

Project Implementation and Socioeconomic Development of the Beneficiaries in Rural Areas of Rwanda.

A Case of Akanyaru Watershed Protection Project in Gisagara District

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Abstract- The study was carried out to assess the impact of project implementation on the socioeconomic of people living in rural areas of Rwanda and Akanyaru Watershed Protection project at Gisagara district was taken as a case study. Descriptive research design was used in this study. The population under study was 8000 people living in Gisagara district and is stakeholders of Akanyaru Watershed Project (AWP) which involves participants within this project, beneficiaries, cooperatives, and government authorities which is supported by RSSP from which a sample of 99 respondents was selected. Purposive sampling technique was used to select the sample respondents. The findings showed that majority of the respondents were female at 55.43%. 60.87% of the respondents were aged between 26 and 45 years. The research findings have revealed that majority of the respondents indicated rehabilitation of the marshland areas with a percentage of 31.5%. 56.5% agreed and 30.4% strongly agreed that they are aware of the project implementation plan and the time it will be completed. 38% indicated the Girinka program is the main activity contributing to improving their lives. The findings further showed that 37% of the respondents indicated that the project has contributed greatly to environmental sustainability. On whether the social life of the respondents has improved since the beginning of this project, 44.6% said at high extent, 40.2% at moderate extent. The findings gave an adjusted $R^2=0.528$. This implies that 52.8% of the socioeconomic development of the beneficiaries in rural areas is attributed to the project implemented in these areas. The ANOVA results showed that the research model was significant ($p=0.000$) at 5% and that the regression coefficients for all the indicator variables are positive and significant. The researcher recommends that project implementation should be carried out in a framework that is inclusive of the key stakeholders especially the intended beneficiaries and the local community. The researcher recommends that policy makers and the government agent should increase project visibility in the rural areas. Since these community projects have a great significant influence on the livelihood of the rural residents, the government, and its agents and in cooperation with donors and non-governmental organization should increase projects in rural areas.

Index Terms- Project implementation, socioeconomic development, Beneficiaries, Rural areas, watershed protection project

I. INTRODUCTION

The economic development of any given nation has been a concern for both the policy makers and scholars. The interest for the economic development has in recent years shifted its attention not only to the general growth of the economy but also to regional growth. This interest has especially been associated with the need to see development in the marginalized and rural areas. For instance, the trend in rural regions in America was by the 1970s characterized by price hike, farming activities and access to credit for the farmers. Different investment activities have taken place in various rural regions like North Dakota with the aim of supporting immediate beneficiaries in such investment services. In addition, they are also geared towards the development of the whole community. Such investments include value adding processing plants. These have also tended to improve the lives of the majority through job creation with adequate pay for the support of the families in rural areas (World Bank, 2018).

In an attempt to increase the use and the productivity of agricultural land, the government of Rwanda and its agents established the Rural Sector Support Project (RSSP) in 2001. This was also intended to make better use of marshlands and hillside regions especially to cater for the most vulnerable. It was also targeting those who were landless and the displaced who were not in the Rwandan land compensation legislation (Ministry of Agriculture, 2015). RSSP's objective of stimulating and improving the rural regions in terms of economic empowerment and uplifting the living standards of the rural residents. This was to be achieved through various means like the technical skills transfer, training and financial means for the rural areas to be more and more self-reliable and sustainable. In phase one, the project was intended to captivate on capacity building for sustainable development. The project objective was to cover a wide range of areas that characterize the rural residents and the marginalized.

The scope covered the gender equality, resource management, marshlands better use, among others (Ministry of Agriculture, 2015).

In addition, the Government of Rwanda (GoR) has been implementing and executing various strategies that are aimed at reducing poverty through various initiatives like sustainable development projects. Following such initiatives, the GoR received funding from the International Development Association (IDA) which were aimed at implementing and supporting programs like Rural Sector Support Project third phase (RSSP3) under the Ministry of Agriculture and Animal Resources (MINAGRI). The main objective of RSSP3 is to promote various economic activities especially in rural regions in order to make the rural areas more stable and economically sustainable. This objective also was aimed at making the rural household income to be more stable and sufficient to support the households' needs (Rural Sector Support Project, 2012).

In 2003, Rwanda signed the Maputo Declaration committing herself to the Comprehensive Africa Agriculture Development Programme (CAADP) of the New Partnership for Africa's Development (NEPAD). The main framework of CAADP is guided by main principles of ensuring that the African countries reach greater heights in relation to economic development achieved especially through agricultural support (Bizimana, *et al.*, 2012).

To this, Rwanda is seen as one among the first to sign the CAADP compact in 2007. This was a collaborative effort among different players who saw this come to effect. These include the government itself, the donors, New Partnership for Africa's Development, COMESA, civil society and private sector. Since then, the agricultural development has improved tremendously in relation to the development of institutions, availability of food and in the eradication of poverty (Flaherty, Stads & Srinivasacharyulu, 2013).

These progressive achievements began with efforts of creating conducive operating environment which culminated with publishing a long term policy framework as well as the framework of the economic policy which is medium term in nature (PRSP 2001/2005, EDPRS 2008/2012 and EDPRS II 2013/2018). The Vision 2020 Umurenge Programme (VUP) is other keystone programmes of the National EPDRS (2008-2012) intended to handle these challenges (MINAGRI, 2012). Therefore, those households and individuals in the extreme poverty bracket should adopt various approaches integrated with different economic activities if they are to adequately address their needs. One of the support mechanisms highlighted is the cash transfers which can be a viable solution to resources inadequacy if the market has the goods that are needed readily available at affordable. In order to support the extreme poor households, the direct support strategy was adopted in order to lift these households from their deplorable conditions. This would enable such households to stand on their feet and be able to explore other avenues through which they can be able to generate their income. This would enable them to achieve, long term goal of economic self-reliance. It is from this background therefore that this study intended to assess the socioeconomic impacts of rural sector support projects in Rwanda.

Majority of the population in Rwanda survive in conditions that are characterized as high poverty level. There are various

factors that have contributed to this current situation. Some of these include the 1994 genocide history, traditional agricultural practices yielding low productivity, high population pressure, poor marketing outreach for agricultural products, poor infrastructure, and lack of access to funding, among others. Although the Rwanda Vision 2020 Umurenge Programme (VUP) (which was recently updated to the Vision 2050) is a cohesive strategy intended to bring the balance in the economic activities in order to promote socioeconomic development. Such activities can spur growth through job creation, poverty eradication and proper use of the available resource. One of the main challenges that has affected majority of the rural area residents is the management of the scarce resources available to them. At the same time, the challenge at the national level on how to best utilize the available resource to maximize their use and the intended benefits.

Further, most of the intended beneficiaries for a project fail to enjoy the benefits that the project promises due to poor project implementation strategies. In majority of community development projects, there are various challenges encountered in the implementation of the project. These are related to managerial problems, lack of sufficient resources, poor coordination of tasks and delayed project delivery, among others. Community related projects are intended to benefit the local people by improving their living standards through provision of different services (UNDP, 2017). However, poor implementation of some projects, with others delaying to kick start, has made people not to enjoy these benefits to full. For instance, during the planning of the Akanyaru Watershed protection project, it was estimated the project would take a maximum of 36 months. However, the project completion was delayed and took 60 months instead (FONERWA, 2020). The delays were experienced during the project implementation stage and caused a delay in enjoying the project benefits. There is therefore the need for thorough investigation to this matter and to establish how project implementation can help in making the project beneficiaries enjoy the intended benefits of the project. For these reasons, this research project sought to assess the impact of project implementation to the socioeconomic development in Rwanda, taking a case of Akanyaru Watershed protection (AWP) project in Gisagara District and the specific objective that guided this study were

In a more precise term, the specific objectives of this research were:

- i) To assess the level of project implementation in Akanyaru Watershed protection (AWP) project in Gisagara District.
- ii) To identify socioeconomic development of Akanyaru Watershed protection (AWP) project in Gisagara District.
- iii) To examine the relationship between project implementation and the socioeconomic development to the beneficiaries of Akanyaru Watershed protection (AWP) project in Gisagara District.

II. LITERATURE REVIEW

2.1 Theoretical Literature

This part helps to understand the content of research topic that involves project implementation and socioeconomic development in rural Rwanda.

2.1.1 Project Implementation

According to Project Management Book of Knowledge (PMBOK), there are five different stages that are involved in project management. These stages or phases of project management are all crucial for the success of a project. They include Project implementation defined as the conceptual and initiation, planning, execution, monitoring and evaluation and project closer. All these phase are interlinked to give what is known as five phases of project life cycle (PMI, 2016). If one of the phase delays to kick start or stalls in the process, it affect the other phase and consequently the whole project. Project management therefore entails coordinating these different phases to ensure that project deliverables are achieved alongside meeting the project expected outcomes.

According to Mukherje and Roy (2017) project management is initiated when there is an initial feasibility study that determines the need for the project and lay out the initial objectives to be met by the project. Soon after this conceptualization of the project, project planning follows where all the project requirements are drafted in order for the project to meet the project scope, budget and timeframe. This phase is followed by project execution, also known as project implementation phases. In this phase, the deliverables are developed and completed. It involves the actual performance of the project. What follows after this phase is project monitoring and evaluation, in which the management measures the project progress and success along key performance indicators (KPI). Last in the project life cycle involves the project closure where the project is said to be completed and is therefore terminated. For the purpose of this study, the main concern is the third phase in the project life cycle, namely project execution or project implementation (Todorovic Mitrovic & Bjelica, 2013).

As stated by Cusworth and Franks (2013), project implementation is one of the main phase in project management and can be considered the key determinant of project activation and success. After all the paper work has been done in the first two stages, project implementation involves bringing those plans in to effect or rather into action. The project managers as well as the team in charge of the project are mandated to see to it that the project execution has taken place with the right design in place. Moreover, the paper plans should be well communicated to all the participants to ensure the smooth kick off of the project. Failure to ensure that everything is ready in terms of resources may end up having the project making a false start. Further, it is the duty of the project planners and managers to ensure that the start of the project is on time.

According to Biafore & Stover (2012), project implementation is seen as the heart or the engine of any project where plans and budget meet actions. Those actions are usually directed towards making the project implementation a success. The actions plans must be coordinated by a central or sometime in collaboration with other centers to ensure that the available resource are utilized to the maximum. Since a project involves various activities, a successful implementation of a project is one that is able to subdivide the activities to different centers. These centers can be headed by different project team heads to ensure that actions within their center rum on smoothly and are well coordinated. Moreover, the ultimate goal of the project is to achieve timely completion, within the set budget and fulfil the

intended scope. To achieve this ultimate goal, all project actions should be cohesively organized and coordinated.

2.1.2 Implementing Project Deliverables

Project deliverables refer to the tangible and quantified expected outcomes of a project. For a project to be considered as a success, project deliverables should be identified in the early stages of the project. While implementing on these deliverables in the execution stage, the project is able to meet the overall expected outcomes. However as noted by Schwindt and Zimmermann (2015), project deliverables can also include intangible outcomes like the services attributed to the project. The project deliverables involve what the project owners and the stakeholders expect to obtain as the end result of the project. In social development project for instance, the community expect to gain both economically and socially from the projects. In the rural and remote areas, projects that are geared towards improving the community well-being should be gauged on the ability to deliver on this promise.

According to Cicala (2020), project outcomes can be seen from two angles, one is the overall project outcomes at the closure of the project life when the project is completed, the other is the 'small' deliverables attained during the project life time. In the implementation stage the management is more concerned with deliverables arising from different tasks that have being identified and assigned to different people. Moreover, the project deliverables are measurable either quantitatively or qualitatively and should be monitored during the implementation stage. The deliverables vary in all the tasks within a project and cumulatively should point to the overall performance of the project.

Project deliverables within different tasks are seen to be a good management tool for the project to deliver to their overall expectations. They chart the path for the project to reach its end result as specified in the project scope. Hence, the deliverables should be within the scope, budget and the timeframe of the overall project. In project execution, the delivery of any project outcome is regarded as a key indicator of the project progress (Biafore and Stover, 2012; Horine, 2013).

As noted by Hornby (2017), one of the main responsibilities of a project manager is in regard to defining, tracking and managing project deliverables within the stated project plan. A deliverable should be in line with the project scope and both the external an internal stakeholder should agree to it. It also seen as a result of deliberate and coordinated work. The overall direction of the deliverables is to accomplish the project objective. For instant, in rural projects that are geared to impact on the socioeconomic development of the community, the deliverables at the implementation stage should be related to improving the social and economic lives of the intended stakeholders.

2.1.3 Rural Projects implementation in Rwanda

In an attempt to increase the use and the productivity of agricultural land, the government of Rwanda and its agents established the Rural Sector Support Project (RSSP) in 2001. This was also intended to make better use of marshlands and hillside regions especially to cater for the most vulnerable. It was also targeting those who were landless and the displaced who were not in the Rwandan land compensation legislation (Ministry of Agriculture, 2017). RSSP's objective of stimulating and

improving the rural regions in terms of economic empowerment and uplifting the living standards of the rural residents. This was to be achieved through various means like through technical skills acquisition, training and financial means for the sustainability of development of rural areas. In phase one, the project was intended to captivate on capacity building for sustainable development. The project objective was to cover a wide range of areas that characterize the rural residents and the marginalized. The scope covered the gender equality, resource management, marshlands better use, among others. In its first phase, RSSP concentrated on the Marshland rehabilitation in order to maximize the productivity of these areas. They targeted this with rice production which was given priority for its adoptability in those geographical conditions (RSSP Official Website, 2019).

Thereafter, the marshlands were extended for the sake of rehabilitating the marshland to enhance the rice production. These rehabilitated lands were then distributed to both men and women through cooperatives since the year 2003 (RSSP Official website, 2019). The objective for such distribution was to ensure that adequate gender representation and equality is adhered to as well as ensuring reducing unfair distribution of land. At the same time, the idea was to ensure maximum utilization of the available resources (Umurenge Program, 2011).

In its operation, the RSSP select the agricultural cooperative in which to support. Once a cooperative is selected, it receives various support services from RSSP ranging from rehabilitation of the marshlands, capacity building for the farmers, training and advisory services. All these are intended to help the rural residents be more economic independent as well as have better living standards. The long term objective is to create economic viable activities that can promote sustainable development in the rural areas (FAO, 2017). As highlighted in the second component of RSSP, there is need to strengthen and promote farmers not more in their individual capacities but rather in the cooperatives and organizations. This ensures adequate support services like training and advisory as well as financing agricultural activities through the cooperatives. Through the cooperatives further support services like technological, infrastructure, institution capacity are easily offered (Rwanda Demographic and Health Survey, 2010).

2.1.4 Socioeconomic development from Projects Implemented in Rwanda

One of the impact provided by RSSP projects is by proving both financial and technical support to farmers. This is aimed at helping the farmers in improving their output levels as well as efficient use of the available land. Since it is also geared towards the rehabilitation of the marshland and the hilly sides, the projects help farmers in better cultivation skills. It also supports productive activities directed to provide agricultural outputs in wetlands (JICA, 2017). Since the masive of this land is hilly and marshland, the terrain is made up of terraces which require much more labour and can therefore support vey limited producton scale.

Projects developed in the rural areas are seen to strengthen the capabilities of the rural residents in terms of ecosystem maintenance and preservations. The rural project are also key to the development of the rural and most remote regions in the country. They are key to the growth and development of other related infrastructure that in turn improve the livelihood of rural residents. When the development projects are initiated in the rural

areas, they bring with them additional amenities that tend to help the local communities. Such development projects envision actions that include: (i) Improvement of a supportive environment for viable resource usage. This would include the development of National Wetlands Policy and a National Strategy and Action Plan for the Conservation and Sustainable Use of Wetlands; (ii) Evaluation of wetlands that are viable for agricultural production activities; (iii) Capacity building and strengthening of institution in their locality to reach out to the majority in the district and sectors and (iv) Development of an Environmental Information System (EIS).

The projects also strengthen support and promote exportation of farm goods. This is offered through strengthening the exporters and empowering them to be independent. This raises up the competitiveness of Rwanda's export sector. This in turn is effective for the export of coffee and tea (the main exports crop in Rwanda), flowers and other fruits species. It would focus on coffee and tea (traditional Rwandan export crops), flowers and various species of fruits (EDPRS, 2006).

Majority of the rural residents rely on subsistent farming as their major activity. Rural support projects help these households in accessing the agricultural products they require. The projects strengthening the capabilities of the public institutions, farmer cooperatives, and SLOs in order for them to be involved in increasing the agricultural output per household as well as the aggregate output for the country. Most households in the rural areas that rely on small scale farming can benefit from projects like these that aim at improving the agricultural productivity. In addition to this, the objective is to enable farmers through their cooperatives to use pesticides and to be able to deal with the risks associated with their use. The RSSP achieve this through a pest management programme as an additional support to agricultural activities (RSSP, 2012).

The implementation of the project in rural areas assist the small scale farmers to gain more on their farming activity. The projects strengthening the infrastructure layout including the transport services, feeder roads, bridges and post-harvest equipment facilitation. This provides the much needed support by the local communities, hence increasing their potentials. However, this support in infrastructure is determined by the efforts of a local community as well as the demand for their products (MINECOFIN, 2010).

2.2 Empirical Literature

According to the study conducted by Goetz (2011) it is shown that low-income households experience different challenges that hinder them from using both public and private services like access to financial services. Another highlighted difficulty faced by rural residents is lack of information. For instant, some of the households may be qualified for government's cash or other assistance may not be aware of this.

In a research conducted by Ayako (2016) concentrating on the support provided for basic or universal education, the researcher identified key success factors towards implementation. These key success factors include stakeholder participation, roles specifications, fund management, among others. The aauthor wanted to draw lessons form the direct support offered in primary schools. The findings revealed that the direct support to education was accepted by the community and yielded positive results.

These include ease access to primary education, increased enrolment rates and improvement the living standards of the community as they direct the money for they would have paid for school to other household needs. Finally, the research acknowledged that there are numerous obstacles in the execution of the Direct Support to School (DSS) mechanisms. Some of these obstacles include poor management and lack of proper organization control, lack sufficient community participations, political interferences, improper monitoring and evaluation and supervision of the whole project cycle, among others.

The study conducted by Hamiduzzaman (2014) investigated the role development projects in Bangladesh focusing on the socioeconomic development. The research was based on explanatory research design. The research found that different development projects carried out in the country have succeeded due to effective planning process and the ability of the project managers to implement the plans. The research also pointed out that development project have great impact on the social and economic welfare of the community they target. However, they may fail to achieve these objective if not well planned and if no effective management of the projects.

Another study in relation to this research is the study by Chavez, Nadolnyak and Saravia (2013) which investigated both the socioeconomic and environmental impact of development projects in Peru. The study used the income data to analyze the impact of the project by comparing the income with and without the project. According to the results, there were indications of socioeconomic development of the projects on the lives of the beneficiaries. For instance, the availability and access to water after the project increased to 73% for the beneficiaries.

Bucheli, Bohara and Villa (2016) in their research investigated the impact of rural road development project on poverty reduction in Nepal. The study used difference-in-difference approach to achieve their research objective and covered the period from 2001 to 2011. The study found that there was reduction in household deprivation as a result of the projects as the families increased asset ownership and had easy access to other facilities. However, the study did not find a significant effect of the project on the health and education of the beneficiaries.

Jazairy (2012) in their empirical research suggest that government and its agencies can through different legislations dictate the way economic agents can make decisions on the economic activities to undertake. Consequently, if no economic incentives are forthcoming from the government, household can easily dispose off their agricultural assets like livestock to look for other productive means of survival. Hence, governments are able to regulate through policies and legislation the level of livestock production. This is possible by offering protection rights like land and property rights. As a matter of fact, through government actions, agricultural prices can be influenced in order to positively benefit farmers. Moreover, the government can ensure sustainable agricultural production through various support systems and through initiating projects in the rural areas. These can help farmers to adopt modern agricultural techniques and methods in order to enhance quantity and quality production.

Anyebe and Mudi (2015) on their part carried out a research on the implementation development project in Nigeria. Primary data were obtained by use of both questionnaire and interview. The data were obtained from government officials as well as from

the intended local beneficiaries. Using cluster sampling method, the beneficiaries were identified and selected for data collection purposes. The research found that there exists a significant correlation ($p=0.031$) between community driven projects and implementation. Similarly, the projects were found to have great impact on the socioeconomic development of the beneficiaries through poverty reduction, in particular to those involved in the project planning and implementation.

In Kenya, Githenya and Ngugi (2014) conducted a research assessing the key determinants of implementation of housing projects. The research used descriptive design and questionnaires to gather primary data from project managers. SPSS was used to process and analyze data using regression models. According to the findings of this research, project control has a correlation coefficient of 0.766 on the project implementation, while the results on the regression model showed that the model was significant ($p=0.001$). Other factors identified to influence project implementation included project planning and project team motivation.

2.3 Theoretical Framework

2.3.1 Gateway Model or theory

The gateway model propounded by Burkey (1993) provides a framework about evolution of town and their associate hinterland. The fundamental features of gateway center are the strategic location, which is typically at the entrance to an extended neighborhood. The gateway center serve as a connection between the neighborhood and national core. Such centers often develop as transport centers in the contact zones between areas of differing intensities or types of production. Practically, gateway centers spring up as a response to a certain economic or social activity taking place in that locality. They in turn start expanding towards the neighborhood to increase the development prospects of the whole region. These towns derive advantage from heterogeneous productive regions, differential distribution of natural resources and population (Fewings, 2013).

According to Fewings (2013), the gateway theory can be applied in project management especially in community oriented development projects which are mostly geared towards the social and economic development of the communities. If the projects are located at strategic location within the rural setting, it acts as a gateway to other development initiatives that may spring thereafter. For instance, whenever a new development project like construction of school, university or other public utility takes place, different projects and economic activities like shops start to grow up. Hence, a project initiated in the rural area can act as a 'gate' to other development initiatives, thereby improving the socioeconomic growth of the beneficiaries.

2.3.2 Economic Development Theory

One theory that has been used in evaluating the development in rural areas is the economic development theory. The economic development theory explains the development of an area based on a given economic base or activity. It therefore tries to relate the economic development of an area based on the changes or improvement of a given economic activity. As such this theory expounds that the development of the rural region will be determined by the main activity that is carried out. In this case the main activity in the rural region is agricultural activities. Hence, the socioeconomic development of the rural residents will

be determined on how well the agricultural activities are improved and coordinated (Felix, 2014). In addition to this, export base theory is also related to the economic base theory. However, this theory looks at the various activities and categorizes them as either basic income sector or non-basic income sector. A basic sector is composed of a community that buys or sells outside of their locality while non-basic buys or sell within the locality boundaries. This theory is related to the current research because it is development oriented and targets to explain how the living standards of a community can be improved through certain economic activities.

2.4 The Conceptual Framework

The study is divided into two variables which are independent variable as project implementation in reference to Akanyaru Watershed Project (AWP) and dependent variable such as socioeconomic development. And this study will be more important because it shows the interaction between these variables.

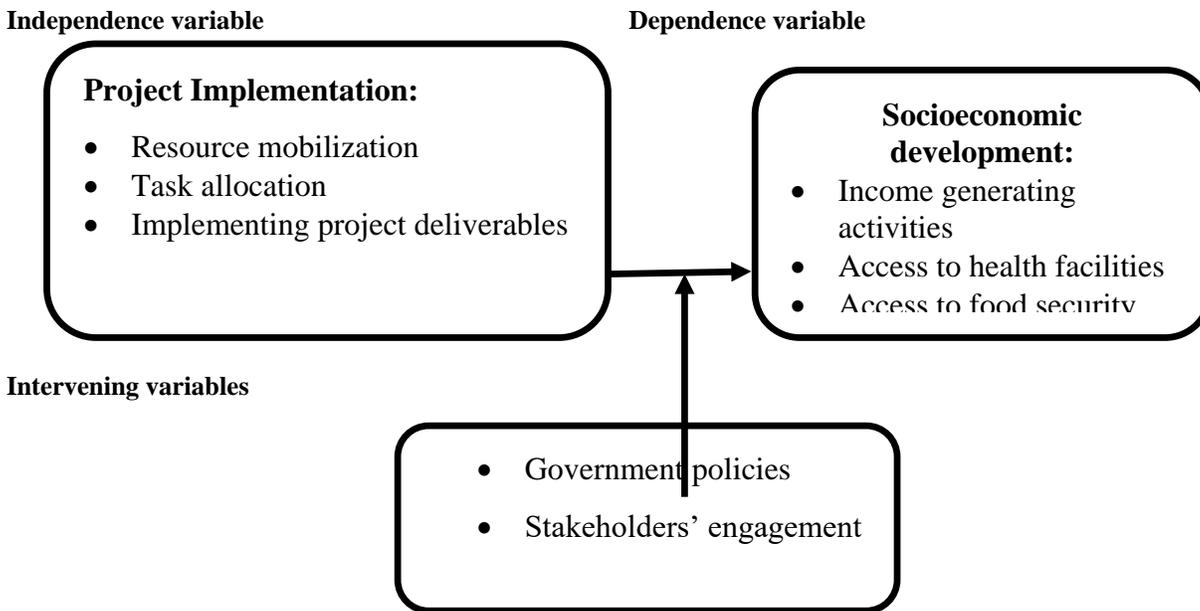


Figure 1. Conceptual Framework of the study
Source: Researcher design (2021)

Figure 1 shows the conceptual framework where the variables of this study can be clearly seen. The independent variable for the study is project implementation. Under this, the indicators used in this research include resource mobilization, task allocation and implementation of project deliverables. In mobilizing resources, the project manager is involved in sourcing for the resources required for the execution of the project. These resources are guided by the project plan and scope already prepared in the initial stages of project lifecycle. Once the resources are available, they are distributed according to the various tasks within the project. The other indicator relates to project deliveries which are the outcomes achieved or to be achieved by different tasks in order to provide an overall project outcome. On the other side, the dependent variable is socioeconomic development which includes income generating activities, access to health facilities, and access to food security and market accessibility.

2.6 Summary of the literature

This chapter has purposed to revise the available literature related to the topic and to gain solutions to the research questions. To that part of literature review the researcher concentrated on Rural Sector Support Projects in Rwanda, its sustainability and impact on socioeconomic development of people living in rural

areas. The second part was of theoretical review where the researcher focuses on Gateway theory and other theories related to the topic. The third part was for Empirical Review where the researcher reviewed the studies conducted by others and remarked that no any previous research conducts to assess the relationship between project implementation and socioeconomic of a given area in Rwanda. The researcher finds more gaps to other empirical reviews such as that conducted by Goetz (2011) where he revealed that low-income families who otherwise were eligible to government facilities either do not know that they are eligible, or how to find the application process, to depend on country.

III. RESEARCH METHODOLOGY

3.1 Research Design and Population

Beins (2017) describes research design as the framework or approach that specifies the procedures and actions to be followed or undertaken in answering to the research questions. It provides details as to how the data will be collected, presented and analyzed following a logical order for easy grasp of the objectives of the study. The study design adopted for this research was a descriptive research design. By using a descriptive study, the researcher focused on the description and analysis of geographical area based on the information obtained from the variety of sources. This study

approach was quantitative to accomplish the stated objectives of the study. The researcher also employed correlative research design to evaluate the relationship between project and socioeconomic development of the selected study area.

According to Scheurich (2014), population is total number of people or objects in a given research. They also define population as certain group of elements for instance people, organizations which is of interest for a particular study to obtain relevant information. For this study, the population under study was around 8000 people (Fonerwa, 2020).

3.2 Sample Design

According to Saunders and Lewis (2012), research design refers to the method used to select the respondents to a research from a wider population in order to attain the purposes of the research. In order for the researcher to decrease the level of prejudiced sampling, the researcher ought to select a sample that is true representation of the total population.

The Slovin's formula was used in this research to determine the sample size as given below

$$n = \frac{N}{1 + Ne^2}$$

Where n = Sample Size,

N = Total population,

e = Error tolerance,

Assume that a confidence level of 90 percent (which give a margin error of 0.1 was used), therefore

$$n = \frac{N}{1 + Ne^2} = \frac{8000}{1 + 8000 * 0.1^2} \approx 99$$

3.3 Data Collection and Analysis

Data collection is a procedure of gathering material from all the appropriate sources to find answers to the research problem,

test the hypothesis and evaluate the outcomes. For this research, the researcher distributed the questionnaires to the respondents within the project area who are beneficiaries to the project. In order to cover a wide geographical area within a short time, two research assistants were used for this exercise.

The method that was more applicable in this research was to identify the respondents, introduce the purpose of the research and assist the respondents to fill out the questions. This was done by reading out the questions to the respondents and ticking the alternative choices as per the responses. This method has been chosen as a means of distributing the questionnaires because of the setting of the rural areas. Moreover, majority of the respondents needed the questionnaire to be translated into the language most are fluent in.

Data Analysis is the process of systematically applying statistical techniques to describe data. IBM SPSS (Statistical Package for Social Sciences) version 21.0 program was used to compute and analyze the data because it is the most useful tool for data analysis particularly social data with less biasness.

Data processing is converting obtained data into more readable form and interpretable subsequent processing (such as storing, updating, rearranging, or printing out). Normally data collected from respondents is not in proper form which renders it difficult to interpret and analyses to draw conclusions. For making the collected data more clear and understandable, the researcher presented the raw data in proper manner for facilitating the interpretation and analysis. A pre-test study was carried out. The researcher took a sample structure of ten questions and the findings obtained to that sample prove that, the designed research questions of this research will be helpful to the researcher to get correct findings. The reliability test gave an alpha of 0.742.

Table 1 : Reliability test

Cronbach's Alpha	N of Items
.742	19

Source: Researcher, (2021)

IV. RESEARCH FINDINGS AND DISCUSSION

the findings obtained from the research field. Out of the 99 distributed questionnaires, 92 were filled and returned on time for analysis. This represents a 92.9% response rate which is much recommendable for this analysis. This chapter firsts presents the background information of the respondents and then the findings related to the research questions.

In this section, the background characteristics of the respondents include gender, age group and education level.

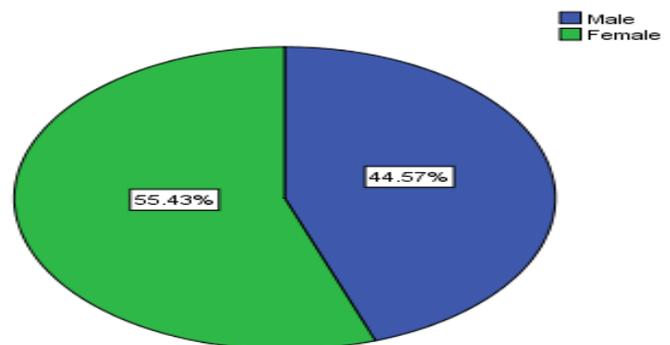


Figure 2: Pie Chart showing Respondents' Gender
 Source: Researcher (2021)

The research findings showed that majority of the respondents were female at 55.43% and male were represented by 44.57%. This possibly imply women beneficiaries are more since the project is located in the rural area.

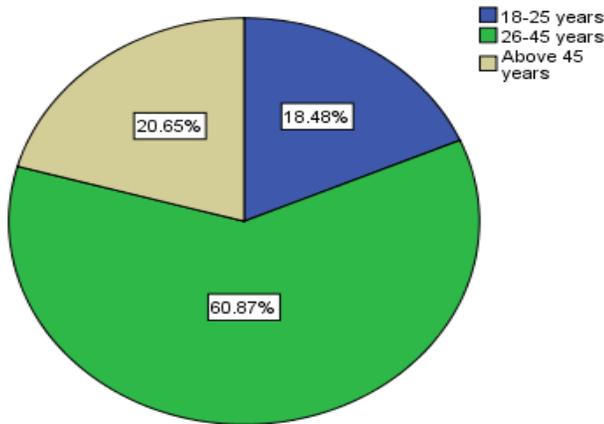


Figure 3: Showing the Respondents' Age Group
Source: Researcher (2021)

Further, the researcher also established the age group of the respondents and the resulted were reported in Figure 4.2. According to the findings, 60.87% of the respondents were aged between 26 and 45 years. This was followed by those respondents who are aged above 45 years. Lastly, those respondents who fall in the age group 18-25 years were 18.48% of the respondents.

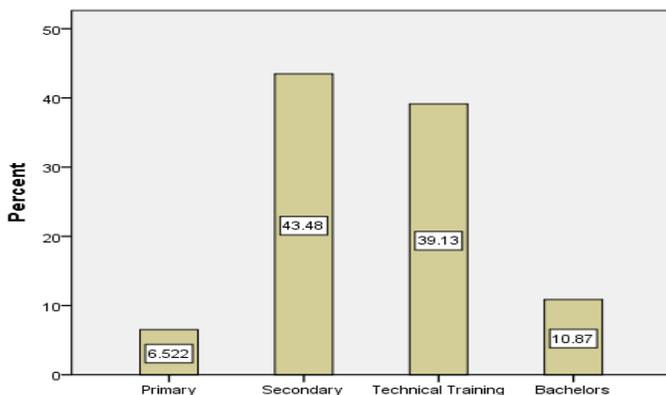


Figure 4: Distribution of respondents by Education
Source: Researcher (2021)

Figure 4 shows the distribution of the respondents by their highest education level. As shown by the diagram, majority of the respondents have gone up to secondary school with a representation of 43.48%. This is followed at close range by those who have technical training at 39.13%. The respondents with a bachelor's degree are 10.87% while those who have only primary level education are 6.522%.

The first objective that guided this research was to assess the level of project implementation in of Akanyaru Watershed protection (AWP) project in Gisagara District are involved in the implementation at different stages of the project. The respondents were requested to fill in the responses on the questionnaires

distributed to them. All the questions were close ended to ensure that the responses were standardized for better analysis.

Table 2 Activities involved within Akanyaru Watershed Protection

Activity	Frequency	Percent
Management	18	19.6
Terracing	28	30.4
Rehabilitation	29	31.5
Training	17	18.5
Total	92	100.0

Source: Researcher (2021)

As shown in Table 2 the respondents indicated the different activities they are involved within the Akanyaru watershed protection project. Majority of the respondents indicated rehabilitation of the marshland areas with a percentage of 31.5% followed up by those who indicated terracing with a percent of 30.5% representation. 19.6% of the respondents said that the activity they are engaged in is the management of natural resources while 18.5% said they are involved in training within the cooperatives.

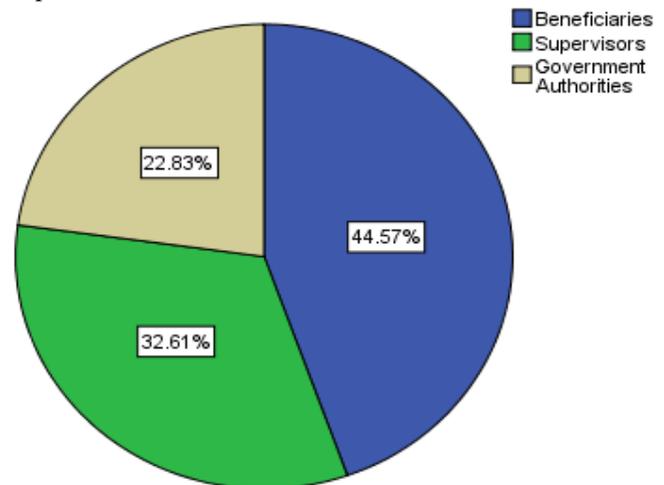


Figure 5: Stakeholders of Akanyaru Watershed Protection Project
Source: Researcher (2021)

The respondents were also requested to indicate the key stakeholders for AWP project. As shown in Figure 4.4, 44.57% of the respondents indicated the beneficiaries as key stakeholders while 32.61% indicated supervisors of the project. Lastly, 22.83% of the respondents indicated that government authorities are the key stakeholders in the AWP project. Table 3 records the responses from the respondents when they were asked to indicate the level of agreement or disagreement with different statements on AWP project implementation. The questions were based on five point Likert scale with 1= strongly disagree, 2= disagree, 3= not sure, 4= agree and 5= strongly disagree. The result showed that

on whether the respondent is aware of the project implementation plan and the time it will be completed, 56.5% agreed and 30.4% strongly agreed. This total to 86.9% of the respondents who agreed with the statement. On the other hand, 10.9% indicated they were not sure while strongly disagreed and disagreed had 1.1% of the respondents each.

On whether the respondent are actively engage in the project implementation as one of the stakeholder to the project, 57.6% and 19.6% of the respondents agreed and strongly agreed respectively. 21.7% of the respondents were not sure while 1.1% disagreed. On

whether the community is involved in providing resources that are locally available, 43.5% agreed while 38% strongly agreed. This gives a total of 81.5% of the respondents in agreement. Only 14.1% were not sure and 4.3% disagreed. 56.5% and 26.1% of the respondents agreed and strongly agreed respectively about the community engagement in providing labour and other human resources. 9.8% and 7.6% of the respondents indicated not sure and disagree respectively.

Table 3 Respondents' views project implementation

Statement	SD	D	NS	A	SA
	n%	n %	n %	n %	n %
a. I am aware of the project implementation plan and the time it will be completed	11.1%	1.1%	10.9%	52.5%	28.3%
b. I am actively engage in the project implementation as one of the stakeholder to the project	0.0%	1.1%	20.7%	53.5%	18.6%
c. The community here is involved in providing resources that are locally available	0.0%	4.3%	13.4%	40.3%	35.8%
d. The community is engaged in providing labour and other human resources	0.0%	7.6%	9.8%	52.5%	24.2%
e. Majority of the activities carried in this project are done by the local community	0.0%	8.7%	8.7%	66.7%	10.9%
f. Majority of the tasks are directly by our own people	0.0%	2.2%	22.3%	45.4%	25.0%
g. The project has being able to deliver most part of its objectives	11.1%	26.1%	33.7%	29.3%	7.6%

SD=Strongly Disagree, D=Disagree, NS=Not Sure, A=Agree, SA=Strongly Agree

Source: Researcher (2021)

Table 3 also shows the respondents' views on the majority of the activities carried in this project are done by the local community. Majority of the respondents agreed (71.7%), followed by those who strongly agreed (10.9%) and 8.7% not sure and disagreed for each. In addition, majority of the respondents were in agreement that majority of the tasks are directed by our own people with 48.9% agreeing and 25% strongly agreeing. Those who were not sure were 23.9% while 2.2% of the respondents disagreed. Lastly, 33.7% of the respondents indicated they were not sure that the project has being able to deliver most part of its objectives. 31.5% agreed that the project has being able to deliver most part of its objectives while 7.6% strongly agreed, 26.1% disagreed and 1.1% strongly disagreed.

The second specific objective was to identify socioeconomic activities from Akanyaru Watershed protection project in Gisagara District. The respondents were given structured questions to help attain this objective.

Table 4 Activities contributing to Socioeconomic Development

Activity	Frequency	Percent
VUP activities	10	10.9
VUP cash	23	25.0
Girinika program	35	38.0
Social protection	24	26.1
Total	92	100.0

Source: Researcher (2021)

The researcher asked the respondents to identify those activities that have helped them to improve their socioeconomic lives. 38% indicated the Girinika program, followed by 26.1% of those who indicated social protection program and 25% VUP direct cash transfer. Only 10.9% of the respondents indicated VUP activities.

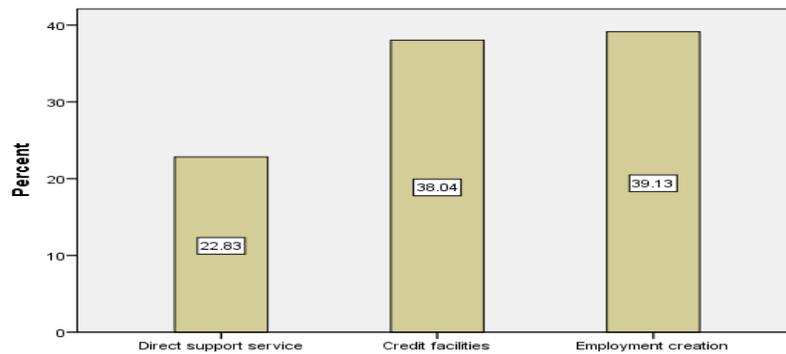


Figure 4.1: Activities Leading to Economic Development
Source: Researcher (2020)

The respondents were also asked to indicate the activities that lead to their economic development. Figure 4.5 shows the results. According to the results, 39.13% of the respondents indicated that employment creation in the rural areas was the main economic activity improving their economic development. This was closely followed by 38.04% of the respondents who indicated

that the main economic activity is credit facilities given to poor and to the vulnerable people. 22.83% of the respondents on the other hand indicated direct support services were beneficial to them.

Table 5 Respondents' view on Socioeconomic Development

Statement	SD	D	NS	A	SA
	n %	n %	n %	n %	n %
a. I am aware of the social and economic activities that this project has created to the community	00.0%	3 3.3%	12 13.0%	47 51.1%	30 32.6%
b. The project has created employment for many local people	11.1%	5 5.4%	23 25.0%	56 60.9%	7 7.6%
c. The project has led to an increase in economic activities including more farming activities	00.0%	0 0.0%	11 12.0%	37 40.2%	44 47.8%
d. There are activities that are geared towards preservation of the environment and water harvesting	00.0%	1 1.1%	9 9.8%	24 26.1%	58 63.0%
e. People around this area are now engaged in more social activities like community and prayer gathering.	00.0%	2 2.5%	10 10.9%	18 19.6%	41 44.6%

SD=Strongly Disagree, D=Disagree, NS=Not Sure, A=Agree, SA=Strongly Agree

Source: Researcher (2021)

The respondents were asked to indicate on a scale of five how they agreed or disagreed on the socioeconomic development where 1= strongly disagree, 2= disagree, 3= not sure, 4= agree and 5= strongly agree. On whether the respondents was aware of the social and economic activities that this project has created to the community, 51.1% of the respondent agreed and 32.6% strongly agreed giving a total of 83.7% of the respondents. Only 13% indicated not sure and 3.3% disagreed.

Table 5 also shows the responses on whether the project has created employment for many local people, where 60.9% agreed and 7.6% strongly agreed which gives a total of 68.5%. 25% of the respondents were not sure, while only 5.4% disagreed and 1.1% strongly disagreed. 47.8% and 40.2% of the respondents strongly agreed and agreed respectively that the project has led to an increase in economic activities including more farming activities. This gives a total of 88% of those who agreed. Only 12% of the respondents indicated they were not sure.

Further, on whether there are activities that are geared towards preservation of the environment and water harvesting, 63% of the respondents strongly agreed and 26.1% agreed. Only 9.8% and 1.1% indicated not sure and disagree respectively. 44.6% of the respondents strongly agreed and 19.6% agreed that people around the project area are now engaged in more social activities like community and prayer gathering. 25% disagreed and 10.9% indicated they were not sure about this.

Objective three was aimed at examining the relationship between project implementation and the socioeconomic development to the beneficiaries of Akanyaru Watershed protection (AWP) project in Gisagara District. First, the researcher sought to find out the various socioeconomic development from the AWP project, the determinant of its performance and then determined the relationship between these variables.

Table 6 Socioeconomic development from Akanyaru Watershed Protection Project

Socioeconomic development	Frequency	Percent
Increased production	29	31.5
Environmental sustainability	34	37.0
Personal development	17	18.5
Increased livestock production	12	13.0
Total	92	100.0

Source: Researcher (2021)

Table 6 shows the respondents' answers on the impact on socioeconomic development of their lives from the AWP project. 37% of the respondents indicated that the project has contributed greatly to environmental sustainability. This was followed by 31.5% of the respondents who indicated an increase in production due to the project. 18.5% of the respondents indicated personal development through training and lastly 13% indicated an increase in livestock production.

Table 7 Determinants of AWR Project Performance

Determinants	Frequency	Percent
Stakeholder acceptability	22	23.9
Time and Cost effectiveness	22	23.9
Technical and performance validity	29	31.5
Sustainability of outcomes	19	20.7
Total	92	100.0

Source: Researcher (2021)

In addition, the respondents were asked to indicate what factor they consider as an indication of project success. 31.5% of the respondents indicated that technical and performance validity as the main determinant of the project performance. Stakeholders' acceptability and time and cost management both got 23.9% of the respondents while the last indicator for the project success was sustainability of the project outcomes with 20.7%.

Table 8 Respondents views on the effect of AWR Project

Statement	VLE		LE		M		HE		VHE	
	n	%	n	%	n	%	n	%	n	%
a. My social life has improved since the beginning of this project	33	33.3%	7	7.6%	37	40.2%	41	44.6%	4	4.3%
b. I am able to access better health services thanks to this project	0	0.0%	2	2.2%	36	39.1%	46	50.0%	8	8.7%
c. The health of the people around this area has also improved because of this project	11	11.1%	5	5.4%	39	42.4%	44	47.8%	3	3.3%
d. The project has generally improved the food security in this region	0	0.0%	1	1.1%	37	40.2%	39	42.4%	15	16.3%
e. Most of the households in this locality can now afford to have decent meals because of the project	0	0.0%	0	0.0%	21	22.8%	61	66.3%	10	10.9%
f. I find that the project has made life better and more sustainable	11	11.1%	27	29.3%	12	13.0%	48	52.2%	4	4.3%
g. People around this area look more happy because the project has transformed their lives	0	0.0%	0	0.0%	62	67.4%	21	22.8%	9	9.8%

SD=Strongly Disagree, D=Disagree, NS=Not Sure, A=Agree, SA=Strongly Agree

Source: Researcher (2021)

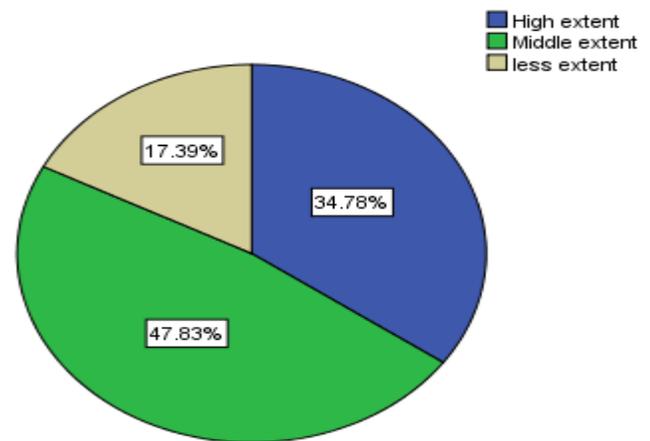


Figure 7. Extent of Beneficiaries Satisfaction with the AWR Project Outcomes
Source: Researcher (2021)

The respondents were also asked to indicate the extent to which the beneficiaries of the project were satisfied. 47.83% of the respondents indicated that the satisfaction of the beneficiaries was at middle extent and was followed by 34.78% of the respondents who were at high extent of satisfaction. 17.39% of the respondents on the other hand indicated less extent.

The respondents were also asked to what extent they think the AWP project has improved the rural livelihood. Using a scale of five with 1= very low extent, 2= low extent, 3= moderate extent, 4= high extent and 5= very high extent. Table 8 shows the results of this. On whether the social life of the respondents has improved since the beginning of this project, 44.6% said at high extent, 40.2% at moderate extent while only 4.3% said at very high extent. 7.6% and 3.3% of the respondents indicated low extent and very low extent respectively.

On whether the respondent is able to access better health services thanks to this project, 50% said at high extent followed by 39.1% at moderate extent. Only 8.7% and 2.2% said very high extent and low extent respectively. Table 8 also shows the respondents' views on whether the health of the people around this

area has also improved because of this project. 47.8% of the respondents indicate at high extent and 42.4% said moderate extent. 3.3% indicated very high extent and only 5.4% and 1.1% indicate low extent and very low extent respectively.

Table 8 further shows the results of whether the project has generally improved the food security in the region. This shows that 42.4% and 40.2% of the respondents indicated high extent and moderate extent respectively. 16.3% of the respondents indicated very high extent while 1.1% indicated low extent. On whether most of the households in the locality can now afford to have decent meals because of the project, 66.3% indicated to high extent and 10.9 to very high extent while 22.8% indicated moderate extent.

Table 9 Correlation Matrix

		Socioeconomic	Deliverables	Resource mob	Task allocation
Socioeconomic	Pearson Correlation	1	.721**	.549**	.616**
	Sig. (2-tailed)		.000	.000	.000
	N	92	92	92	92
Deliverables	Pearson Correlation	.721**	1	.675**	.803**
	Sig. (2-tailed)	.000		.000	.000
	N	92	92	92	92
Resource_mob	Pearson Correlation	.549**	.675**	1	.762**
	Sig. (2-tailed)	.000	.000		.000
	N	92	92	92	92
Task allocation	Pearson Correlation	.616**	.803**	.762**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	92	92	92	92

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

SD=Strongly Disagree, D=Disagree, NS=Not Sure, A=Agree, SA=Strongly Agree

Source: Researcher (2021)

On whether the respondents find that the project has made life better and more sustainable, 52.2% of the respondents indicate to high extent. 4.3% of the respondents indicated very low extent, 13% moderate extent, 29.3% low extent and only 1.1% very low extent. The last statement was dealing on whether people around this area look happier because the project has transformed their lives, 67.4% indicated at moderate extent, 22.8% at high extent and 9.8% at very high extent.

Further, the researcher sought to establish the relationship between project implementation and socioeconomic development of the respondents using Pearson's coefficient of correlation. Table 4.8 displays the results for this analysis. As shown in the diagram, project deliverables, resource mobilization and task allocation are all positively and significantly related to socioeconomic development. The Pearson's coefficients of correlation reveal that project deliverables (r=0.721, p<0.05) is positively and strongly related to socioeconomic development, resource mobilization (r=0.549, p<0.05) is positively related to

socioeconomic development and task allocation (r=0.616, p<0.05) is also positively related to socioeconomic development.

Table 10 Model Summary for Socioeconomic Development

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.727 ^a	.528	.512	.29557

a. Predictors: (Constant), Task allocation, Resource mobilization, Deliverables

Source: Researcher (2021)

The researcher further conducted the regression analysis to determine the effect of project implementation as measured by task allocation, resource mobilization and project deliverable on

the socioeconomic development of beneficiaries. The results displayed in Table 10 show that the $R^2= 0.727$ and the adjusted $R^2=0.528$. This imply that 52.8% of the socioeconomic

development of the beneficiaries in rural areas is attributed to the project implemented in these areas.

Table 11 ANOVA for Socioeconomic Development

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.595	3	2.865	32.795	.000 ^b
	Residual	7.688	88	.087		
	Total	16.283	91			

a. Dependent Variable: Socioeconomic

b. Predictors: (Constant), Task allocation, Resource mobilization, Deliverables

Source: Researcher (2021)

Table 12 Regression Coefficients Table for Socioeconomic Development

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	1.366	.229		5.971	.000
	Deliverables	.454	.091	.620	4.975	.000
	Resource mobilization	.066	.078	.097	.844	.021
	Task allocation	.033	.103	.045	.317	.051

a. Dependent Variable: Socioeconomic

Source: Researcher (2021)

Further analysis of variance (ANOVA) were conducted and the results are displayed in Table 4.10. According to the research findings, the research model was found to be significant ($p=0.000$) at 5%. Hence, the research went ahead to check the significant effect of each of the indicator variables on socioeconomic development. The results of this analysis is shown in Table 4.11. As shown in Table 12 the coefficients for all the indicator variables are positive and significant. The model can therefore be written as

$$socioeconomic = 1.366 + 0.454 * delv + 0.066 * res + 0.033 * task + \epsilon$$

Where socioeconomic is the impact of the project implementation on the social and economic livelihood of the beneficiaries, represents the project deliverables, res represents the resource mobilization and task represents the task allocation. It implies that one unit change of project deliverables changes the socioeconomic lives of beneficiaries by 0.454; one unit change of resource allocation changes the beneficiaries' socioeconomic lives by 0.066 and one unit change in task allocation changes the socioeconomic lives of beneficiaries by 0.033.

V. CONCLUSION AND RECOMMANDATIONS

5.1 Conclusion

The research findings have shown that projects implemented in the rural areas uplift the livelihood of the beneficiaries in terms of the social lives and economic lives. The literature consulted has also pointed out the impact that community project benefit the community especially the marginalized and the rural residents. This research has specifically

investigated the impact of the implementation of the Akanayaru Watershed Protection project to the socioeconomic development of the rural residents in Rwanda. It has revealed that project resource mobilization, task allocation and project deliverables are key areas in project implementation life cycle.

Moreover, the research findings have shown there that is significant effect of project implementation on the social and economic livelihood of beneficiaries. The findings also shows that majority of the respondents observed that been involved in the implementation of a project ensures that they get maximum benefits from the project. The researcher, basing on all the findings of this research, can therefore conclude that project implementation is one of the key stage in the project management life cycle. For it to be successfully attained, the project managers are supposed to involve the key stakeholders especially the intended beneficiaries and the local community. This not only help the community to gain from the project but it also ensures the sustainability of the project.

5.2 Recommendations

Based on the findings of this research, various recommendations are highlighted in this section. First and foremost, the researcher recommends that project implementation should be carried out in a framework that is inclusive of the key stakeholders especially the intended beneficiaries and the local community. The project managers should be keen to promote this inclusive atmosphere in their management in order to enhance participation of the stakeholders and increase the project sustainability even after its completion.

In addition, the researcher recommends that policy makers and the government agent should increase project visibility in the rural areas. Since these community projects have a great significant influence on the livelihood of the rural residents, the government, and its agents and in cooperation with donors and non-governmental organization should increase projects in rural areas. This works to cover two angles of development at the same time, it brings in the needed infrastructure developments in the rural areas and also improve the livelihoods of the rural residents. Moreover, the government of Rwanda and other governments in Africa have been at forefront fighting poverty. One way to reduce the poverty levels and its impact in rural areas is through such community project implementations.

Further the researcher recommends that the community should also embrace project initiated in their locality. One of the failures of project implementation has been pointed out in literature is lack of acceptance by the community. In order to increase the project acceptance levels by the community, the project managers should carry out a campaign to sensitize the locals. In the same breathe, the local community should embrace these projects as their own because they are brought out to benefit them and to improving their lives

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