish processing for export. However, the Turkana are nomads with no history of fishing or eating fish (Associated Press, 2009). The plant was completed and operated for a few days, but was quickly shut down. The cost to operate the freezers and the demand for clean water in the desert were too high. It remains a "white elephant" in Kenya's arid northwest. Therefore it's believed most of the projects have failed to succeed due to many factors, although some of them succeed.

It is on the basis of the above background that the researcher would like to examine the effect of Donor Support on success of Climate Change Adaptation Project in Rwanda. The problem facing rural people living in Western Rwanda is that the capacities of communities, local government, and national government to manage and cope with the greater frequency and intensity of droughts and floods are very limited(The Earth Watch Institute, 2009). The proposed project contributes towards mitigating this problem. The project aims to reduce the vulnerability of the Gishwati ecosystems and its associated Nile-Congo crest watersheds, and the people that derive their livelihoods from it, to increased floods and droughts due to climate change. The proposed project intervention area includes regions within the crest area of Nile-Congo basins, also categorized as the Gishwati ecosystem, identified through the NAPA process as being among the most vulnerable to climate change. These regions are already being adversely affected by the increased frequency in floods and landslides. Whilst the need for early warning and disaster preparedness systems among other adaptation measures, have been strongly called for since heavy flooding occurred in 2007, which took the lives of dozens of people in Nyabihu District in western Rwanda. Capacity to induce and strengthen disaster preparedness and adaptation at the decentralized government level is limited.

Local people have limited knowledge of climate change risks, adaptation needs and options throughout Rwanda. Additionally, individual, institutional and systemic capacities to act on such risks remain low. Although local coping mechanisms already exist, systematic risk and adaptive planning is not currently taking place and local communities are not yet fully engaged in desperately needed risk aversion and adaptation action. Further, critical research and information support from national institutions needed for effective adaptation action to take place in the district is currently lacking hence there is need for donor support inform of finance, capacity building and information through knowledge base system.

Statement of the problem:

Many donor projects around the world keep failing, resulting in loss of millions of dollars for organizations. This persisting challenge has led many project management professionals to attempt to identify the critical factors that need to be tackled head-on to produce a successful project management outcome. Hough (2004) demonstrates common problems with donor funded projects in South Africa which is pretty much the case with the problems seen in other parts of Africa. The problems with such projects are varied and include erroneous use of technology, monitoring and evaluation, empowerment of primary stakeholders, and accountability issues. For instance, during international debates, such as the one promoted by the United Nations (2007), it has been alarming that NGO's reputation is falling along with the society trust on their work capability.

There is a growing critique regarding the managerial competence of NGOs and it is increasing the claim to evidence their expertise on providing significant impacts. Indeed, it is apparent the call for accountability and professional management, which would assess work done; demonstrate its value and provide useful information for sponsors and general public (Ebrahim, 2003 & The Earth Watch Institute 2006). There are several factors which distinguish the aid industry as unique within project management environments, such as the social accountability claimed and the nature of the impact aimed (Crawford & Bruce 2008).

In Rwanda some government and donor projects have failed to meet their goal and objectives, for example Rwandan taxpayers have lost billions of francs on energy and infrastructure projects that were initially said to be feasible only to turn out to be impossible to implement. Appearing before the Parliamentary Committee on Political Affairs and Gender, the Minister of Infrastructure James Musoni admitted mistake was made in management of Karisimbi projects (East Africa Newspaper, April 24th 2015).

General Objectives:

The general objective of the study is to examine the effect of Donor Support on performance of Community project in Rwanda.

Specific objectives:

i. To assess the effect of financial support and accountability on the success of Climate Change Adaptation Project in Rwanda
ii. To analyse the effect capacity building on the success of Climate Change Adaptation Project in Rwanda
iii. To analyse the effect knowledge base technology on the success of Climate Change Adaptation Project in Rwanda

Research questions:

i. What is the effect of financial support and accountability on the success of Climate Change Adaptation Project in Rwanda?

ii. What is the effect capacity building on the success of Climate Change Adaptation Project in Rwanda?

iii. What is the effect knowledge base technology on the success of Climate Change Adaptation Project in Rwanda

Significance of the study:

This study is of importance to the researcher as it equips him with the knowledge about the effect of Donor Support on performance of Community project in Rwanda. It will also enable the researcher to obtain a Master's degree in Project Management. If the donors put this recommendation into considerations the report will help donors to account for resources and improve on their strategies on how to manage different projects being supported in developing countries like Rwanda. The research report will be available in library of JKUAT and be used by other future researchers who would be interested in this area of research.

Limitations of the Study:

Like any other research, the researcher is likely to encounter some limitations as seen below: Unavailability or inaccessibility of the information due to professional secrecy under its performance. However it was overcome by thorough explanation that the research is meant for academic purposes not any other intention.

The scope of the study:

The study scope was sub divided into geographical, subject and time scope:

The study examined the effect of Donor Support on performance of Environmental projects in Rwanda specifically Climate change adaptation project. The study shall focus on understanding how donor funds were spent and how other resources were utilized. Particular attention was put to Climate Change Adaptation Project located implemented in Ngororero, Rutsiro and Nyabihu Districts but managed in Kigali under REMA. The researcher focused on the period of four years from 2010 to 2013 during which the project was implemented.

2. RESEARCH METHODOLOGY

This chapter shows how the research was conducted. It describes the research design, study population, sampling procedure and sample size, data sources and collection instruments, measurement of variables and data analysis.

Research design:

The study is a descriptive design based on both qualitative and quantitative approach. A quantitative approach is linked to deductive method of testing theories while qualitative approach is characterized with inductive testing (Saunders, et al., 2003). The study focused more on the qualitative approach but in some instances, quantitative approach was employed in order to get better understanding and more insightful interpretation of the results. For this study, the quantitative method shall investigate the effects of donor support on success of Climate Change Adaptation project in Rwanda. The qualitative data collection method on the other hand shall investigate the extent to which the donor support affected the performance of Climate Change Adaptation project in Rwanda.

Target Population:

Target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well-defined or set of people, services, elements and events, group of things or households that are being investigated. This definition ensures that population of interest is homogeneous. And by population the researcher means complete census of the sampling frames. The population of this study comprised of 65 stakeholders of Climate Change Adaptation project in Rwanda.

Sample Design:

A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample (Kothari, 2004).

With this kind of technique, the researcher is certain to include elements that are presumed to be typical of a given population about which the researcher seeks information.

Sample Size Selection:

The sample size of the study was 65 respondents from Climate Change Adaptations in Rwanda comprising of different stakeholders ranging from donors representatives, government officials, project employees, beneficiaries representative and private sector representatives.

Sampling Techniques:

The researcher used universal sampling method as a preferred sampling technique because the population size is affordable and the researcher can be able to contact all the respondents. Stochastic Universal Sampling (SUS) is a technique used in genetic algorithms for selecting potentially useful solutions for recombination. It was introduced by James Baker (1968). Stochastic universal sampling is a development of fitness proportionate selection (FPS) which exhibits no bias and minimal spread.

Data Collection:

Primary data was gathered through structured questionnaires. On the other hand secondary data was collected from Climate Change Adaptations office. A semi-structured questionnaire was used to collect primary data. In order to ensure uniformity in response and to encourage participation, the questionnaire was kept short and structured with mostly multiple-choice selections in a likert scale. The questionnaires are preferred in this study because respondents of the study are literate and quite able to answer questions asked adequately. According to Mugenda and Mugenda (2003), questionnaires are commonly used to obtain important information about a population under study. The researcher obtained an introductory letter from the University to collect data then personally deliver the questionnaires to the respondents and has them filled in and then collect later: the drop and pick later method.

Validity and reliability:

First, an item analysis was done to see whether the items in the instrument belong there and a pre – test was carried out to check validity and reliability so as to minimize on vagueness of the results to be generated. The validity of the instrument was further measure using the Content Validity Index (CVI). Reliability (internal consistency and stability) of the instruments was tested using Cronbach's Alpha Coefficient. The researcher first test inter-item consistency reliability to ensure that there is consistency of respondents' answers to all items in the measure.

Data Analysis:

This involved data coding, editing and tabulation especially quantitative data where by the findings are interpreted by use of frequency, mean and standard deviation. The purpose of all these is to make the information clear and understandable for other people. Qualitative analysis techniques were used. The Qualitative analysis techniques were complemented by some statistics that was mainly obtained from the secondary. Graphical presentations gives clear understanding of the research interpretations for clear and easy understanding of the phenomenon studied. The relationship between the variables was established by use of Pearson correlations. A multivariate regression analysis was used to determine the relationship between the dependent and the independent variables.

The multivariate regression model was:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Where:

Y = project success;

β_0 = Constant Term;

β_1, β_2, and β_3 = Beta coefficients;

X_1= Financial support and accountability;

X_2= Capacity building;

X_3= Knowledge base Technology;

ε = Error term

The study used a 95% confidence level. A 95% confidence interval reflects a significance level of 0.05. This shows that for an independent variable to have a significant effect on the dependent variable, the p-value should be below the significance level (0.05).

Chi square (X^2) statistics was used to investigate whether distributions of categorical variables differed from one another. The ANOVA table was used to compare the tallies of categorical responses between the independent and dependent groups.

Ethical Considerations:

In conducting the researcher there are some ethics that were considered. The adherence to ethical consideration helps the researcher to have smooth process in data collection. In conducting my research, the researcher considered the followings ethics in order to establish rapport with the respondents:

There was Informed consent in doing research. The researcher got permission from the respondents to participate in the research. The researcher requested the project management office to allow their members to participate in the interview which required authority letter.

Confidentiality and privacy was one of the key issues to be observed. The researcher observed respondents confidentiality during the interviewing process. Researcher allowed the respondents to be free when conducting the interviews, mentioning names might look like coercing the respondents and was avoided.

3. RESEARCH FINDINGS AND DISCUSSION

This chapter presents research findings based on the field data and theoretical literature from related fields. It describes profile of the respondents (response according to gender, age, educational background and experience) and it further described the findings according to specific objectives namely; to assess the effect of financial support and accountability on the success of Climate Change Adaptation Project in Rwanda; to analyze the effect of capacity building on the success of Climate Change Adaptation Project in Rwanda and to analyze the effect knowledge base technology on the success of Climate Change Adaptation Project in Rwanda. Lastly the chapter shows the relationship between the key variables in the topic as well as the challenges and solutions to the problems being faced.

Profile of the respondents:

This section describes the respondent's response according to gender, age, educational background and experience.

Analysis in table 4.1shows that 60% of the respondents are male and 40% are female and this implies that there is no gender biasness since both male and female were represented. As far as description of gender is concerned, 41.5% of the respondents are between 31- 40 age group, 26.2% of the respondents are between 41- 50 age group, 18.5% were 51 years and above and 13.8% of the respondents are between 21- 30 age group. This implies that respondents were matured enough and the information they provided were relied on for the purpose of the research.

Furthermore researcher analyzed the age implications on the research, whereby 55.4% of the respondents were degree holders, 23.1% were post graduate holders and 21.5% were diploma holders and this implies that the respondents had the ability to respond to the questionnaires without much challenges and the information can be relied on. Lastly in analyzing the experience of the respondents on project management the analysis shows that 41.5% had experience of 5 years and above, 36.9% had experience of 3 - 5 Years and 21.5% had experience of 1 -3 Years, this implies that the respondents had enough knowledge in project management the information they have provided can be relied on for the purpose of this research.

Effect of financial support on success of Climate Change Adaptation Project in Rwanda:

Table 4.2 shows the assessment of financial support services provided in the project and its success of Climate Change Adaptation

Table 4.2: Assessment of Financial support on success

Assessments of Financial support services	Mean	Std. Deviation	Comments
Donors provided operational funds and its accounted for effectively	4.3231	.53349	Strong heterogeneity
Donors provided material funds and its accounted for effectively	4.1692	.48635	Strong homogeneity
Donors provided training funds and its accounted for effectively	4.2615	.53843	Strong heterogeneity
Donors provided equipment funds and its accounted for effectively	4.1538	.50716	Strong heterogeneity
Summary of findings	**4.2269**	**.51635**	**Strong heterogeneity**

Source: Primary data, 2018

Analysis in table 4.2 shows that donors provided operational funds and its accounted for effectively as reflected by strong mean of 4.3231 and heterogeneous standard deviation of .53349. In assessing whether donors provided material funds and it's accounted for effectively, it was reflected by strong mean of 4.1692 and heterogeneous standard deviation of .48635, implying that materials were provided and accounted for. Furthermore researcher wanted to assess whether donors provided training funds and if it's accounted for effectively, was reflected by strong mean of 4.2615 and heterogeneous standard deviation of .53843, implying that training was provided in the project. Lastly on whether donors provided equipment funds and it's accounted for effectively, this was reflected by strong mean of 4.1538 and heterogeneous standard deviation of .50716, implying equipment funds was provided in the project for effective operations. In Summary it can be concluded that to a large extent donors provided financial support for the project effective operations.

Table 4.3: Success of Climate Change Adaptation Project in Rwanda

Success of Climate Change Adaptation Project	Mean	Std. Deviation	Comments
The project has improved levels of income	4.2154	.51515	Strong heterogeneity
The project has improved standards of living	4.3385	.53843	Strong heterogeneity
Summary of findings	**4.27695**	**0.52679**	**Strong heterogeneity**

Source: Primary data, 2018

Analysis in shows that the project has improved levels of income effectively as reflected by strong mean of 4.2154 and heterogeneous standard deviation of .51515 and the project has improved standards of living, reflected by strong mean of 4.3385 and heterogeneous standard deviation of .53843. This implies that the project improved standards of living and has improved levels of income.

Table 4.4: Correlations between financial support on success of Climate Change Adaptation

Relationship		Financial support	Success of Climate Change Adaptation Project
Financial support	Pearson Correlation	1	.963**
	Sig. (2-tailed)		.000
	N	65	65
Success of Climate Change Adaptation Project	Pearson Correlation	.963**	1
	Sig. (2-tailed)	.000	
	N	65	65
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.4 gave the relationship between financial support on success of Climate Change Adaptation project whereby the respondents N is 65 and the significant level is 0.01, the results indicate that independent variable has Positive strong correlation to dependent variable equal to .963** and the p-value is .000 which is less than 0.01. When p-value is less than significant level, therefore researchers conclude that variables are correlated. This means that there is a significant relationship between financial support services on success of Climate Change Adaptation project. Researcher can, therefore conclude that financial support services improved the success of Climate Change Adaptation project inform of income and standard of living.

Effect of capacity building on success of Climate Change Adaptation Project in Rwanda:

Table 4.5 shows capacity building services provided in the project and its success of Climate Change Adaptation

Table 4.5: Capacity building on success

Assessments of capacity building services	Mean	Std. Deviation	Comments
Donors have provided experts to advice on the project operations	4.3385	.56670	Strong heterogeneity
Donors have provided trainings for the project staffs and or beneficiaries	4.2769	.59968	Strong heterogeneity
Donors have provided sensitization and training for community on climate change adaptation	4.2462	.61316	Strong heterogeneity
Donors have provided information available on climate change adaptation to the beneficiaries	4.4154	.55600	Strong heterogeneity
Summary of findings	**4.2269**	**.51635**	**Strong heterogeneity**

Source: Primary data, 2018

Analysis in table 4.5 shows that donors have provided experts to advice on the project operations as reflected by strong mean of 4.3385 and heterogeneous standard deviation of .56670. In assessing whether donors have provided trainings for the project staffs and or beneficiaries, it was reflected by strong mean of 4.2769 and heterogeneous standard deviation of .59968, implying that there was staff training in the project. Furthermore researcher assessed whether donors have provided sensitization and training for community on climate change adaptation, was reflected by strong mean of 4.2462 and heterogeneous standard deviation of .61316, implying that sensitization training was provided in the project. Lastly on whether donors have provided information available on climate change adaptation to the beneficiaries, this was reflected by strong mean of 4.4154 and heterogeneous standard deviation of .55600, implying there was available information on climate change for effective operations. In Summary it can be concluded that to a large extent donors provided capacity for effective operations of the project.

Table 4.6: Success of Climate Change Adaptation Project in Rwanda

Success of Climate Change Adaptation Project	Mean	Std. Deviation	Comments
The project has improved levels of income	4.2154	.51515	Strong heterogeneity
The project has has improved standards of living	4.3385	.53843	Strong heterogeneity
Summary of findings	**4.27695**	**0.52679**	**Strong heterogeneity**

Source: Primary data, 2018

Analysis in table 4.6 shows that the project has improved levels of income for effectively as reflected by strong mean of 4.2154 and heterogeneous standard deviation of .51515 and the project has improved standards of living, reflected by strong mean of 4.3385 and heterogeneous standard deviation of .53843. This implies that the project improved standards of living and has improved levels of income.

Table 4.7 Correlations between Capacity building on success of Climate Change Adaptation

Relationship		Capacity building on success	Success of Climate Change Adaptation Project
Capacity building on success	Pearson Correlation	1	. 941**
	Sig. (2-tailed)		.000
	N	65	65
Success of Climate Change Adaptation Project	Pearson Correlation	. 941**	1
	Sig. (2-tailed)	.000	
	N	65	65
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.7 gave the relationship between Capacity building on success on success of Climate Change Adaptation project whereby the respondents N is 65 and the significant level is 0.01, the results indicate that independent variable has Positive strong correlation to dependent variable equal to .941** and the p-value is .000 which is less than 0.01. When p-value is less than significant level, therefore researchers conclude that variables are correlated. This means that there is a significant relationship between capacity building services on success services on success of Climate Change Adaptation

project. Researcher can, therefore conclude that capacity building services affects project performance inform of income and standard of living.

Effect knowledge base technology on the success of Climate Change Adaptation Project:

Table 4.8 shows assessment of knowledge base technology services provided in the project and its success of Climate Change Adaptation

Table 4.8: Assessment of knowledge base technology

Assessments of knowledge base technology	Mean	Std. Deviation	Comments
Donors have provided technology on meteorological early warning system	4.3077	.58425	Strong heterogeneity
Donors have provided technology to improve innovations in the projects activities	4.2154	.59928	Strong heterogeneity
Donors have provided database which contains all information on Climate Change Adaptations	4.2769	.59968	Strong heterogeneity
Donors have provided technology that has promoted communication among the stakeholders	4.3846	.55035	Strong heterogeneity
Summary of findings	**4.2269**	**.51635**	**Strong heterogeneity**

Source: Primary data, 2018

Analysis in table 4.8 shows that donors have provided technology on meteorological early warning system as reflected by strong mean of 4.3077 and heterogeneous standard deviation of .58425. In assessing whether donors have provided technology to improve innovations in the projects activities, it was reflected by strong mean of 4.2154 and heterogeneous standard deviation of .59928, implying that technology has improved innovations in the project. Furthermore researcher assessed whether Donors have provided database which contains all information on Climate Change Adaptations, was reflected by strong mean of 4.2769 and heterogeneous standard deviation of .59968, implying that database for which collect relevant information regarding the project. Lastly on whether donors have provided technology that has promoted communication among the stakeholders, this was reflected by strong mean of 4.3846 and heterogeneous standard deviation of .55035, implying technology improved on effective communication in the project. In Summary it can be concluded that to a large extent technology improved effective operations of the project.

Table 4.9: Success of Climate Change Adaptation Project in Rwanda

Success of Climate Change Adaptation Project	Mean	Std. Deviation	Comments
The project has improved levels of income	4.2154	.51515	Strong heterogeneity
The project has improved standards of living	4.3385	.53843	Strong heterogeneity
Summary of findings	**4.27695**	**0.52679**	**Strong heterogeneity**

Source: Primary data, 2018

Analysis in table 4.9 shows that the project has improved levels of income for effectively as reflected by strong mean of 4.2154 and heterogeneous standard deviation of .51515 and the project has improved standards of living, reflected by strong mean of 4.3385 and heterogeneous standard deviation of .53843. This implies that the project improved standards of living and has improved levels of income.

Table 4.10: Correlations between knowledge base technology on success of the project

Relationship		knowledge base technology	Success of Climate Change Adaptation Project
knowledge base technology	Pearson Correlation	1	. 949**
	Sig. (2-tailed)		.000
	N	65	65
Success of Climate Change Adaptation Project	Pearson Correlation	. 949*	1
	Sig. (2-tailed)	.000	
	N	65	65
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.10 gave the relationship between knowledge base technology on success on success of Climate Change Adaptation project whereby the respondents N is 65 and the significant level is 0.01, the results indicate that independent

variable has Positive strong correlation to dependent variable equal to .949** and the p-value is .000 which is less than 0.01. When p-value is less than significant level, therefore researchers conclude that variables are correlated. This means that there is a significant relationship between knowledge base technologies on success services on success of Climate Change Adaptation project. Researcher can, therefore conclude that knowledge base technologies affects project performance inform of income and standard of living.

Relationship between donor support and success of environmental projects in Rwanda:

This sections presents relationship between the variables inform of model summary, Anova table and coefficients table.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.976[a]	.952	.950	.22397
a. Predictors: (Constant), knowledge base technology, Capacity building on success, financial support				

R-square =0.976(97.6%). 97.6% variations in project success (improved level of income and standard of living) have been captured by the model used. Since the p-value is of 0.000, the model performance is statistically significant /very good.

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	61.002	3	20.334	405.369	.000[b]
	Residual	3.060	61	.050		
	Total	64.062	64			
a. Dependent Variable: Success of Climate Change Adaptation Project(improved level of income and standard of living)						
b. Predictors: (Constant), budget planning, budget implementation, budget monitoring NB This implies that there is a very strong relationship between knowledge base technology, Capacity building on success and financial support as per the mean square of 20.334 as also reflected by sig level of .000						

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.227	.251		.904	.370
	Financial support	.314	.038	.607	8.173	.000
	Capacity building on success	.113	.097	.252	1.165	.248
	Knowledge base technology	.062	.106	.137	.581	.563
a. Dependent Variable: Success of Climate Change Adaptation Project						

H0: Financial support service has no significant effect on project Success:

Hypothesis H0 proposes that financial support services have significant effect on process success. The results indicate that financial support services have relationship with project success. The coefficient of determination is 0.000 which indicates that there is positive relationship (.314) between financial support services and project success. These results provide reasonable evidence to the consistent view that, there is increase level of income and standard of living. The beta of financial support services is .607 with a t-statistic of 8.173. The positive coefficients mean a 1% increase in financial support services leads to a .314% increase in project success and the positive t-statistic value indicates that the effect is statistically significant at 5 % test level.

H1: Capacity building on success has no significant effect on project Success:

Hypothesis H1 proposes that Capacity building services has significant effect on project success. The results indicate that Capacity building services has relationship with project performance. The coefficient of determination is 0.000 which indicates that there is positive relationship (.113) between Capacity building services and project success. These results provide reasonable evidence to the consistent view that, there is increase level of income and standard of living. The beta of Capacity building services is .252 with a t-statistic of 1.165. The positive coefficients mean a 1% increase in Capacity building services leads to a .113% increase in project success and the positive t-statistic value indicates that the effect is statistically significant at 5 % test level.

H2: Knowledge base technology has no significant effect on project Success:

Hypothesis H2 proposes that Knowledge base technology has significant effect on project success. The results indicate that Knowledge base technology has relationship with project success. The coefficient of determination is 0.000 which indicates that there is positive relationship (.062) between Knowledge base technology and project success. These results provide reasonable evidence to the consistent view that, there is increase level of income and standard of living. The beta of Knowledge base technology is .581 with a t-statistic of .137. The positive coefficients mean a 1% increase in Knowledge base technology leads to a .062% increase in project success and the positive t-statistic value indicates that the effect is statistically significant at 5 % test level.

Donor support challenges affecting Success of the project:

The researcher has realized that they are some few challenges facing success of the projects which includes; Inadequate funding for effective operations of the project, inadequate knowledge on environmental science management project and inadequate knowledge on technological utilisation hence affecting project operations.

4. SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this chapter is to summarize the research project. It includes of the summary of the findings, conclusions and discussion. It also recommends areas for further research in future studies.

Summary of Findings:

The study summary was based on specific objectives namely; To assess the effect of financial support and accountability on the success of Climate Change Adaptation Project in Rwanda; To analyse the effect of capacity building on the success of Climate Change Adaptation Project in Rwanda and to analyse the effect of knowledge base information on the success of Climate Change Adaptation Project in Rwanda.

Financial support service and project Success:

Findings on financial support service shows that donors provided operational funds and it is accounted for effectively, donors provided material funds and it is accounted for effectively, donors provided training funds and if it is accounted for effectively, and lastly donors provided equipment funds and it is accounted for effectively. Financial support has improved on project performance in form of income and standard of living. The results further indicate that financial support services have relationship with project success. The coefficient of determination is 0.000 which indicates that there is positive relationship (.314) between financial support services and project success. These results provide reasonable evidence to the consistent view that, there is increase level of income and standard of living. The beta of financial support services is .607 with a t-statistic of 8.173. The positive coefficients mean of 1% increase in financial support services leads to a .314% increase in project success and the positive t-statistic value indicates that the effect is statistically significant at 5 % test level.

Capacity building and project Success:

Findings on shows that donors have provided experts to advice on the project operations, donors have provided trainings for the project staffs and or beneficiaries, donors have provided sensitization and training for community on climate change adaptation and donors have provided information available on climate change adaptation to the beneficiaries. Capacity building has, improved on project performance inform of income and standard of living. The results further indicate that Capacity building services has relationship with project performance. The coefficient of determination is 0.000 which indicates that there is positive relationship (.113) between Capacity building services and project success. These results provide reasonable evidence to the consistent view that, there is increase level of income and standard of living. The beta of Capacity building services is .252 with a t-statistic of 1.165. The positive coefficients mean a 1% increase in Capacity building services leads to a .113% increase in project success and the positive t-statistic value indicates that the effect is statistically significant at 5 % test level.

Knowledge base technology and project Success:

Findings on shows that donors have provided technology on meteorological early warning system, donors have provided technology to improve innovations in the projects activities, donors have provided database which contains all information on Climate Change Adaptations and donors have provided technology that has promoted communication among the stakeholders. Knowledge base technology has, improved on project performance inform of income and

standard of living. The results further indicate that Knowledge base technology has relationship with project success. The coefficient of determination is 0.000 which indicates that there is positive relationship (.062) between Knowledge base technology and project success. These results provide reasonable evidence to the consistent view that, there is increase level of income and standard of living. The beta of Knowledge base technology is .581 with a t-statistic of .137. The positive coefficients mean a 1% increase in Knowledge base technology leads to a .062% increase in project success and the positive t-statistic value indicates that the effect is statistically significant at 5 % test level.

Conclusion:

In conclusion, it was established that donor support has effect on success of environmental projects in Rwanda. Donor support inform of financial support service shows that donors provided operational funds, donors provided material funds, donors provided training funds and donors provided equipment funds. Findings on capacity building shows that donors have provided experts to advice on the project operations, donors have provided trainings for the project staffs and beneficiaries, donors have provided sensitization and training for community on climate change adaptation and donors have provided information available on climate change adaptation to the beneficiaries. The finding on knowledge base technologies shows that donors have provided technology on meteorological early warning system, donors have provided technology to improve innovations in the projects activities, donors have provided database which contains all information on Climate Change Adaptations and donors have provided technology that has promoted communication among the stakeholders. Donor support has, improved on project performance inform of income and standard of living. Table 4.3, 4.7, 4.10 and gave the relationship between Donor support on success on success of Climate Change Adaptation project whereby the respondents N is 65 and the significant level is 0.01, the results indicate that independent variable has Positive strong correlation to dependent variable equal to .951** and the p-value is .000 which is less than 0.01. When p-value is less than significant level, therefore researchers conclude that variables are correlated. This means that there is a significant relationship between Donor support on success services on success of Climate Change Adaptation project. Researcher can, therefore conclude that Donor support affects project performance inform of income and standard of living.

Recommendations:

The researcher came up with the following recommendations.

- Donors should increase on project fund in order to improve on project operations effectively inform of equipments and other operational funds.
- The project beneficiaries and employees should be trained on project operations for effective operations of the project.
- Project beneficiaries should have access to project information through various technological means like internet.
- Government should supplement on project resources for effective and efficient management of public funds

REFERENCES

[1] African Development Fund (2010): Projet d'appui au Développement Agricole de Bugesera (PADAB). *Rapport devaluation.*

[2] Agresti, Alan, and Barbara Finlay. (2009). *Statistical Methods for the Social Science*. Fourth edition. Upper Saddle River: Pearson Prentice Hall

[3] Barry, E. and Jamie, E. (2010). *Financial Accounting and Reporting 8th edition* prentice-hall united kingdom.

[4] Barth, M. & Landsman, W. (2010). *How did financial reporting contribute to the financial crisis? European Accounting Review.* [Online] 19 (3) p. 399-423. Available

[5] Crawford, L & J. Pollack (2009) "Hard and Soft Projects: A Framework for Analysis." *International Journal of Project Management*, vol 22, pp 645-652; Elsevier Ltd.

[6] Crawford, P and Bryce, P (2008)"Project monitoring and evaluation: a method for enhancing the efficiency and effectiveness of aid project implementation". *International Journal of Project management* 21, 363-373,

[7] Cronbach, L. J., J. E. Deken, & Webb, N. (1976) Research on Classrooms and Schools: Formulation of Questions, *Design, and Analysis* (Stanford, CA: Stanford University).

[8] David A &, Anne B (2008), *Financial Reporting: A review*. Cengage The seventh edition, Learning EMEA.

[9] Ebrahim, A (2011), 'Making sense of accountability: conceptual perspectives for northern and southern nonprofits', Nonprofit Management & Leadership, vol. 14, no. 2, pp. 191 – 212.

[10] FAO (2008). *Climate Change Adaptation Projectand mitigation in the food and agriculture. S*ector. Technical background document from the expert consultation, 5-7 March, 2008 FAO, Rome.

[11] Gasper, D (2008) "Evaluating the `logical framework approach' towards learning-oriented development evaluation" Public Administration and Development, vol. 20, pp. 17- 28.

[12] IFAD, (2006) *Enabling the rural poor to overcome poverty in Rwanda*, November 2006.

[13] Kothari, R. C (2008); Research Methodology; Methods and Techniques, 2nd end, *New Age International (P) Limited, India*

[14] Manishimwe, J (2012) Contribution of Caritas Rwanda in promoting horticultural products. Case study: PASAB II, Pineapple, Bugesera District. Dissertation Submitted to the Faculty of Agriculture Department of Agricultural Economics and Agribusiness in Partial Fulfillment of the Requirements for the Bachelor's Degree with Honor in Agricultural *Economics and Agribusiness.*

[15] Morgan, P. and A. Qualman (2008) '*Institutional and Capacity Development, Results-Based Management and Organizational Performance',* Document prepared for CIDA Policy Branch, May.

[16] Saunders, M. (2003) Research *methods for Business Students*. 3rd edition

[17] The Earth Watch Institute (2009), "A review of biodiversity conservation performance measurement", viewed 10th October 2008,

[18] World Bank (2012), Empowerment and Poverty Reduction: A Sourcebook, Washington, D.C.: World Bank

[19] Hui, W. S., Othman, R. O., Normah, O., Rahman, R. A. & Haron, N. H. (2011). Procurement issues in Malaysia. *International Journal of Public Sector Management,* 24(6), 567- 593.