

**KOBLENZ-LANDAU UNIVERSITY**  
**SCHOOL OF ECONOMICS**  
**DEPARTMENT OF SOCIAL SCIENCE**

The contribution of saving and credit cooperatives (SACCOS) on the improvement of members' socio economic development in Rwanda: Opportunities and challenges". Evidence from Umwalimu SACCO- Huye District

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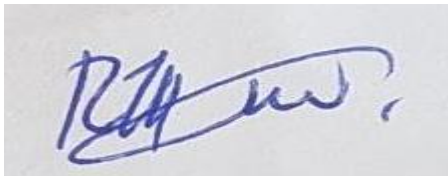
Submitted: July, 2020

## DECLARATION

I declare that, this research project entitled “*The contribution of saving and credit cooperatives (SACCOs) on the improvement of members’ socio economic development in Rwanda: Opportunities and challenges*”, *Evidence from Umwalimu SACCO- Huye District*”, is my original work; it has not been presented to any other institution of higher learning for academic purposes.

**NTUITE Sylvain Robert**

Signed: \_\_\_\_\_



**Date:** 16.11.2020

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**S. NTUITE Robert**

## **DEDICATION**

This thesis is dedicated to my beloved parents Mr. Norbert KALOMBO and Mrs. Norbertine Lufika wa Mbayi, who laid down the foundation of my education which made me what I am today.

## **ABSTRACT**

This study examines the contribution of saving and credit cooperatives (SACCOS) on the improvement of members' socio economic development in Rwanda: Opportunities and challenges", Evidence from Umwalimu SACCO- Huye District". The appearance of saving and credit cooperatives or credit unions has been known as remedy for social ills rooted in poverty because of its efficiency in loans or credits dispensation, social equality for enhancement and reduction of poverty amongst low income earners. Therefore, millions and millions of poor people and non-bankable in developing countries (or third world countries) have been provided access to formal financial services through saving and credit cooperatives' programs.

The targeted population concerned by the study was 1,940 members of USACCO from which a sample of 92 respondents was purposively selected. The study has adopted a combination of correlation and descriptive research design. It has employed both quantitative and qualitative approaches. The study used both primary and secondary data. The primary data was collected using questionnaire and interview and, while secondary data was collected using documentations techniques whereby, Manual of procedures and Credit policies of USACCO and financial reports have been consulted. The analysis of data was done using SPSS version 21. The data was presented in form of tables, charts and graphs designed by SPSS v. 21. The bio-characteristics of respondents showed that, the majority of respondents were women with 55.4%, majority of respondents' age is between 26 to 45 years Furthermore, and majority 77.20% of respondents were married. 100% of respondents attended school, where the majority of respondents attended secondary school with certificate A2.

The study has revealed that Umwalimu SACCO services offered to its members have a positive effect on the improvement of members' welfare. It was found that USACCO services have slightly affected income level of members, assets acquired, access to education and medical care as well as small income generating activities established by members in Huye District. The analysis of data also revealed that there are some variables which have effected USACCO members' socio-economic status, these were listed as: Education background of a member, number of dependents, the occupation of a member, and number of loans got from USACCO, government programs against teachers' welfare, and membership duration played very important role on the improvement of standard living of teachers. All these variables were found to have positive effects on teachers' socio-economic status, except the family size of respondents.

In addition, the findings showed that, the majority of respondents confirmed that, they did not find opportunities to save with other financial institutions, and other respondents did not have access to loan from other financial institutions due to complicated loan requirements. In addition, after they have joined USACCO, their deplorable status somewhat changed, both socially and economically which has contributed to the improvement of their welfare. Therefore, the study testified that, the welfare of USACCO members in terms of assets acquired, income increased was improved compared to situation before joining USACCO. The study concludes that “the level of improvement of living conditions of teachers depends largely to the level of loan granted by USACCO to teachers and membership duration. If the level of teachers’ loan and saving increases, there will be also improvement of teachers’ wellbeing” and finally, USACCO financial service is a veritable instrument for better improvement of economic and social conditions of teachers. The study recommends that, USACCO should provide frequent and regular trainings on business management game to their members. This could help members for good management of their loans and reducing loan defaulters’ cases observed at USACCO. Challenges observed were lack of physical collateral security required by USACCO, complicated loan requirements terms and conditions and insufficient trainings on business management game.

**Keywords:** *Saving and credit cooperatives (SACCOs), Microfinance, microfinance institutions, socio-economic development, standard of living, loans, saving.*

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## **LIST OF ACRONYMS & ABBREVIATIONS**

**ACCOSCA:** African Confederation of Cooperatives saving & credit Associations

**AMIR:** Association of Microfinance institutions in Rwanda

**BNR:** Banque National du Rwanda (National Bank of Rwanda)

**BRI:** Bank Rekyat Indonesia

**CGAP:** Consultative Group to Assist the Poor

**DPP:** District Development Plan

**EAC:** East African Community

**PHDR:** Poverty Human Development Report

**MINECOFIN:** Ministry of Finance and Economic planning

**MFIs :** Micro finance Institutions

**MLS:** Membership Living standard

**RCA :** Rwanda Cooperative Agency

**FCA:** Financial Conduct Authority

**MDGs:** Millennium development Goals

**NGOs:** Non-Governmental Organizations

**NPLs:** Non-performing loans

**NISR:** National Institute of Statistics

**NGO:** -Non-Governmental Organization

**NST:** National strategy for Transformation

**PHDR:** Poverty Human development Report

**RAMA:** La Rwandaise d'Assurance Maladie/ Rwanda Health Insurance Fund

**SACCO:** Saving and credit Cooperative organization (or, Credit unions)

**SIMTEL:** Simulation and Teleprocessing

**SPEED:** Social Pact for Empowered Economic Development

**SPSS:** Statistical Package for Social Science.

**UNDP:** United Nations Development Program

**UNRISD:** United Nations Research Institute for Social Development

**USACCO:** Umwalimu Saving and Credit Cooperative organization

**USAID:** United States Agency for International Development

**USD:** United States of American's Currency (USD)

# **CHAPTER ONE**

## **GENERAL INTRODUCTION**

### **1.1. Background of the study**

The study seeks to assess the contribution of saving and credit cooperatives organizations (SACCOS) on the improvement of members' socio economic development in Rwanda: Opportunities and challenges"- Evidence from Umwalimu SACCO- Huye District. Nowadays, Poverty is an overarching problem in Africa which is deeply rooted in rural areas. Despite rapid urbanization, over 70 % of the poor still live in rural areas and up to 45 % of the people of the African continent live in absolute poverty (ADB, 2008). About 90 % of the people of Rwanda are poor and live in rural areas. Agriculture and agriculture-related activities being their mainstay with limited access to credits and other financial services from commercial banks or micro-finance institutions mainly due to demand for collaterals or securities (NISR, 2010).

Despite massive progress in the past few decades, global poverty in all its different dimensions remains a broad and entrenched problem. For example, today, more than 700 million people subsist on extremely low incomes. Every year, five million children under five years die of diseases that often could have been prevented or treated by a handful of proven interventions. Again, a large majority of children in low- and middle-income countries attend primary school, but many of them leave school lacking proficiency in reading, writing and mathematics. How to effectively reduce global poverty remains one of humankind's most pressing questions. It is also one of the biggest questions facing the discipline of economics since its very inception. The Royal Swedish Academy of Sciences (2019);

Africa is considered to be the poorest continent in the world followed by Asia and Latin America (PHDR, 2009). World statistics indicated that three of every four people in the developing countries live in rural areas; most of them were found in Sub-Sahara Africa whose livelihood depends on agriculture economy (Kopoka, 2006). Within Africa, the Sub-Saharan region is the poorest region where poverty is unique in the sense that majority particularly rural people are extremely poor. Rwanda is one of Sub Saharan countries where poverty is also extreme. The available statistical data from World Economic Forum Africa (2015) showed that, the country has reduced the percentage of people living below the poverty line from 57% in 2005 to 45% in

2010. Despite this, 63% of the populations still live in extreme poverty, as defined by the World Bank as they live with less than \$1.25 a day. Furthermore, only 17% of Rwandans live in urban areas where 83% of Rwandans are living in rural areas where the incidence and severity of poverty is twice as high as those who are living in urban areas (Human Development Report, 2018). Despite the fact that most of population is located in rural areas, many people residing in these rural districts are faced with low income constraints, that is the case of Rwanda's primary and secondary school teachers.

According to World Bank (2012), income is pronounced as money that individuals earn for their well-being, and comprises many dimensions. It includes having high purchasing power and the ability to acquire the basic goods and services necessary for survival with dignity. Low household incomes also encompasses low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity to better one's life, and one of the proposed interventions in reducing this challenge and uplifting the standard of living of primary and secondary schools' teachers in Rwanda. As to resolve definitively these challenges, there was the establishment of Umwalimu savings and credit cooperatives (USACCO) in 2006 which was licensed in 2008 by the National Bank of Rwanda to operate as financial institution. This cooperative was established in 2006, with the guidance of President Paul Kagame to cater for the welfare of teachers by ensuring their socio-economic development. Today, Umwalimu SACCO has got 30 branches -one in each district; and has grown further in terms of equity and clientele with a total of **70,697** operational and active accounts. The teaching population in Rwanda (primary and secondary schools) is at least 62,000, of which 48,000 (constituting 77%) have active accounts and therefore are paid salaries through Umwalimu Sacco where about 44,000 teachers have accessed loans from Umwalimu SACCO ( Umwalimu SACCO, 2018).

Furthermore, the study of Getachew Mergia Tache (2006) cited in Ergetew Temeche (2014), argued that, SACCOs or Credit Unions have been developed to meet the fundamental human need to find a way of saving and borrowing methods without taking risks and without handing over too much power to a moneylender. These financial cooperatives were invented in South Germany in 1846 at the time of agricultural crisis and continues heavy drought in Europe, by two community business leaders: Hermann Schulze-Delitzsch (1803-1883) and Friedrich Von

Raiffeisen (1818-1888), who are considered as the founding fathers of the saving and credit cooperatives (SACCOs) movement: Hermann Schultze Delitsche, who established a saving and credit cooperatives for minor artisans and the urban middle classes, and Friedrich Von Raiffeisen (1818-1888), who is known as a cooperative leader who reinvented microfinance by creating rural savings and credit cooperatives. Helmut K. Anheier & Stefan Toepler (2010) added that, Hermann Schulze-Delitzsch introduced similar initiatives in urban areas while Raiffeisen addressed problems in rural areas during the great famine of 1846/47 that inspired him to establish a rural charity association, importing grain from non-affected areas to distribute bread to the poorest. Later on, he founded a loan society (Flammarsfelder Hilfsverein) in order to stimulate savings and provide credit to farmers, allowing them to buy cattle and equipment. These initiatives, however, rested heavily on philanthropy, rendering its viability uncertain. Again, in the 1860s, Raiffeisen followed the example of Schulze-Delitzsch by introducing the concept of cooperative self-help in what would become the first rural savings and credit cooperative (Darlehenskassen-Verein) in Germany. Until his death, Friedrich Raiffeisen put considerable effort in the propagation of this type of cooperative. In 1872, the first rural cooperative bank (later known as Raiffeisen-bank) was set up, as a structure to strengthen the financial position of the Darlehenskassen. Additionally, rural producer cooperatives were set up for storage, marketing, and distribution of agricultural produce and joint purchase on agricultural factor markets. Indeed, the innovation of Friedrich Von Raiffeisen (1818-1888) laid the foundation of a cooperative movement and provided a prototype for rural credit associations in more than 100 countries, resulting today in hundreds of thousands of cooperatives and affecting the lives of more than 150 million people through the concept of cooperative self-help.

Ergetew Temeche (2014) added also that, in Italy, Luigi Luzzatti established saving and credit cooperatives, which combined the principles established by his two German predecessors. Both forms spread rapidly all over Europe, northern America, Latin America, and Asia from 1900 to 1930 and to Ghana by one Catholic Bishop. Now days, SACCO societies play a very important role in empowering their members Socio-Economic status all over the world.

However in some countries of Africa, the Savings and Credit Cooperatives were promoted between 1965 and 1989; The first SACCO was introduced by Father John Necnulty in Ghana with purpose to assist villagers improve their economic conditions (Fredrick, O., W.2013). The

African Confederation of Cooperatives saving and Credit Associations (ACCOSCA) was formed in Kenya in 1968 having goal to attain sustainable and viable SACCOs in Africa. In recent years, in developing countries consideration of the potential of Savings and Credits Cooperatives and Credit Unions as tool for sustainable poverty alleviation has been increasingly recognized (Jonathan, M, et al. 2002). Many of the first savings and credit cooperatives emerged in the English- speaking countries, primarily in Ghana 1955, Uganda 1946 and in Nigeria dates back to 1951-1953 (Mbwana, K., and J. Mwakujonga, 2013). In Tanzania SACCOS emerged in 1954, Kenya in 1964 and Liberia 1965. Thus, in Rwanda the first forms of cooperatives were introduced in 1949 by the colonial masters but Credit and Savings Cooperatives started as early as 1988 and were first legally recognized by law number 31/1988 of 1988, (Rwanda Cooperative Agency, 2009). Later law number 08/1999, of June 1999, regulating the banking and non-banking financial institutions in Rwanda affirmed the role of savings and credit cooperatives in Rwanda (ibid 2009). Such institutions were established under the instructions and supervision of National bank of Rwanda (BNR, 2008).

### **1.1.1 Historical background of Umwalimu SACCO and SACCOs in general**

Umwalimu SACCO was created in 2006 and it was licensed in 2008 by National Bank of Rwanda (BNR) to operate as a Financial Institution offering different financial services to its members. Today it has 30 branches, one in each district, and has grown in terms of equity and members with a total number of almost 78,333 active accounts. Members have easy access on their accounts at all Branches of Umwalimu SACCO and Umurenge SACCOs through an interface technology. Through the cooperative and out of their meager earnings, teachers save up to 5 per cent of their monthly net salary; this would automatically qualify them to access loan as Umwalimu SACCO members (Umwalimu SACCO Report, 2018). The aim of establishment for Umwalimu SACCO was to empower the members towards uplifting of their social-economic welfare and to contribute to socio-economic development of the community in which they live. The establishment of the SACCO was the initiative from His Excellence the President of the Republic of Rwanda, Paul Kagame. Both the Ministry of Finance and the Ministry of Education were charged with responsibility of having the idea implemented. The main concern was the economic position of teachers that would not cater for their basic needs, the budget constraint and the wage bill limit as normally advocated by international financing institutions (MINECOFIN, 2006).

The background of SACCOs in the world can be traced based on the origins of modern cooperation. Morris Altman (2016) cited in Muyombano A., et al., (2016), Savings and Credit Co-operatives first appeared in Germany in the 1870's. The idea moved to North America in 1900 with European immigration. Canada, the United States, Australia and Ireland had the most established movements. In many regions of these countries SACCOs are much larger than the commercial banks. According to Muyombano A., et al., (2016), the first Savings and Credit Cooperative were established in mid-19<sup>th</sup> Century, mainly in Germany by two men considered as the founding fathers of the credit cooperative movements: Hermann Schultze-Delitsche, who established a credit cooperative for minor artisans and the urban middle classes, and Friedrich Von Raiffeisen, the founder of the saving and credit cooperatives or rural credit. After consumer cooperatives, the savings and credit cooperatives is the common type of cooperatives to be found in the modern world, including the Third world (Munyiri, 2006).

The objective of the scheme is to improve the teachers' professional lives, get access to loans for different income generating activities that could help them to meet their needs and to improve the socio-economic development of the country. The study assumes that after the establishments of Umwalimu SACCO in Rwanda, the socio-economic status of teachers have improved.

### **1.1.2 Conceptual background**

A SACCO (saving and credit cooperative) is a financial institution under the cooperative form. It is a legal entity, in which individuals save their money and can get loans to invest in various other income generating activities. The basic structure of SACCOs and credit unions is what differentiates them from banks for they are user-owned financial intermediaries. Members typically have a "common bond" based on geographic area, employer, community, industry or other affiliation (MINICOFIN, 2007) cited in Isaboke Peter Kennedy Nyataya (2008). After being a member of SACCO, each member has equal voting rights regardless of the deposited amount of money or the number of shares owned. The principal products of SACCOs are savings and credit, however, some offer money transfers, payment services and insurance; they sometimes join together to create second-tier associations for the purposes of building capacity, liquidity management and refinancing; these second-tier associations can play a useful role in monitoring and evaluation.

Microfinance is the provision of financial services including savings, transfers, insurance and credit for the poor (Pacific Financial Inclusion Program, 2009). Today there is broad awareness that poor people have many and diverse financial service needs, which are typically met by a variety of providers through multiple financial services (The World Bank, 2013). SACCO is an easy way of organizing a community to save and recycle savings in a given locality. Since the nature of a SACCO is local, it mobilizes savings locally, within the community, and then the profits are returned to members in the form of loans (MINICOFIN, 2007). The money stays and works within the membership and the area. This mutually achieved success helps not only build a sense of ownership and pride in an area but also create a culture of saving and investing. SACCOs is a Rwandan based savings credit and co-operatives whose objective is to pool savings for the members and in turn provide them with credit facilities. Other objectives of SACCO are to encourage co-operation among members, teach them proper investment practices and also proper money management. Unlike banks the SACCOs are primarily formed to raise the social welfare of members (MINICOFIN, *ibid*).

Thus, to enhance the socio-economic development of Rwandan community in general, and the teachers' welfare in particular, the government of Rwanda established a teachers' cooperative in the name of "Umwalimu Sacco" that grants loans to teachers to enable them to set up small income generating projects to supplement to their regular professional income (Ntambara, D. 2012). Provision of small loans, regular saving deposits which teachers will deposit in their Umwalimu SACCO and later Umwalimu SACCO provide investment advisory services which in the long run will lead to improved welfare of teachers and enabling teachers to invest in both liquid assets and non-liquid assets to enable them pay school fees, pay medical bills and improve on food security.

### **1.1.3 Contextual background**

In Rwanda, about 48.7 % of the rural populations are below the nationally defined poverty line, while it is 22.1% for urban population. Indeed, the majority of Rwandans live in rural areas, where Poverty is deeper and severer than in urban areas (National Institute of Statistic of Rwanda, 2011). In Rwanda people are classified into six different classes according to their social economic status as per *Ubudehe* Programs. *Ubudehe* program is a method of addressing rural poverty through community collective action creating empowerment by helping local

people create social capital, nurture citizenship and build a strong civil society (MINECOFIN, 2002). In order to uplifting the living conditions of low income earners, SACCOs were established from each sector as financial intermediaries, channeling savings into loans, provide saving opportunities for the people, especially in the rural areas, but further improvements are necessary to make their services more efficient and sustainable.

Due to claims formulated by primary and secondary schools' teachers to the government of Rwanda related to their low monthly income earned that could not allow them facing the market price fluctuations caused by the inflation. The government of Rwanda has subsidized the founding of Umwalimu SACCO all over the country. The cabinet meeting of 31<sup>st</sup> October, 2012 ordered that a special program to support Umwalimu SACCO be put in place for 10 years until 2022. The government then agreed a figure of Rwf 30 billion to be disbursed in 10 years from 2012 in order to have the USACCO reach out to as many teachers across the country for them to access formal financial services affordably. The benefits the members have received from the government support include the government primary and secondary schools' teachers accessing loans at an interest rate of 11%, down from 14% per year on projects meant to increase their income sources or allow them to own their homes under mortgage financing. Consumption loan rates were also lowered, from 14% to 13% per year. Teachers after putting these loans and savings together will able to establish small income generating activities that could generate to them an additional income that could then improving their standard of living.

## **1.2. Statement of the problem**

Cooperatives and SACCOS are important contributors to economic growth and development of both rural and urban Rwandans. Hence it is worth to examine the level of contribution of these SACCOs on beneficiaries, in terms of socio-economic status improvement. Most empirical studies portray that SACCOS and rural MFIs have led to positive effects on their members as argued by (Kyessi 2010; Isaboke Peter Kennedy Nyataya and Sheria Ruvugiro (2015). However, some studies reported the negative effects of MFIs and rural SACCOS for beneficiaries (Diagne and Zeller 2001; Frohberg and Müller 2007; Dean and Zinman 2010) including Stewart et al (2010) argued that microcredit clients are made poorer and not richer by microfinance, because sometimes their businesses fail to generate enough profit which is necessary for repaying the loans in Sub Saharan Africa. Similarly, Lapenu and Reboul (2006) noted 10% decline of MFIs



clients in their household's standard of living in Comoro, since they had been forced to sell personal items to repay back the loans. Moreover, loans have fueled the economic difficulties for MFI clients because they had increased market competition and hence they reduced the profits obtained from their business. Ngehnevu and Nembo (2010) noticed that the poorest of the poor were not benefited from the Cameroon Cooperative Credit Union League (CamCCUL) financial services.

Furthermore, in economic development and Poverty reduction strategy (EDPRS), Rwanda has the main goal of achieving sustainable economic growth and social development of all levels of citizens. In order to implement its goals, the Rwandan government established microfinance institutions including savings and credit cooperatives as important instruments (tools) to reduce the number of poor people from 60% in 2000 to 30% in 2020. While, inadequate or lack of financial resources is one of the major problems facing poor households in Rwanda. The emergence and development of microfinance institutions, the SACCOs inclusive, has been gaining its popularity in providing financial services to the poor and low income earners ever since their inception in 2008 as an instrument for antipoverty development programs. The ultimate aim of Rwanda's long-term development plan is to transform the country into a middle-income country by the year 2020. Again MINECOFIN (2007) added that, microfinance can build the capacity of poor people to create employment and generate wealth in a sustainable manner. Therefore, for the effective accomplishment of the aforementioned program (EDPRS) is one of the reasons why the government of Rwanda established Umwalimu SACCO in 2008 to quickly fulfill duties of uplifting the socio-economic development of teachers in Rwanda.

However, in Huye District Umwalimu SACCO has been observed to have created a remarkable impact on the enhancement of teachers' saving culture and hence, facilitating them in accessing loans which in the long run has enabled their households to invest in various activities and projects. Though primary and secondary school teachers face always with a budget constraint, teachers' wages should not be comparable to those of other workers of other sectors with the same level of qualifications such as nurses, public servants, etc whom they meet at the market demand and whose salary is larger than that of teachers. Thus, USACCO was formed by the government of Rwanda as, a solution to encourage teachers to pool together savings so that they can access loans to engage in productive activities for their socio-economic development. Following the Umwalimu SACCO members' continuous saving with their SACCO, they are able

to access credit at low but competitive interest rates. With access to these financial savings and credit services, members can start new businesses or improve on the existing businesses and engage in any other productive activities as well as learning how to use earned income wisely and consequently improve on their socio-economic status. However, socio-economic status of members in Umwalimu SACCO is still low as there is a general outcry on the savings procedure and the size of the loans given to members. Thus, if members do not access adequate credit and continue to get small loans, among other obstacles, their goals of improving on their socio-economic development through the establishment of small income generating activities may not be achieved. Hence, it is against the aforementioned backdrops, the researcher decided to undertake the present study in order to have a better understanding on how Umwalimu SACCO has effectively and positively transformed the socio-economic lives of its beneficiaries through the execution of its planned and unplanned financial and non-financial activities.

Again, according to Wolday (2003) quoted by Sheria Ruvugiro (2015), limited researches were conducted in this domain and have only concentrated on institutional sustainability, rather than their impact on member's living standard improvement. Since inception Umwalimu SACCO, it has not attracted attention of scholars to examine its contribution to the improvement of teachers' socio-economic development and welfare.

The purpose of this paper is therefore to assess the contribution of SACCOs' beneficiaries living conditions (as measured by income, saving, asset accumulation, and self-esteem) by paying a special attention before- and after teachers have joined USACCO. Hence, this study is intended to evaluate whether USACCO had any contribution towards the welfare or standard of living of teachers in Rwanda, with evidence of USACCO of Huye District.

### **1.3. Objectives of the study**

The main objective pursuing by this research is to assess how primary and secondary school teachers were experienced the implementation of the Umwalimu SACCO on improvement of their socio-welfare in Rwanda and being focused on USACCO located in Huye District. The specific objectives include the following:

1. To determine the type of contributions generated by Umwalimu SACCO' activities (services) to its members, in Huye District.

2. To assess the type of small income generating activities generated by members and their contributions on the improvement of their standard of living, as results of becoming USACCO members, in Huye District.
3. To evaluate the relationship between USACCO's financial products and the socio-economic development improvement of beneficiaries

#### **1.4. Research questions**

The following questions will be answered by the research, in order to achieve the specific objectives stated as above.

1. To what extent the type services provided by USACCO contribute to teachers' socio economic development, in Huye District?
2. What are the contributions of small income generating activities established by teachers to their standard of living, as results of becoming members of USACCO, in Huye District?
3. Is there a significant relationship between Umwalimu SACCO' financial services and the socio-economic development improvement of beneficiaries?

These specific questions were highlighted by the following sub-questions, which will guide my attention:

- i) What was the socio-economic status of members before and after joining USACCOs?
- ii) What are the services provided by Umwalimu SACCO to its members, in particular, towards members' socioeconomic conditions improvement, in Huye district?
- iii) Is there a relationship between the USACCO's activities and the socio-economic development of beneficiaries?
- iv) What are the challenges which face Umwalimu SACCO members in improvement of their wellbeing?

#### **1.5. Significance of the study**

The study plays a very important role for both at local and national levels. Locally the study is of importance for the local governments and decision makers to understand the relevance of Umwalimu SACCO in improving socio-welfare of teachers. This is to enable them to refocus in case the intended objectives are not being met. The study also offered a great opportunity for the practitioners to get feedback from primary and secondary school teachers who are participating

and those not participating in Umwalimu SACCO' activities and this feedback includes suggestions on what can be done better which can be used to create a positive change in improving the living conditions of teachers. At the national level, the study is of importance in assessing the relevance of Umwalimu SACCO in improving the socio-welfare of teachers. This brings out practically what it takes to establish and manage a successful Umwalimu SACCO and this can be integrated in national policies and programs for teachers in other areas in Rwanda.

Furthermore, the study was significant in the following ways:

(i) Information generated on the study will help the researcher to understand the extent to which financial services provided by Umwalimu SACCO contributed on socio-economic development of teachers.

(ii) The study will help the researcher, Umwalimu SACCO management, members and other stakeholders to understand how the Umwalimu SACCO savings and credit services contribute to the members' socio-economic development.

(iii) The study helped to widen the researcher's knowledge on the subject and in particular credit and saving services of Umwalimu SACCO.

(iv) The study will serve as a basis for further research by institutions and other scholars, having contributed to its literature and methodology.

### **1.6 Justification of the study**

The study provides information on the role played by Umwalimu SACCO in improving the socio-economic development of teachers on how they can be sustained in Huye district and in Rwanda at large. This research has been motivated by the introduction of new type of cooperative called Umwalimu SACCO in Rwanda, with an aim of enhancing the socio-economic status of primary and secondary school teachers in Rwanda. The findings of the study will be presented in a form report and the copy of the same shall be shared with the management of Umwalimu-SACCO. Hence serving as database and reference document to facilitate the management in decision making on matters concerned with activities of the USACCO. Through the data gathered for the present study, the members of USACCO will be able to have a better understanding of the role their USACCO is playing towards their own socio-economic development and that of others in the area. The study also will add value to the existing literature on SACCOs in general and USACCO in particular and therefore, benefiting academics as well as researchers as study reference material. Finally, this study will identify the opportunities found at

USACCO, propose suggestions, advices, appreciation and recommendations to strengthen the USACCO.

## **1.7. Scope of the study**

### **1.7.1 Geographical scope**

The study was conducted at Umwalimu SACCO, Ngoma sector, Huye District, Southern Province, Rwanda. This location was selected because it is convenient to the researcher in terms of accessibility.

### **1.7.2 Content scope**

This study concerns the Contribution of USACCO on the socio-economic development of teachers in Rwanda, with Evidence from Huye district branch. The study focuses on the contribution of USACCO services as an independent variables and the socio-economic development of beneficiaries was considered as a dependent variable which was measured in terms of members' ability to start new businesses, expand existing ones, and increased income. Finally the intervening variable were government policies and programs, level of entrepreneurial skills, educational level, family size and Saving culture. Lastly, inquiries will be made on what is thought to be the missing link and what corrective measures should be taken to ensure that the assigned objectives of USACCO are applied in improving socio-welfare for teachers and how they can be sustained.

### **1.7.3 Time scope**

This study covers a period of 10 years, from 2008 to 2019. This is the time the researcher deems suitable for collecting data with the regards to the objectives of the study and also finishing the research on time with regards to the University timeline and convenient for the researcher to achieve the award in time. The year 2008 was taken into consideration because it was the starting year of Umwalimu SACCO in Rwanda and 2019 is the current year of the study.

## **1.8. Thesis structure or organization**

The thesis is divided into six main chapters including this introductory chapter. This first chapter presents, firstly, the introduction, statement of the problem, purpose of the study, research objectives, research questions, and significance of the study, scope of the study and the

organization of the study. The second chapter focuses on the literature review. It covers literature related to topic by different authors and the theoretical foundations of the study. It is also concerned with the consultations of existing literature on the topic; it aims at fetching the knowledge from the works or conducted by other researchers. The third chapter covers the overview on financial system and microfinance activities in Rwanda and oversea. It includes the introduction on Microfinance, concepts of microfinance & MFIs, Microfinance in Rwanda and in European countries. The chapter four presents the research methodology used in this dissertation; it covers methodological approaches that were employed in the research, research design, research instruments and sampling techniques used during the study. The fifth chapter provides the presentation, analysis and interpretation of research results and verification of hypotheses; and Chapter six is dedicated to the summary of major findings, discussion, conclusions and recommendations and suggestions for further research. The detail structure of thesis is arranged as follows:

Chapter 1: General Introduction

Chapter 2: Literature Review

Chapter 3: Overview on financial system and microfinance activities in Rwanda

Chapter 4: The research methodology

Chapter 5: the presentation, analysis and interpretation of research results and verification of hypotheses

Chapter 6: Summary of major findings, discussion, conclusions and recommendations and suggestions for further research.

### **1.9. Operational definitions**

**SACCOs:** These are savings and credit cooperative organizations which are initiated by both governments and private individuals or firms in order to improve the welfare and income of the general public in which they are located.

**Microfinance:** it is an economic development approach that involves providing financial services, to low-income clients, where the market fails to provide appropriate services. The services provided by the Microfinance Institutions include credit, saving and insurance services.

**Membership:** is a quality of people to belong to a group, association, cooperative, organization... in the line with the present study, membership is the quality of SACCO members who have fulfill all condition to become members to have fully paid their share.

**Teachers:** these are skilled individuals who impart knowledge from nursery, primary, to secondary education giving instruction to the young generations.

**Socio-economic development:** Socio-economic development is the process of social and economic development in a society. The ultimate objective of social development is to bring about sustained improvement in the well-being of the individual, groups, family, community, and society at large. It involves sustained increase in the economic standard of living of a country's population, normally accomplished by increasing its stocks of physical and human capital and thus improving its technology.

**Micro-credit:** according to (Meagher, 2002) micro-credit is a component of microfinance and is the extension of small loans to entrepreneurs, who are too poor to qualify for traditional bank loans. Furthermore, in developing countries especially Rwanda micro-credit enables very poor people to engage in self-employment projects that generate income, thus allowing them to improve the standard of living for themselves and their families.

**Micro finance Institutions (MFIs):** Ledgerwood, (1999) defined MFI as a microfinance institution or an organization, that is engaged in extending micro credit loans and other financial services to poor borrowers for income generating and self-employment activities.

**Opportunities and challenges:** these are the benefits and hindrances of Umwalimu SACCO.

Finally, this chapter has covered the introductory background of savings and credit cooperative (SACCO), the statement of problem that the research aims to resolve, research questions and objectives of the study; the following next chapter two examines the literature pertaining to the research topic.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0. Introduction**

The previous chapter one mentioned the general introduction of the study, background as well as the statement of problem; this chapter examines and presents an increasing body of knowledge pertaining to saving and credit cooperatives. This chapter therefore, provides theoretical and empirical information of the study from publications on topics related to the research problem that have allowed the researcher to formulate the hypotheses of this study based on the theoretical foundations of the study found in this chapter two. It begins with definitions of key concepts of the topic, a theoretical review where a number of theories that explain saving and credit cooperatives and microfinance are discussed in length, an empirical review is thereafter provided where previous studies on the SACCOs are presented and discussed and ends with hypotheses of the study.

#### **2.1. Definitions of key concepts**

##### **2.1.1. Micro-finance**

Micro-finance is a term used to refer to different methods for giving poor people access to financial services and the main difference among definitions is about the range of services and target clients. According to the Consultative Group to Assist the Poor (CGAP, 2018), microfinance is the “*provision of basic financial services to poor (low income) people, who traditionally lack access to banking and related services*”. Hence, Microfinance is an economic development approach that involves providing financial services, to low-income clients, where the market fails to provide appropriate services. The services provided by the Microfinance Institutions include credit, saving and insurance services.

Again, The Asian Development Bank (ADB) defined microfinance in 2000 as “the provision of a broad range of financial services such as deposits, loans, payment services, money transfers, and insurance to the poor and low-income households and their micro-enterprises”. It was noted that ADB’s definition of microfinance low-income households, micro-enterprises as well as people below the poverty line. This is why, microfinance or saving and credit cooperatives are most



developed in developing countries. Furthermore, saving credit cooperatives are mostly used by developing countries to alleviate the poverty.

### **2.1.2. SACCO**

A SACCO (saving and credit cooperative) is a financial institution under the cooperative form. It is a legal entity, in which individuals save their money and can get loans to invest in various other income generating activities. The basic structure of SACCOs and credit unions is what differentiates them from banks for they are user-owned financial intermediaries. Members typically have a “common bond” based on geographic area, employer, community, industry or other affiliation (MINICOFIN, 2007). Again, Kimberly, Zeuli, and Robert (1980) and United States Department of Agriculture (USDA) in 1987 add that, “A Cooperative is a user-owned, user-controlled business that distributes benefits in the basis of use.” SACCOs are user-owned financial institutions that offer both savings and credit services to their members.

Getachew (2006) argued that, in SACCO Society once overhead and other expenses are paid, reserve for cushion against any loss, and for expansion of services set aside, the remaining income from loans is returned back to members in the form of dividend on savings, share or both. The difference between a SACCO and other forms of co-operatives is that the SACCO can accept deposits from its members as savings and also issue out loans to qualifying members of the SACCO. Furthermore, SACCOs in Africa are intended to offer alternative development approaches directed towards improving the desirable situations in low-income countries. They are community membership based-financial institutions that are formed and owned by their members with a view to promoting and enhancing their members’ economic interests, hence, contributing favorably to the Human Integrated Development.

### **2.1.3. Umwalimu SACCO**

Umwalimu Savings and Credit cooperative (U-SACCO) is a SACCO for Rwandan teachers mandated to empower the members towards uplifting of their social-economic welfare and to contribute to socio-economic development of the community in which they live ( Umwalimu SACCO-Annual financial report, 2018). The principal activities of Umwalimu-Savings and

credit cooperative as all other saving and credit cooperative are the provision of microfinance, savings and credit services to teachers.

#### **2.1.4. Cooperative**

Masharani (1978) defines a co-operatives society as “an association of people who have voluntary come together for the purpose of improving their standards of living and have agreed to be guided and governed by certain specific principles known as cooperative’s principles. Thus, an association refers to any group of people who have joined together for a particular purpose ranging from social to business, and usually meant to a continuing organization.

According to RCA (2018), “A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise, according to internationally recognized co-operative values and principles”. A co-operative is different from a conventional business due to: It fulfills a social or environmental objective, or is formed to fulfill its members’ needs; its democratic ownership and control; its way of working and its legal structure.

Cooperative Organizations may carry out activities in all sectors of economic and social life, and they are divided into the following categories: (i) Production Cooperative Organizations; (ii) Commercial and Consumer cooperative Organizations; (iii) Savings and Credit Cooperative organizations; (iv) Services Cooperative Organizations and (v) Multipurpose Cooperative Organizations. (RCA, Idem)

#### **2.1.5. Savings**

Quicken, 2019 stated that, savings refer to money you put aside for future use rather than spending it immediately. In addition to the benefits of saving up for future purchases, delaying an impulse purchase also helps you decide whether it is something you really need, or a waste of money you will regret shortly after buying (Quicken, 2019). Indeed, saving is the conservation of money for the future spending. Methods of saving include putting money aside in a bank or pension plan. Saving also includes reducing expenditures, such as recurring costs. In terms of personal finance, saving specifies low-risk preservation of money, as in a deposit account, versus investment, wherein risk is higher. “Savings are an important determinant of financial

development because when economy is getting stronger, the earnings of people increases which in turn increases the savings resulting in financial development within the country” (Luca, 2000).

### **2.1.6 Loan**

In finance, a loan is the lending of money from one individual, organization or entity to another individual, organization or entity. According to Signoriello J. (1991), a loan is a debt provided by entity (organization or individual) to another entity at an interest rate, and evidenced by a promissory note which specifies, among other things, the principal amount of money borrowed, the interest rate the lender is charging, and date of repayment.

Thus, a loan entails the reallocation of the subject assets for a period of time, between the lender and the borrower. In a loan, the borrower initially receives or borrows an amount of money, called principal, from the lender, and is obligated to pay back an equal amount of money to the lender at a later time.

### **2.1.7. Socio-economic development**

Socio-economic development is a process that seeks to identify both the social and the economic needs within a community, and seek to create strategies that will address those needs in ways that are practical and in the best interests of the community over the long run. The general idea is to find ways to improve the standard of living within the area while also making sure the local economy is healthy and capable of sustaining the population present in the area. Socio-economic development occurs in neighborhoods in metropolitan areas, sections of smaller cities and towns, and even in rural settings. (Sullivan et al., 2003)

**Social development** is a process that results in the transformation of social structures to improve the capacity of a society in order to fulfill its objectives (World Bank, 2009). UNRISD adopts a broad definition of social development one that is concerned with Processes of change that lead to improvements in human well-being, social relations and Social institutions and that are equitable, sustainable, and compatible with principles of democratic governance and social justice (UNRISD, 2011). In general social development analyzes how societies progress, stagnate, or regress because of their local or regional economy, or the global economy.

### **2.1.8. Development**

Todaro, M (1985:85) defines development “as a multidimensional process involving major changes in social structures, popular attitudes, and national institutions, as well as the acceleration of economic growth, the reduction of inequality, and the eradication of absolute poverty. Thus, Todaro believes there are three core values of development and these core values are life-sustenance, self-esteem and freedom to choose.

Therefore, development, in its essence, must represent the whole gamut of change by which an entire social system, tuned to the diverse basic needs and desires of individuals and social groups within that system, moves away from a condition of life widely perceived as unsatisfactory and toward a situation or condition of life regarded as materially and spiritually better.

### **2.1.9. Growth and development**

The terms economic growth and economic development sometimes are used interchangeably, but they are fundamentally different. (Perkins *et al.*, 2006) argued that, Economic growth refers to a rise in national or per capita income and product. If the production of goods and services in country rises, by whatever means and along with it average income increases, the country has achieved “economic growth”. While, economic development implies more, particularly improvements in health, education, and other aspects of human welfare. Countries that increase their income but do not also rise life expectancy reduce infant mortality, and increase literacy rates are missing out on some important aspects of development. If all of the increased income is concentrated in the hands of a few rich elite or spent on monuments or military apparatus, there has been very little development in the sense that we mean (Perkins *et al.*, 2006).

### **2.1.10. Economic development**

Furthermore, Todaro M. (1985) the concept of economic development gets a unique meaningful and understanding from the books published by the Professor Michael Todaro who stated that, the term *development* implies the process and the positive changes in the growth of the wealth of given country and therefore the growth of the well-being of its citizen. It is necessary to mention that the economic that the economic development may be seen as synonymy of well-being of the country. Indeed, the term economic development also emphasizes the importance of constant economic growth that is achieved through the competency of the national companies and their work force through the various innovations, raising the economic competency of the countries.

## **2.2. Theories on microfinance: saving and credit cooperatives**

This section involves the presentation and discussion on theories considered as foundation of the study. Therefore, theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge within the limits of critical bounding assumptions. The theoretical framework is the structure that can hold or support a theory of a research study.

The theories on microfinance were advanced by scholars, have been considered by the researcher for the purpose of this study. Many studies indicated that various microfinance institutions have successfully extended unsecured small loans to poor households and entrepreneurs while that was the failure of traditional or formal financial institutions or banks.

To explain for the success of this infancy industry or microfinance towards poor holds and people, several economic theories are used, which are called: Theories of asymmetric information and economies of scale have explained us that formal financial institutions are reluctant to provide microfinance services. The theory of group lending with joint liability, which originally is a method of lending but presently developed as a theory in microfinance, explains Microfinance Institutions can avoid the above stated problem by creating financial contracts that impose joint liability and create dynamic incentives to mitigate the effects of asymmetric information. The economic theory treats microfinance institutions (MFIs) as infant industries and the psychological theory differentiates microfinance entrepreneurs from traditional money lenders by portraying them as social consciousness driven people (Khandakar et. al., 2004).

According to Jeffrey S. Royer (1987), the general purpose of any economic theory is to provide a framework for the analysis, understanding, and prediction of economic behavior. Theory gives meaning to the events economists observe.

### **(a) Theory on asymmetric information**

According to Sean Ross (2018), the theory of asymmetric information was developed in the 1970s and 1980s as a plausible explanation for common phenomena that mainstream general equilibrium economics couldn't explain. In simple words, the theory proposes that an imbalance of information between buyers and sellers can lead to inefficient outcomes in certain markets. This theory was developed by three US economists (George Akerlof, Michael Spence, and Joseph Stiglitz). All three won Nobel Prize in Economics in 2001 for their earlier contributions;

implied the simple fact that two sides in a transaction do not have the same information. One of the most vital tasks of the bank is to ensure about the repayment probability of borrowers to protect its depositors and shareholders against risks. Therefore, the banks need to use information effectively to solve the three economic problems: What kind of loan contract to provide, to whom and what interest rate. The bank required significant expenses to gather, processing and storing information on borrowers. Asymmetric information in credit market can lead to adverse selection and moral hazard, which can be source of credit risk and be the main concerns of any bank. Thu Trang BUI (2017)<sup>1</sup> adds that, adverse selection arises because the bank cannot perfectly observe the characteristic of borrowers. They give the same treatments to the risky borrower and the safe ones. So when the screening mechanisms cannot effectively distinguish, the standard solutions for bank are to demand collateral in order to ensure that only safe types enter the market. However, typical microfinance clients are the poor; they don't possess sufficient wealth for collateral under the bank's regulation. Therefore, they are denied accessing to the credit services.

This might create moral hazards after the transaction when the borrowers may deviate from the terms of the loan contract used for loan purposes. One solution for the bank's lenders is to have to control and evaluate the borrower's actions after giving loan, and this approach is costly. The bank, therefore, try to demand collateral as a mean of mitigating the problem of moral hazard. Once again, poor borrowers are excluded from the market because of asymmetric information problems.

### **(b)Theories on economies of scale**

In economics, the economies of scale are achieved when more units of a good or service can be produced on a larger scale, yet with fewer input costs.

According to this theory, economic growth may be achieved when economies of scale are realized that implies lower average cost as the result of mass producing a good. In finance, it can be understood as both when loans are large and when the number of borrowers increases, the average lending cost decreases. This theory in one side encourages lender to make large loans rather than a number of small loans to reduce cost. In the other side, it suggests that if lenders can make some loans in the same ways, the average transaction fixed cost also decreases.

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<sup>1</sup>Thu Trang BUI (2017). *Factors affecting microfinance development in Vietnam*, Université Paris 13 Sorbonne Paris Cité- Doctorate thesis, 2017

Therefore, to expand quickly and keep the costs of handling each loan application low, financial institutions may offer simplified and standardized loan contracts but by so doing can lead to a fall-off in portfolio quality because of economizing on the resources needed to select the best potential borrower. To find out the solution, financial institutions have been interested in finding new lending methodologies to the economies of scale and increase the quality of borrower such as making use of advantage of new lending technologies such as Group Lending Methodology<sup>2</sup>.

**Group lending with joint liability:** In the late 1970s. The success of Grameen Bank introduced a practical solution for the problem of adverse selection and moral hazard: that is group lending with joint liability which is now known as a theory of social liability or peer lending. Indeed, the solution is the idea that instead of offering individual liability contracts, the bank lends to a group of borrowers who are jointly liable for each other's loan. So, if one member of the group defaults on his debts, other members in the group must repay the bank a portion of the defaulting member's loan in addition to their own liabilities. The group loan contract differs from an individual loan contract in that group members are now liable for their fellow member's loan. Therefore, safe borrowers will not wish to match with risky types since the latter are more likely default on their loan, leading a higher expected joint liability cost. Group lending with joint liability overcomes the problem of moral hazard by passing the monitoring activity onto the borrowers themselves. They will monitor their peer and pressure those individuals who misuse their loan to act accordingly. Since group members will typically know each other well in advance of the date of borrowing, so their information for each other can be available they will save the expense less than it would be for the lender and increase the quality of borrower. Furthermore, when financial institutions made loan to the group, the fixed cost transaction would be lower than if they made individual loans.

**The Law of diminishing return and profitable microfinance:**

In other words, the total output initially increases with an increase in variable input at given quantity of fixed inputs, but it starts decreasing after a point of time. In economics, diminishing return law plays an important role in explaining a firm's behavior. It states that if other factors are fixed in supply and successive units of a variable factor are added to them, then the extra output derived from the employment of each successive unit of the variable factor must, after a

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<sup>2</sup> Idem

time, decline though they may increase prior to that and this may hold for revenue as well as output. In finance, the law of diminishing return can be expressed as when more capital is added, the marginal return tends to increase to a point beyond which any additional capital could lead to a lower marginal return.

The reason to apply this theory into saving and credit cooperative can lead to an inception that a small business seems to have higher marginal return than large business because they lack access to capital and any additional capital could be in the first stage of increasing marginal return, while large businesses seem to be in the second stage of decreasing marginal return.

Therefore, microfinance Institutions can expect a profitable and sustainable development by meeting their high cost by charging high interest rate to their members.

### **(c) Modernization Theory of development**

Modernization theory is a theory used to explain the process of modernization that a nation goes through as it transitions from a traditional society to a modern one. The theory has not been attributed to any one person; instead, its development has been linked to American social scientists in the 1950s. This theory of development suggests that economic dimension alone is insufficient and adds theories on institutional and social change. Incorporates non-economic elements such as social practices, beliefs, values and customs (McClelland, *Achieving Society*) Diffusion and speed of change is critical as is removal of various cultural and social barriers. Backward internal structures-rather than external factors-cause underdevelopment (Kimberly Winston, 2018)

### **2.3. Saving and credit cooperatives' literature review**

A great deal of attention and funding has been directed toward microfinance over the past few decades. Scholar interests in microfinance lagged behind the development of microfinance industry. The development of MFI is the pre-conditions for them to complete their important goals. However, the factors determining the development of microfinance sectors in are not clearly known because development can be measured in different ways basing on saving and credit cooperatives' specific characteristics and their objectives.

According to Nguyen Kim Anh et al, (2014); Nghiem Hong Son (2006), Micro-finance institutions are considered developed if they contribute to both economic development and poverty reduction, that made the main difference between MFIs and commercial banks. While



commercial banks try to achieve sustainability before expanding access even when they are still young, saving and credit institutions focus on their first goals of depth and width access right from its establishment and then their operation, financial and institutional sustainability.

Again, studies conducted on saving and credit cooperatives have shown that countries of the world with high membership include the United States (87 million), India (20 million), Canada (11 million), and South Korea (4.7 million) and Japan (3.6 million). By the end of 2006, there were 46,377 credit unions in 97 countries around the world, which collectively served 172 million retail members with over US\$1.1 trillion in terms of assets. Today, a good number of credit unions existing with a view to furthering not only sustainable community development at local but also at international level as well. Saving and credit cooperatives are known in different countries by different names, for example, in a number of countries in Africa, they are referred as savings and credit cooperative organizations (SACCOs) with an emphasis on savings before credit.

The nature of financial services that a credit cooperative provides depends on, to some extent, its size. The Vancouver City Savings Credit Union in Canada, for example, by the end of 2002 had more than 340,000 members and \$10.5 billion assets, had forty-two branches and provided to its members with every kind of financial service that was available. Credit unions have not only played a distinct and significant role in providing financial services to Canadians but also in the small business sector and are, the second largest lenders to small businesses in the Canadian economy (World Bank, 2008).

Robinson (2001), summarizes the role of microfinance institutions: Improving financial security; Facilitate growth of enterprises; allow storage of excess liquidity for future use; Improve the livelihoods of low income earners and those of their dependents; help people of low income reduce risk, improve management, and realize high return on investments and ensure social change through empowering women and changing gender relations in the community and households.

Fisher *et al.*, (2002), rightfully, pinpointed that Micro-Finance Institutions (MFIs) can facilitate the poor people to work their way out of poverty by delivering financial services through appropriate mechanisms. The microcredit is necessary but not enough for microenterprise development, its promotion and the success of microenterprises depends on the whole range of

resources, for instance, natural resources, human resources and financial resources. It has been noted that implementers of credit schemes have taken the claim that their work will eventually lead to progressive social change, for example, through empowering women and change in gender relations in society. Fairbairn and Hammond (1997) state that financial services are not the panacea for poverty alleviation, but other strategies are needed for the very poor who need food and employment before they can make use of financial services.

### **2.3.1. The Role of Cooperative Societies in Economic Development**

For over 160 years now, cooperatives societies have been an effective way for people to exert control over their economic livelihoods. Dogarawa (2005) provided a unique tool for achieving one or more economic goals in an increasingly competitive global economy. As governments around the world cut services and withdraw from regulating markets, cooperatives are being considered useful mechanisms to manage risk for members in Agricultural or other similar cooperatives, to help salary earners save for the future through a soft-felt monthly contribution that is deducted from source, own what might be difficult for individuals to own by their efforts, strengthen the communities in which they operate through job provision and payment of local taxes (Dogarawa, 2005). He added that, today, in an era when many people feel powerless to change their lives, cooperatives represent a strong, vibrant, and viable economic alternative (Dogarawa, 2005). The author furthermore posited that cooperatives are formed to meet peoples' mutual needs (Dogarawa, 2005). They are based on the powerful idea that together, a group of people can achieve goals that none of them could achieve alone. This is evidence which indicated that cooperatives empowering people to achieve their targeted goals.

According to (RCA, 2018), the main strength of cooperatives is that they pool the resources of their members and as a consequence they allow their members to reduce costs, face the various challenges of the enterprise and increase their individual visibility and their capacity to negotiate prices and market their products: members, individually, would have greater difficulties running their enterprise. Cooperatives are enterprises that produce goods and services like any other enterprise. They differ from other enterprises in that their owners, known as “members”, organize their activities to serve their needs first, before seeking to maximize profits or increase their share in the market. Cooperatives are interested above all in enhancing their members' capacity to produce or to consume.

(RCA, 2018) adds that, many cooperatives may produce goods or services for sale in the market, and may make significant profits, while others may simply provide a service to their members. Some cooperatives may distribute the profits from the sale of products among the members but most allocate any benefits to the development of the cooperative, limiting the compensation to members in proportion to their transactions with the cooperative. That is why in many countries, cooperatives are considered as non-profit organizations. As a rule, a cooperative is owned by many members and each member has equal voting rights, independently of the capital they invest. This is known as the “one member one vote” principle.

Moreover, McAuthur and Stuard (1993), have pointed out the major developmental role played by cooperatives in the modern world as mentioned below<sup>3</sup>.

To close this section, the researcher asked himself, how do SACCOs work?

Several microfinance institutions and SACCOs require a minimum monthly contribution from members. This helps them to instill a saving discipline. The money saved by members is not accessible to the member unless they choose to withdraw from the SACCO or take out a loan. This protects the savings and prevents impulsive spending of cash saved.

### **2.3.1.1 Economic Role of microfinance cooperatives**

The economic role involves the provision of opportunities for improved incomes to members. Besides, playing an important role in the economies of countries, as evidenced by their market share of the GDP, cooperatives are used as a tool to help alleviate poverty. They facilitate access to credit, procurement and storage, distribution of inputs and marketing of products. Hence, cooperatives supplement the functions of state credit institutions and marketing corporations. In general, the main economic activities in which cooperatives have ventured in include agriculture, fishing, financial services, production and labor, mutual guarantee or insurance, in retail and wholesale, housing and public services.

### **2.3.1.2. Social role of microfinance cooperatives**

The social role includes protection of members from risks not only through mitigating risks and solving social problems but also by improving living and working conditions of farmers and factory workers: providing their members with financial services with a view to facilitating them

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<sup>3</sup> Isaboke Peter Kennedy Nyataya (2018). Op.cit

with needful in responding to unexpected problems; making production and consumption credit available to small-scale producers and agriculturists; offering production, health, funeral and life insurance and protecting consumers from adulteration of commodities; taking other social responsibilities such as providing care to the aged, children and handicapped, and the creation of employment for socially disadvantaged population as well.

### **2.3.1.3 Political Role of microfinance cooperatives**

In democratic countries, cooperatives express their views on different issues concerning their communities' welfare such as environmental conservation and the provision of services such as health care, education, the creation of employment and taxation, amongst others. Above all, they defend the interests of their members and that of the public in general. For instance, consumer cooperatives set standards for consumer protection. The contribution of cooperatives to civic life is embedded in the fact that they are viewed and serve as schools of democracy. The principles of voluntary and open membership, as well as democratic membership control, ensure cooperatives are seen as schools of values comprising honesty, transparency and equity.

### **2.3.1.4 Contribution of saving credit cooperatives to Poverty reduction**

SACCO is a Rwandan based savings credit and co-operatives whose objective is to pool savings for the members and in turn provide them with credit facilities. Other objectives of SACCO are to encourage co-operation among members, teach them proper investment practices and also proper money management. Unlike banks the Sacco are primarily formed to raise the social welfare of members. USACCO is a Rwandan based savings credit and ... then the profits are returned to members in the form of *loans* (MINICOFIN, 2007)

According to (Branch & Cora 1999), saving and credit cooperatives played an important role in poverty reduction in the following ways.

- Financial cooperatives contribute to poverty in various way; financial cooperatives by proving saving products help to reduce member's vulnerabilities to shocks such as medical emergencies or consumption smoothing. They encourage thrift for future investment, education and small business enterprises.
- Financial cooperatives also provides to their members access to credit for financing micro, small and medium enterprises that generate additional employment and incomes and provide agriculture credits that help small farmers increase production and improve income. The

primary product offered by financial cooperatives is low-cost saving facilities for the poor depositors. Empirical research of the last decade has demonstrated that for saving services exists even among the poorest.

- If formal means of saving are unavailable, poor people tend to use livestock, jewelers or informal arrangement that typically have a low or negative interest rate.
- For people living in poverty saving is critical to counterbalance the cyclicity of income. For example, coffee farmer in Rwanda join financial cooperative to save money for period before the next harvest and to reserve money for low yield years.
- Financial cooperatives (SACCOs) provide access to credit for members who might not have typically access to the saving commercial banks.
- USACCO is a Rwandan based savings credit and co-operatives whose objective is to pool savings for the members and in turn provide them with credit facilities. Other objectives of SACCO are to encourage co-operation among members, teach them proper investment practices and also proper money management. Unlike banks the Sacco are primarily formed to raise the social welfare of members.
- The SACCOs have managed to establish themselves in different localities. Whereas in urban areas wage and salary earners have formed Urban Sacco, in rural areas, farmers have formed Rural SACCOs. There are also traders, transport, and community.
- Many people who initially used to keep money in holes from their houses and in suitcases are getting involved in USACCO program and have opened savings accounts and this is sign that the institution is yielding.

#### **2.3.1.5. Contribution of SACCO in increasing members' income**

SACCO plays an important role in lower income groups through increasing their asset via establishing a credit relationship, establishing an enterprise, accessing working capital, increasing income through business expansions, meeting housing credit needs and increasing wealth through savings (Branch & Cora 1999). Among many advantages, there are four primary strengths of SACCO's institution i.e. Savings mobilization, services for lifetime asset growth, mixed outreach, and full services array of the credits getting from SACCO contributes on saving of beneficiaries from after getting from 10000 to 700000 and above towards economic development where 51.1% prove that loans granted contributes to the development of beneficiaries and community through satisfying the daily needs of households. The credits

getting from SACCO contributes on saving of beneficiaries from after getting from 10000 to 700000 and above towards economic development where 51.1% prove that **loans** granted contributes to the development of beneficiaries and community through satisfying the daily needs of households.

### **2.3.2. Importance of cooperatives to members**

- Cooperatives are important tools to helping members out of illiteracy through training;
- Members receive training on how to practice modern farming methods;
- Members can easily receive farming inputs such as improved seeds and fertilizers;
- Availability of market for their produce and at reasonable price;
- Mutual support to vulnerable members of the cooperatives especially by paying “Mutuelle de Santé” or *medical care*, giving goats, pigs and rabbits;
- Cooperatives provide support funds to their members from their reserve accounts to cater for issues like school fees, health bills and building houses;
- Cooperatives members easily access loans from the financial institutions for development projects;
- Cooperatives provide dividends to members which defer depending what each member supplied to the cooperative<sup>4</sup>.

### **2.3.3. Importance of cooperatives to Rwanda<sup>5</sup>**

- Cooperatives pay taxes which are useful to country’s infrastructural development;
- Cooperatives are very good channels to disseminating government programs such as *Girinka*, *Ubudehe*, 9 & 12 year basic education, made in Rwanda among others to all members;
- Cooperatives provide jobs thus solving the problem of unemployment in the country;
- Increased production in different sectors such as Agriculture and off farm activities;
- Cooperatives can lead to the development of the district where they operate;
- Cooperatives can help in solving the problem of balance of payment while exporting locally made and produced goods.

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<sup>4</sup>RCA, 2018 retrieved on line: <http://www.rca.gov.rw/about-cooperatives/faqs/>

<sup>5</sup> Idem

### 2.3.4. Objectives of saving and credit cooperatives

According to Ahimbisibwe, (2006) the objectives of SACCO are to promote the economic interest of their members and in particular to: Promote thrift among its members by affording them an opportunity for accumulating savings and paying reasonable interest without risk on such savings. Create a source of funds from which it can afford relief to its members in need by making loans to them for productive and provident purposes at fair and reasonable rates of interest and with easy terms of repayment, Continuously educate members on how savings can be made on regular basis and the wise use their savings.

Furthermore SACCOs provide service to its members such as financial counseling so that the members can solve most of their financial problems, and the risk of management service to ensure the safety of members' savings and loans. Fight against poverty through improving the members' economic and social conditions by enabling the access financial services. Fight against exploitation of powerless individuals by the powerful individuals or institutions, by pooling their own resources to meet their needs.

### 2.3.5. Cooperative Principles

The United States Department of Agriculture listed three principles that uniquely characterize a cooperative organization:

- **The User-Owned Principle:** The people who own and finance the cooperative are those who use the cooperative.
- **The User-Control Principle:** The people who control the cooperative are those who use the cooperative. They democratically elect a board of directors. The board sets the overall operating policies, approves the annual budget, oversees its operation, and distributes the benefits derived from use of the cooperative to members. The board also hires professional management to handle the day-to-day operations.
- **The User-Benefit Principle:** The cooperative's sole purpose is to provide and distribute benefits to its users on the basis of their use. While the goal of agricultural cooperatives is not to generate a return on investment, they, like all businesses, must cover costs and generate capital to cover expansion and unforeseen emergencies. However, The

International Cooperative Alliance (1995) cited in Division of Agriculture and Natural Resources,2020 listed seven principles of cooperative that are more socially-minded:

- Voluntary and Open Membership
- Democratic Member Control
- Member Economic Participation
- Autonomy and Independence
- Education, Training and Information
- Cooperation Among Cooperatives
- Concern for Community

### **2.3.6. Services offered by saving and credit cooperatives (SACCOs)**

According to Bailey (2001) cited Sheria Ruvugiro(2015)SACCOs offer various products to their members including shares, savings, emergency loans, loans, life and loan insurance, fixed deposits, educational savings, housing loans, funeral insurance benefits of SACCOs to members. These services offered some benefits to SACCOs' members that are: Members are encouraged to save since SACCOs are readily accessible, interest rate on saving and lending is better than elsewhere a fact sounds idealistic. Further, members are taught how to handle their finances in responsible manner this could be true only when they effectively economically patronize their SACCOs, loans are insured, so if a member dies, the outstanding balance is settled, however, it is not practice across board. Besides; other Micro-finance also do insure loans for their clients, savings are mobilized and turn into loans necessary for members to finance their activities, regular social interaction between members, promote autonomy and economic independence among members. SACCO also promotes self-responsibility, democracy, equality, equity, openness, social responsibility, and caring for others, SACCOs develop communities where they are operating and promote civic education among members.



### 2.3.7 Type of services offered by Umwalimu SACCO<sup>6</sup>

Umwalimu SACCO's saving culture has been a tremendous success in addressing teachers' financial needs and has catapulted teachers out of poverty. The following are the services offered by USACCO.

#### 2.3.7.1. Saving services

Umwalimu SACCO engages in two principal activities which include managing members' savings got from their monthly deductions of 5% of the member's net salary through a check-off system and loan services. The following are the kind of savings offered by USACCO.

1. *Permanent savings/Compulsory savings*: These savings are made as permanent savings/Compulsory savings and serve as guaranty when giving loans to members. They are the 5% of net salary of teachers' net salary and remunerated at 4% every year.

2. *Free saving or voluntary saving products*: Umwalimu SACCO has also a free savings account through which all the money the member have transit before they are channeled to other subaccounts according to the client willing. In order to encourage teachers to save for their future, Umwalimu SACCO has developed voluntary saving products made under contractual terms and conditions. They include the following savings types:

a) *School fees saving account*: It has a Competitive interest rate depending to the amount and the period saved, allow members planning to save for their children's school fees and themselves; then, members are able to pay school fees on time and preserve their dignity.

b) *Home furniture saving account*: It has a competitive interest rate depending on the amount and period saved, easing the start of the home life. Allow members to access to quality equipment which can serve as loan collateral.

c) *Children saving account*: Umwalimu SACCO offers savings account designed specifically for children development. The parents may begin to save money for their children using this type of account for the secure future of their children.

d) *Fixed/term deposit accounts*: It has an interesting and competitive interest rate depending on the amount and period saved. It increases wealth with high return to the members. Through the

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<sup>6</sup> Umwalimu SACCO reports. Available on <https://umwalimusacco.rw/loan-products/>

mobilization of those different Savings product from members, Umwalimu SACCO grants different types of loans to its members.

### **2.3.7.2. Loan products<sup>7</sup>**

This is the second service provided by USACCO is loan or credit. The types of credit offered are the following:

**1. Overdraft:** Overdraft loan product is a facility that USACCO advances to our valuable members to enable them to cover their needs before their monthly income or salary is deposited to their account.

**Benefits of this overdraft:** Getting quick cash to make essential payment before monthly salary payment; Automatic Processing after completing the request form and Cash collateral (salary of the following month).

*Features of overdraft:* Having paid Share capital of Frw 10,000 + Frw 30,000 payable within the agreed terms; Membership period: at least 2 months; competitive interest rates; Maximum repayment period up to 1 month and ceiling loan amount equivalent to 75% of your net salary; Accessible at Umwalimu SACCO Branches and at Umurenge SACCOs.

*Requirements for accessing USACCO overdraft:* (a) Member's salary passing in Umwalimu SACCO for at least 2 months; (b) A copy of Identity Card or passport for foreigners; (c) Having paid at least Frw 10,000 of share capital; (d) Fill and sign the application form requesting the overdraft.

**2. Emergency loan:** loan granted to members where membership matters” Benefits of emergency loan: (a) Helps in solving personal emergency issues; (b) increase treasury for accessing opportunities; (c) Quick access to sufficient amount with less cost; (d) Uniqueness of the product.

*Features of emergency loan are:* (a) Having paid at least Frw 10,000 of Share capital; (b) Membership period: at least 2 months; (c) Maximum loan duration: 1 year or less depending on the probation period for new members; 1-2 years for public and private teachers in primary and secondary schools; Loan amount limited to permanent saving for loan duration above 1 year; Other members limited to one for amount not exceeding their savings; Start with the beginning

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<sup>7</sup><https://umwalimusacco.rw/loan-products/>

of the academic year for teacher members and takes the remaining months of the year from the month it is approved depending on whether it is for one or two years; Competitive interest rates; (d) Loan protection fees: 1.5% for loan amount less or equal to Frw 500,000; (e) Immediate processing period: if the amount requested is less or equal to the permanent savings amount; if the amount does not exceed Frw 2,000,000 and have 3 guarantors; (e) Physical collateral for loan amount above Frw 2,000,000 not covered by the permanent savings; f) Monthly installment not exceeding 75% of net salary after all compulsory deductions in case does not have any other loan.

**3. Salary advance loan:** it is a “Personal Banking at its Best.”

Benefits of this loan: (a) Helps in solving personal issues; (b) Increase working capital for small businesses; (c) Loan Processing period: between 1-3 working days if all requirements are complete; (d) Access to sufficient amount; (e) Competitive interest rate.

*Features of salary advance loan are:* (a) Having fully paid the share capital of Rwf 40,000 for new members starting with January of each academic year; (b) Competitive Interest rates; (c) Maximum loan amount: Net monthly pay times 12 backed with collateral (physical or cash) of a value not less than 125% of the loan amount, repayable within 3 years; Net monthly pay times 8 to 10 backed with collateral (physical or cash) if the loan amount is above Frw 2,000,000, and the loan amount repayable within 2 years. (Umwalimu SACCO reports, 2018)

**4. School fees loan:** it is used to “Give your child an advantage for life”

*Benefits of school fees loan:* (a) Facilities to pay school fees on time; (b) Processing period: between 1-3 working days if all requirements are complete; (c) Save the dignity of the member

*Features of this loan:* This loan helps members to pay school fees for their children and their own; (a) Competitive Interest rates; (c) Maximum Repayment period up to 1 year; (d) Direct transfer of the amount to school account. (Umwalimu SACCO reports, 2018)

**5. Medical loan:** “Making our member’s health a priority.”

*Benefits of medical loan:* (a) Facilities to pay Medical fees on time; (b) Processing period: between 1-3 working days if all requirements are complete; (c) Save the dignity of the member

*Features of medical loan are:* (a) Share capital of at least Frw 10,000; (b) Competitive Interest rates: 13% for Primary and secondary Public schools teachers; 14% for Private schools,

universities teachers and others; (c) Maximum Repayment period up to 1year, Direct transfer of the fees amount to the hospital. (Umwalimu SACCO reports, 2018)

**6. One laptop per teacher loan:** “Building a bright future together.”

Benefits of this loan are: (a) Competitive interest rate; (b) Enrich members’ knowledge through research; (c) Access to e-learning; (d) Easy access to asset (Laptop).

*Features for one laptop per teacher loan:* (a) Product for primary and secondary school teachers both public and private; (b) Interest rates of 11% for all Primary and secondary teachers at Private and Public schools; (c) 1 to 3 working days processing period; (d) Loan repayment period: 3 years; (e) Direct transfer to supplier of laptop.

**7. Home furniture loan:** “Go ahead. You can rely on us.”

*Benefits of home furniture loan are:* (a) Competitive interest rate; (b) Loan processing period: 15 working days ; (c) Granted home furniture loan amounting to 80% after saving 20% of the total cost of the item to finance; (d) The collateral is the same asset purchased.

*Features of home furniture loan:* (a) Competitive Interest rates; (b) 13% for Primary and secondary Public schools’ teachers; (c) 14% for Private schools, universities teachers and others; (d) Loan Repayment period 1-2years; (e) A Valid identification documents of applicant; (f) Share capital equals to Frw 40,000 for new members starting from January 2018, (g) Direct transfer to supplier of furniture. (Umwalimu SACCO reports, 2018)

**8. Business loan:** “The power to help you succeed.”

Benefits of business loan: (a) Competitive interest rate; (b) Maximum Processing period: 30 working days; (c) Finance income generating project hence increasing members’ wealth, (d) Increase working capital to expand the business.

*Features of business loan:* (a) Ceiling  $\leq$  frw35,000,000; (b) Competitive interest:11% for Primary and Secondary Public teachers with loan amount not exceeding Frw 10,000,000; 14% for Primary and Secondary Public teachers exceeding Frw 10,000,000 and all other borrowers’ loans; (c) Maximum tenor: 5 years and (d) Suitable for individual and group (Members cooperative and companies) (Umwalimu SACCO reports, 2018)

**9. Vehicle and asset loan:** sometimes USACCO allows its members to acquire the vehicles for their cooperative.

*Benefits of vehicle and asset loan are:* (a) Competitive interest rate; (b) Loan processing period: 15 working days; (c) The collateral is the same asset purchased.

*Features of vehicle loan:* (a) Ceiling  $\leq$  frw35,000,000; (b) Competitive interest rates; (c) 13% for Primary and secondary Public schools' teachers; 14% for Private schools, universities teachers and others; (d) Loan Repayment period: 5years; (e) A Valid identification documents of applicant; (f) Share capital equals to Frw 40,000 for new members starting from January 2018; (g) The purchased asset shall be the loan security; Personal contribution 5% of the total cost of the asset to be purchased; Direct transfer to supplier of furniture.(Umwalimu SACCO reports, 2018)

**10. Agriculture loan:** Agriculture and livestock loans are advanced to finance farmers' requests for agricultural activity which could be production; processing or distribution.

*Benefits of agriculture loan are:* (a) Competitive interest rate; (b) Additional income and food security to members; (c) Increase working capital to expand; (d) Partnership with BDF; (e) Quick access to cash to meet agriculture requirements (seeds, fertilizer, land rent, tools, harvest); (f) Protect harvest against speculators; (g) Facilitate process of mechanization and agriculture transformation. (Umwalimu SACCO reports, 2018)

*Features of agriculture loan:* (a) Ceiling:  $\leq$  35, 000,000; (b) Competitive interest rates: 11% - 14% for Primary and secondary Public teachers and 14% for others (11%  $<$ 10,000,000 Frw) and 14%  $\geq$ 10,000,000 Frw for others); (c) Loan processing period: 15 working days; (d) Repayment period: 6 months to 2 years depending on the product financed ; (e) Grace period (moratorium): between 3-6months; (f) Suitable for individual and group (Members cooperative and companies)

**11. Mortgage loans:** "Dream house, Make it happen."

Benefits of mortgage: (a) Competitive interest rate; (b) Own a house with low income; (c) Used as loan collateral; (d) Protect against renting stress and risks; (e) Increase household wealth.

*Feature of mortgage loan:* (a) Ceiling:  $\leq$  frw35,000,000; (b) Competitive interest rates: 11% for Primary and secondary Public teachers for amount not exceeding 10 million and 14% for public teachers who get above Frw 10,000,000 and all other members; (c) Maximum loan processing period: 30 working days; (d) Maximum tenor: 10 years; (e) The property purchased or under construction serves as collateral; (f) The property is insured against perils to protect the interest of the borrower and the Institution. (Umwalimu SACCO reports, 2018)

### **2.3.7.3 Trainings on Business Management game**

Other services offered by UMWALIMU SACCO to its members are trainings on Business Management game, project elaboration, basic front office banking services and so forth. (Umwalimu SACCO reports, 2018).

### **2.3.8. SACCOs and MFIs' lending Methodology and policies**

Most of saving and credit cooperatives organizations offer and provide credit on a solidarity-group lending basis without collateral. There is also a range of other methodologies that MFIs follow (Abadi, 2007). Some MFIs start with one methodology and later on move or diversify to another methodology so that they do not exclude certain socio-economic categories of clients. So it becomes important to have a basic understanding of methodologies and activity of SACCOs. Subsequently, Robert Cull et al (2007) stated that, there are numerous lending methodologies around the world's micro financial institutions. Nevertheless the three methodologies listed below are more popular around the world:

#### **2.3.8.1 Group Lending**

Group based lending is one of the most novel approaches of lending small amounts of money to a large number of members who cannot offer collateral. The size of the group can vary, but most groups have between four to twenty five members. The group self-selects its members before acquiring a loan. Loans are granted to selected member(s) of the group first and then to the rest of the members (Morduch, 1999). Most MFIs require a percentage of the loan that is supposed to be saved in advance, which points out the ability to make regular payments and serve as collateral. Group members are jointly accountable for the repayment of each other's loans and usually meet weekly to collect repayments. To ensure repayment, peer pressure and joint liability works very well. The entire group will be disqualified and will not be eligible for further loans, even if one member of the group becomes a defaulter. The creditworthiness of the borrower is therefore determined by the members rather than by the SACCO. One of the best-known institutions for lending and savings money, in Bangladesh, is the *Grameen Bank*. According to *Grameen Bank* mainly targets women (98% of their clients are women) on the basis that women repay their loans better than men.

### **2.3.8.2 Individual Lending**

This is a straight forward credit lending model where micro loans are given directly to the borrower. It does not include the formation of groups, or generating peer pressures to ensure repayment. The individual model is, in many cases, a part of a larger 'credit plus' program, where other socio-economic services such as skill development, education, and other outreach services are provided.

Lending policies for individual loans are mostly applied by SACCOs when a borrower candidate is willing to apply for an individual loan, he first goes to meet the branch manager. The manager sensitizes him about the lending procedure, requirements and charges, then gives him a loan application form and allocates him to one of the loan officers. If the applicant is a repeat borrower, he goes to the same officer as before. Next the borrower candidate fills in the application form, indicating the desired loan amount, purpose of the loan, collateral and guarantors. Physical collateral, such as a land plot, motor vehicle log book or household items, is required to back up all individual loans. In case the collateral is a property item, the local council needs to verify, in writing, that the asset really belongs to the applicant in question. All individual loans need to be guaranteed by two other members of SACCOs if necessary. If the loan applied for is smaller than 1,000,000 Frw, one guarantor may be sufficient. The guarantors need to be good savers, and they should not have experienced serious repayment problems in the past. However, no explicit criteria exist for the assessment of the guarantors' repayment capacity. After the application form is filled, the loan officer goes to visit the applicant's business premise and place of residence. During this visit the officer also verifies that the security is genuine. After this inspection, the loans officer judges how much money he/she recommends to be advanced to that client. Next the application is examined by the branch manager, and after that the loan committee will have a final say in the credit allocation decision.

### **2.3.8.3 Credit Unions**

According to Robert Cull *et al* (2007), a credit union is a unique member-driven, self-help financial institution. It is organized by and comprised of members of a particular group or organization, who agree to save their money together and to make loans to each other at reasonable rates of interest. The members are people of some common bond: working for the same employer; belonging to the same church, labor union, social fraternity, etc.; or

living/working in the same community. A credit union's membership is open to all who belong to the group, regardless of race, religion, color or creed. A credit union is a democratic, not-for-profit financial cooperative. Each is owned and governed by its members, with members having a vote in the election of directors and committee representatives.

### **2.3.9. Lending Conditions**

According to the co-operative society's act 2003 lending conditions on which loans may be made to make to SACCO's members includes.

- i. The payment of interest rates on loans, shares and deposits shall be fixed by the general meeting of the SACCOS.
- ii. The maximum period which can be granted for the repayment of a loan
- iii. The maximum amount of money, which may be lent to a member
- iv. The purpose of loans
- v. secure for loan payment
- vi. The consequences of default in payment of any sum due on account of for the purpose for which it was granted. Stella Emilian Luoga (2013):

Furthermore, the loan process will start with a loan request from the potential borrower. The loan request can be made in person at the SACCO or by phone. The borrower will be given an application and sheet of paper that details what the borrower needs to provide so that the request can be processed promptly. Staff and officials of the SACCO will not discourage a member from submitting an application for credit. All loan requests must be in writing on the approved loan forms.

### **2.3.10. Advantages and benefits of SACCOs**

SACCOs and credit unions hold some real advantages for microfinance outreach and development. An organize SACCO is:

- a) An easy way of organizing a community to save and recycle savings in a given locality;
- b) Since the nature of a SACCO is local, it mobilizes savings locally, within the community, and then the profits are returned to members in the form of loans. The money stays and works within the membership and the area. This mutually achieved success helps to not only build a sense of ownership and pride in an area, it creates a culture of saving and investing.



c) Loan product: what distinguishes cooperatives from other non-Bank financial entities involved in SACCO is the ability of masse number mobilization of small, voluntary, savings account. These deposits can then be invested in rural production, housing small scale enterprises and small business loans (Branch & Cora, 1999).

- Branch & Cora say that, SACCO today emphasizes scale and depth of outreach of financial services to large numbers of the working poor through financially sustainable organizations. They offer a saving first, self-sustainable approach to SACCO that has already successfully met the needs of millions of lower incomes members around the world.
- Saving and credit cooperative organizations encourage savings mobilization especially for urban poor women. It is known that savings are key to investment, without them, investments are very hard to be realized.
- SACCOs lending prevents stress: Sometimes borrowing from someone you know can strain the relationship. If the interest rate or repayment schedule is beyond your means, it can cause anxiety. Some lenders may use means to ensure repayment that cause stress.

For Examples among the following groups of lenders one can choose SACCOs due to the following characteristics:

- **Bank:** High Interest rate — Difficult Loan Approval — Far Away — Collateral.
- **SACCO:** Easy Approval — Easy to Show Collateral — Low Interest Rate.
- **Money Lender:** Stress — High Interest Rate — Frequent Repayments.
- **MFI:** Short Repayment Schedule — High Interest Rate.
- **Family:** Stress — Relationships Affected.

To close, facilitate a discussion of why borrowers would choose one lender over another; explore the relative benefits of SACCOs.

### 2.3.11. Challenges faced by SACCOs

The challenge for SACCOs include also to continue to be perceived as “the poor people’s bank” lies within their ability to ensure their sustainability and to harness the trust that currently exists amongst Rwandans especially in rural areas to build on the current membership base. However, key challenges facing SACCOs include: Strengthening SACCO management in terms of functions such as administration, governance and accountability, Ensuring that SACCOs have

the facilities and equipment needed to facilitate their activities, Providing a broader base of products and services specifically designed to meet the needs of middle and lower income Rwandans, Putting in place measures aimed at consumer protection (Irma Grundling Yakini, 2012).

- Based on the study the challenges identified are shortage of finance for loan distribution. This challenge is the most remarkable in Rwanda, where SACCOs do not have enough capital to operate smoothly.
- members weakness in regular saving, management weakness in collection of loan receivables;
- weak awareness creation and information transmission activities of both SACCO's and promotion office to all rural community for being member in the society; and
- Limited support of government to SACCO's lower administrative level.
- Several studies revealed that SACCOs experience a number of problems. These include poor management, low level of education to members, low capital, high loan default rate and political interventions all of which hinder the development of sustainable institutions. The highlighted problems limit SACCOS from operating in an efficient and effective manner.

### **2.3.12. Empirical studies**

In this section, following some previous studies related saving credit cooperatives in worldwide and in Rwanda has been taken into consideration by the researcher for the purpose of this study.

#### **2.3.12.1. Empirical literature review of saving and credit cooperatives worldwide**

Saving and credit was invented in Bangladesh during the famine of 1974, when Professor Yunus studied the lives of the poor entrepreneurs in Bangladesh. Yunus began by loaning to groups of women an equivalent of \$30 to forty two basket weavers to help them purchase bamboo. Upon the advice of banks and government, he carried on giving out micro-loans and in 1983 formed the Grameen Bank. The program proved that small loans could not only quickly improve lives of poor people, but were paid back with interest and on time. By 1997, there were 1.8 million poor borrowers in 22,000 out of 68,000 villages in Bangladesh with 830 million credits worth every month (Yunus M. B., 2004).

Moreover, Mavenga (2010) noted that a SACCO is an easy way of organizing a community to save and recycle savings in a given locality. The nature of a SACCO being that it is local, mobilizes savings from within the community and profits are shared among members in the form of loans. Hence, it is community owned and community managed. This mutually achieved success helps not only in building a sense of ownership and pride in a given area but also creates a culture of saving and investing, as observed by McAuthur and Stuard, (1993).

Again, a study carried out by the World Bank's sustainable banking for the poor with the title of the project "Worldwide Inventory of Microfinance Institutions" found that female programs are group based with the characteristic of having small loan size and short loan term (Paxton, 1996). (Gine, 2004) show that based on a general equilibrium model of the economy, the expansion of access to the financial sector has significantly raised Thailand's growth rate. Conversely, (Micro, (2009).) emphasize the efficiency and productivity losses associated with preferential access to finance by the better off, and suggest a potential first-order effect of access on investment and growth. Finally, (Burgess, 2005) find a strong positive effect on rural poverty, using a "natural experiment" of new branching regulations in India that incentivized banks to expand into underserved areas. However, the high cost of this expansion policy outweighed the aggregate benefits. This result suggests large potential benefits from technology-enabled, lower-cost branch expansion. While, Gibson (2005) witnessed those microfinance institutions in which SACCOs belong are perfect ways through which the lives of poor and low income people can change and he noted that the process of developing and sustaining a cooperative involves the processes of developing and promoting community spirit, identity and social organization as cooperatives play an increasingly important role worldwide in poverty reduction, facilitating job creation, economic growth and social development. Again, income improvement involves the strategic use of tools such as education, economic development, health and income redistribution to improve the livelihoods of by governments and internationally approved organizations.

Kato and Kratzer (2013) examined how microfinance empowered women in Tanzania by using Mann-Whitney U test. The study noted a significant difference between the women members and non-members of the MFIs where the women members had more control over savings and income and were empowered in decision-making. Hence they had greater self-efficacy, self-esteem and freedom of mobility.

Sharma et al (2005) cited by Joseph John Magali (2013), applied the univariate regression and descriptive analysis to evaluate the impacts of SACCOS in Nepal. The study noted that loans were mostly taken for productive purposes, social activities, purchasing and repairing assets and for repaying previous loans. Also the study noted that most women took loans for social activities and for repaying the previous loans, thus loans were diverted to other purposes. However, SACCOS' members registered higher increases of incomes, assets, food consumption, education expenditure, improved housing and decline of health expenditures compared to non-members. Nzekwe(2012) by using descriptive analysis found out that cooperative societies have increased the members' business profitability up to 180,000 naira in Yoruba, Nigeria.

Indeed, sometimes saving and credit cooperatives don't bring any positive effects to their members because of the loans default. Various scholars have reported negative or no impacts of MFIs to their members, that are as:

Study conducted by Diagne and Zeller (2001) found out that, there is no statistically significant differences in both acute and chronic malnutrition for preschoolers between members and nonmembers participated in credit program in Malawi. The study further noted no significant impact of access to credit on the per capita incomes, food security, and nutritional status of credit program members.

Similarly, Frohberg and Müller (2007) conducted a study by using econometric regression model revealed that households participated in joint liability borrowing in Kenya had significantly lower incomes than nonparticipating households because MFIs clients sold their properties to recover the defaulted loans. The study found out that about 17%, 60% and 4% of MFIs clients recovered their loans through selling of their pre-existing properties, by duress and confiscation of peers' properties respectively. It is obvious that recovering loans through cohesion don't lead to realization of impact on loans by MFIs clients. Again, Grades (2007) noted that households participating in joint liability borrowing had significantly lower incomes than nonparticipating households in Kenya.

### **2.3.12.2. Rwanda's empirical research on saving and credit cooperatives (SACCOs)**

Though as mentioned earlier many scholars conducted several studies on the contribution of saving and credit cooperatives on the improvement of socio-economic welfare of their members. The researcher considered some of them for the purpose of this study, like:

The study conducted by Isaboke Peter Kennedy Nyataya (2018), on Umurenge-savings and credit cooperatives as building blocks for socio-economic development of rural Rwanda, the study revealed that: The members/beneficiaries of the SACCO were noted to have been able to lead a better living, had increased their incomes through the establishment of income generating activities; mobilized savings and opened personal bank accounts; they were able to raise school fees for their school-going children and managed to purchase household property such as furniture, land, houses, solar equipment, beds and beddings, clothes and food. Another notable observation from paper was that 46.7% of the respondents invested their loans in agriculture and livestock; 41.1% in starting businesses; 7.6% on transport projects and 4.3% of them in housing projects. Hence, as it can be seen from the aforementioned projects, it is indeed the acquisition of capital from the SACCO that enabled the respondents to start up the indicated income generating activities which led to the increment of their respective incomes. As concerns the amount of money generated through the projects established and run by the respondents, the study revealed that the majority(55.4%) of the respondents had earned themselves a monthly income of fewer than 50,000 Rwfs; 35.9 % earned between 50,000 and 100,000Rwfs ; 5.4%,101,000 to 150,000Rwfs and only 3.3% of them earned more than 150,00Rwfs from their respective projects. Therefore, from the foregoing, it can be rightly stated that the amount of incomes earned through the established projects by respective households is an indicator of the socio-economic development of people any given area. The income earned is viewed as a contributing factor towards the need and the utilization of family assets, for the larger the family, the higher the demands for the basic necessities of life such as foods, clothing, shelter and education.

Again, Sheria Ruvugiro (2015) conducted a study on the impact of microfinance on poverty alleviation of rural population in Rwanda, Case of Gakenke district (2010-2014),The study has found that microfinance activities have a positive impact on poverty alleviation of members. It was found that microfinance activities has positively affected income level, housing, wealthy (assets ownership), occupation, access to education and medical care service, as well business performance of members in Gakenke District. The study found that there are six variables that have impact on member's poverty alleviation, these are: Educational background of a member, family size/number of dependents, the occupation of a member, and number of loans got from microfinance, government programs against poverty, and membership duration. All variables

were found to have positive impacts on poverty alleviation of rural population, except the family size or number of dependents of respondents.

Furthermore, Mbabazi Jonathan & Uwingenzi Marthe (2018) conducted a study on Role of Saving and Credit Cooperatives in Improving Socio Economic Development in Rural Areas. Case Study Imboni Sacco Kageyo Sector, this research was conducted through a research design to present oriented methodology used to investigate population by selecting sample to analyze and discover occurrences. It used primary and secondary data, with documentary, interview and questionnaires, to provide numeric description of some part of population, and describe events. This research enabled the researchers to consider issues such as economy, rapid data collection and ability to understand a population from a part. The research findings approved that all respondents agreed the positive impact of Umurenge SACCO in the socio economic development in rural area and the most impact such as to increase financial performance in rural areas. 43.3% of respondents said that the relationship between Imboni SACCO and Social Development in Rural Area plays an important role as financial services providers.

Aimé Muyombano and Mbabazi Mbabazize (2016) wrote an article paper on the contribution of Umwalimu Savings and Credit Cooperative (Umwalimu Sacco) On Socio –Economic Development of Teachers in Rwanda. Case of Gasabo District; this study demonstrated the significant impact of Umwalimu Sacco on socio-economic development. However, the results indicated that there is a significant impact on socio-economic development.

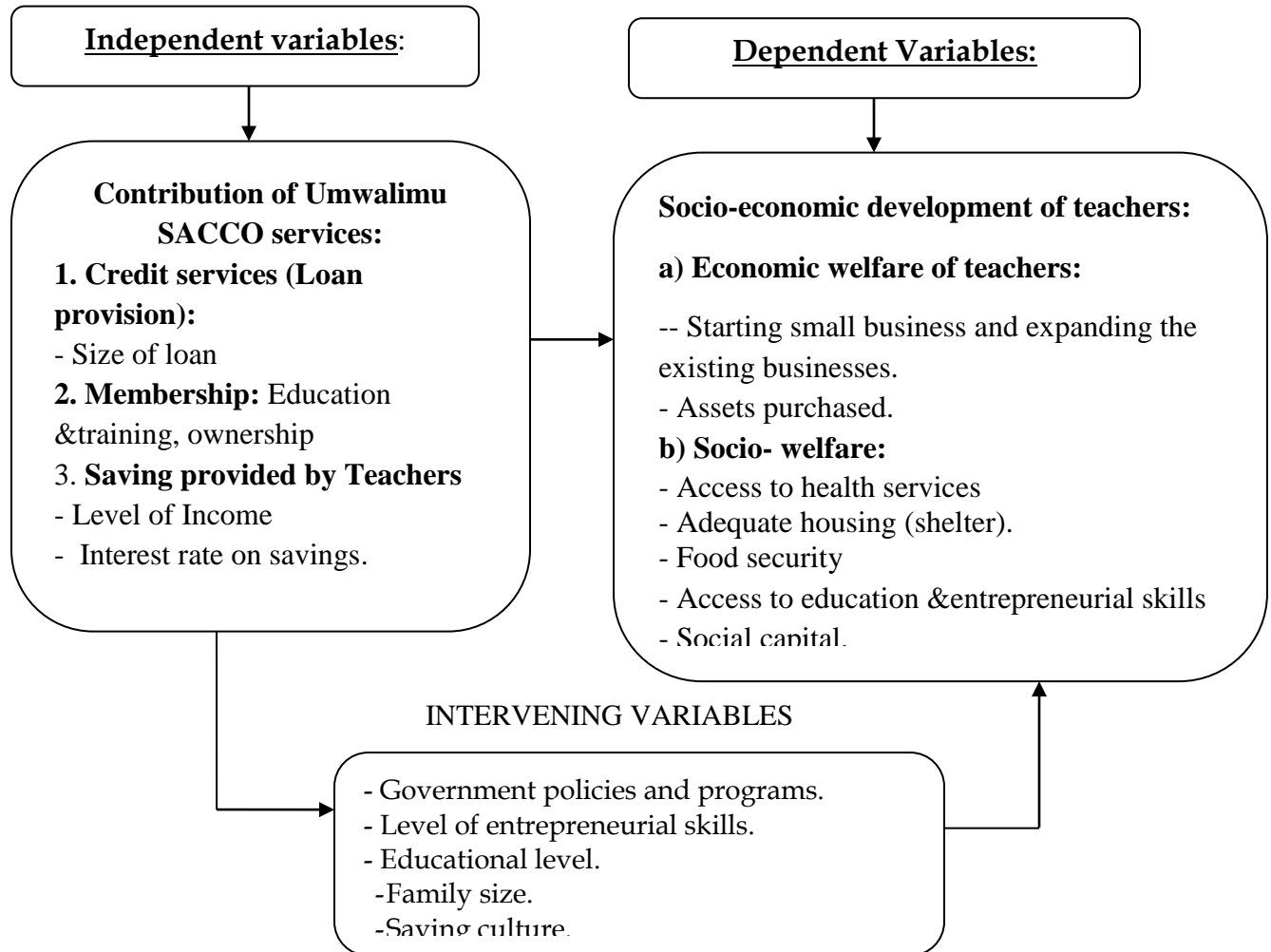
Indeed, Niyitegeka (2001), argued that the key tool for achieving the objectives of the economic development and poverty reduction strategy in Rwanda is the Microfinance institution and argued also that SACCOs changed people's welfare in Rwanda but this research does not indicate anything about the extent to which SACCOs, specifically USACCO contributed to the socio-welfare of teachers, especially those of Huye District. All these studies show that there is still a big gap to be fulfilled about the contribution of USACCO on socio-economic development of teachers in Huye District.

#### **2.4. Conceptual Framework**

The framework below illustrates the inter-relatedness and inter-connectedness between the independent and dependent variables that were explored on the contribution of Umwalimu

saving and credit cooperatives (USACCO) and how it has impacted in improving members' socio-economic development in Rwanda.

**Figure 1: Conceptual framework**



$$SED = f(Y, Ed, L, Gov, Fs, Md),$$

**Source:** Adapted from MC Cleland (2007) cited in Aime Muyombano et al., (2016)

The model of conceptual framework shows the relationship between independent and dependent variables. During this study, this model was used but some aspects were left out due to limited data available, therefore, the researcher will adopt some elements of the above model. The independent variable in the study is contribution of USACCOs' services' conceptualized as loan provision including size of loan obtained by respondents, membership (Education & training, ownership) and Saving made by teachers. Dependent variable (Socio-economic development Indicator measured in terms of members' level of income, education level, assets owned, ...) and; intervening variables such as family size, government policies & programs, level of education) The

dummy variables can have an effect on the dependent/independent variables as elucidated above. The model further shows that there are intervening variables such as government policies and programs, education level, family size, etc which can have a counteracting effect on the dependent variable and on their socioeconomic development. USACCO is assumed to have positive effect on teachers' socio-economic development, however, this is possible only when teachers who members of USACCO patronize it by effectively saving with, and borrowing from USACCO as this will lead to capital accumulation, high incomes, establishing income generating activities, breaking the vicious cycle of poverty and hence improving quality of life of USACCO members.

## **2.5. Hypotheses of the Study**

In order to evaluate the contribution of USACCO and to address the main objectives of the study, this study will test the following hypotheses which are formulated in the form of null hypotheses (Ho) and alternative hypotheses (H<sub>1</sub>).

1. Saving and credit cooperatives' loan and income generating activities established by members have no a positive effect on the welfare of members, in terms of assets acquired, shelter, education and increase of members' income level. (Ho);
2. Saving and credit cooperatives' activities (services) have no significant effect on members' monthly income, in terms of membership duration, credit received and saving.(Ho);
3. There is no an existing of a statistically significant relationship between USACCO services and the standard of living improvement of members (Ho).

## **2.6. Chapter conclusion**

This chapter has reviewed and synthesis the existing theoretical issues and empirical literature on saving and credit cooperatives and all kind of microfinance. In summary, saving and credit cooperatives are the provision of small scale financial and non-financial services to unbanked poor people. Saving and credit societies are organizations that access to financial resources from banks, government, international donors or other financial institutions to conduct microfinance activities, providing financial services to the poor. Being considered as tools for poverty reduction, job creation and social economic development, saving and credit cooperatives need to attain sustainability to reach their dual targets. The chapter also provided us the interesting link between saving and credit cooperatives' activities and poverty alleviation among developing



countries sustainability under the effect of environment within which saving and credit cooperatives (SACCOs) operate. There are many dimension of sustainability, among which microfinance institutions sustainability has been captured the attentions of scholars and researchers throughout the world most due to its importance in the poverty alleviation and standard of living improvement for their members.

## **CHAPTER THREE**

### **OVERVIEW ON FINANCIAL SYSTEM AND MICROFINANCE ACTIVITIES IN RWANDA**

#### **3.0. Introduction**

As seen earlier in chapter two related to review of literature that, saving and credit cooperatives played an important role in the improvement of standard living of members, particularly among developing countries. This chapter three described an overview on financial system and microfinance activities of Rwanda and involves the socio economic and legal environment of Rwanda, the national financial sector, main microfinance operators as well as their characteristics. This chapter also highlighted a picture of Rwanda microfinance operation, evaluated the achievements and challenges to Rwandan's MFIs during the suitable development progress.

#### **3.1. The country overview**

##### **3.1.1 Demographics and Political Situation**

Known as “The Land of Thousand Hills”, Rwanda is located in central Africa with a total resident population of 12.5 million inhabitants, and a slightly higher representation of women (51.8%) (NISR 2018); The country had 415 inhabitants per km<sup>2</sup> in 2012, the highest population density in Africa (IFAD, 2014).The county economy relies heavily on agriculture, which employs 70% of the total population and contributes 32% of GDP (AFDB, 2014). Rwanda is the most densely populated country in Africa; landlocked with few natural resources and minimal industry. It has a total land area of 26,338 Km<sup>2</sup> and a population of 12.5 million, which is estimated to be growing at 2.4% annually. There are more than 300 people per square kilometer and only 52% of the country's surface area is arable with much of the country being mountainous especially in the western region (African Development Bank, 2002).

After the assassination of President Habyarimana Juvenal in April 1994, the genocide erupted and in a three months period more than 800,000 people, mainly Tutsis and moderate Hutus, were killed. By mid-July 1994, the RPF forced the Rwandan army and the *Interahamwe* out of the

country, which brought the war and the genocide to an end. However, about 2 million people fled to neighboring countries. The social infrastructure of health and education were seriously affected by the genocide and the quality of services, already very unsatisfactory before the conflict, declined, due to lack of human and financial resources. The pronounced degradation of social indicators in the aftermath of the war, which represented considerable hardship, was undoubtedly worse than the dry figures show in terms of access to health care, education and potable water. Rwanda Microfinance Sector Assessment (2005)

The demographic structure also dramatically changed after the 1994 events with women now accounting for about 54% of the total population. In the 16-64 years age group - representing half of the population - women accounted for 27% compared with 22% men. Adult women were about 23% more numerous than adult men. The HIV/AIDS epidemic threatens the country human resources and development with over 13% of the population over 12 years old infected with the virus. While Rwanda's economic situation has been improving over the past decade, most Rwandans are worse off today than in the late 1980s, particularly in rural areas. As a consequence of the genocide, many people are particularly vulnerable. One-third of households are headed by women. One million children, 12% of the total population, are orphans, cared for by impoverished family or community networks. World Bank Website ([www.worldbank.org](http://www.worldbank.org))

According to world meters (2019), Rwanda population is of 12,952,218 inhabitants; with yearly change of +2.58% and global Rank are 76. The 2019 population density in Rwanda is 512 people per Km<sup>2</sup> (1,326 people per mi<sup>2</sup>), calculated on a total land area of 24,670 Km<sup>2</sup> (9,525 sq. miles). Currently, 17.5 % of the population of Rwanda is urban (2,215,085 people in 2019). Infant mortality: 22.6 (infant deaths per 1,000 live births); Deaths under age 5: 29.8 (per 1,000 live births); Life Expectancy in Rwanda: 70.0 years (life expectancy at birth, both sexes combined): 72.2 years (life expectancy at birth, females), 67.8 years (life expectancy at birth, males). A Total Fertility Rate (TFR) of 2.1 represents the Replacement-Level Fertility: the average number of children per woman needed for each generation to exactly replace itself without needing international immigration. A value below 2.1 will cause the native population to decline and *Pregnant woman* total fertility rate (TFR) is of 4.1 (Live Births per Woman, 2020)<sup>8</sup>.

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<sup>8</sup><https://www.worldometers.info/demographics/rwanda-demographics/#pop>

The political, social and economic context of Rwanda is profoundly affected by the civil war of the early 1990s and genocide of 1994 and the people continue to deal with the consequences. These events bankrupted Rwandans and increased their vulnerability (UNDP, 2007).

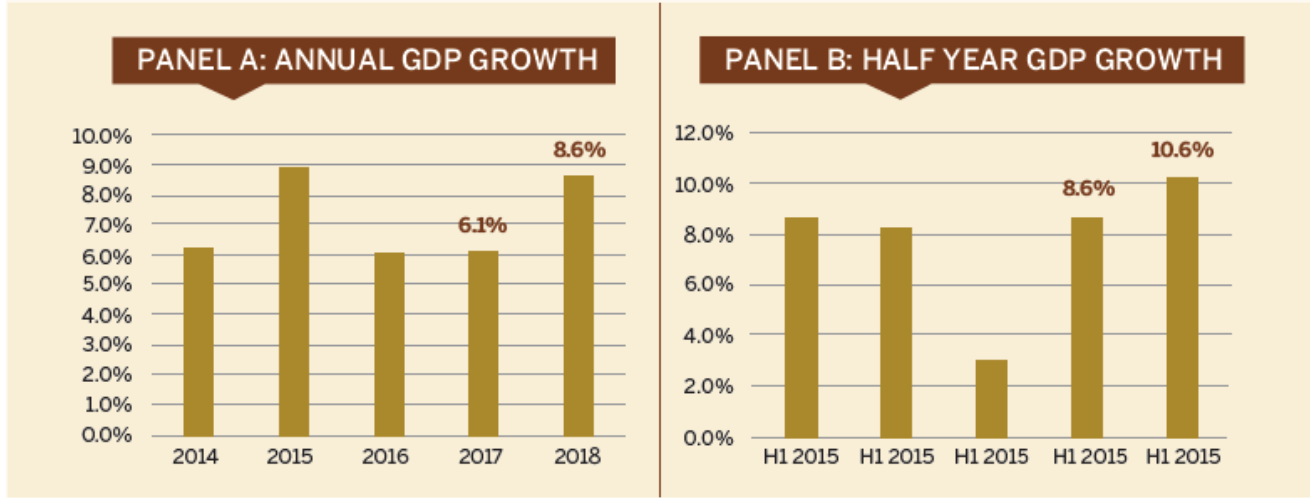
Indeed, the majority of Rwandans are the low income earners including primary and secondary school teachers. Whether considering demographic trends, issues of land ownership or penal-code reform, the background of devastation and horror impinges on the consciousness of all concerned. Rwanda's economy is agrarian. Agriculture employs almost 80 percent of the population, accounting for more than 40 percentage of gross domestic product (GDP) and more than 70% of exports; Economist Intelligence Unit, 'Rwanda (2006). Apart from unexploited gas reserves beneath Lake Kivu, Rwanda is poorly endowed with mineral resources. Subsistence food production is the dominant activity in the agriculture sector. Production of coffee and tea for export is still modest.

### **3.1.2 Rwanda's Macroeconomic conditions**

Rwanda's economy is agrarian. Agriculture employs almost 80 percent of the population, accounting for more than 40 percent of gross domestic product (GDP) and more than 70 percent of exports. Apart from unexploited gas reserves beneath Lake Kivu, Rwanda is poorly endowed with mineral resources. Subsistence food production is the dominant activity in the agriculture sector and production of coffee and tea for export is still modest (UNDP, 2007). The per capita Gross National Income was US\$250 in 2005 which is well below the US\$600 average for sub-Saharan African countries with 60% of the population living under the national poverty line. Over 90 percent of Rwandans rely on subsistence agriculture, with very limited participation in the exchange economy. Productivity is low, and production covers only 80 percent of Rwanda's food needs. The primary export crops are coffee and tea. Like most post-war economies, economic growth and social changes are severely constrained by the shortage of skilled people, and Rwanda is making significant investments to make up for the losses. But currently, about 1 million youths are unskilled, a problem with important economic and socio-political dimensions. The 1994 genocide decimated Rwanda's fragile economic base, severely impoverished the population, particularly women, and eroded the country's ability to attract private and external investment (Rwanda Microfinance Sector Assessment, 2005).

According to BNR’s Annual financial stability report (2019), Rwanda’s economic growth accelerated to 8.6 percent in 2018, the highest in the last three years (Figure 3A). Strong growth continued in the first half of 2019, at 10.3 percent - the highest half-year growth in the last 5 years. This robust growth reflects a good performance of the industry sector (construction and the manufacturing), as well as, services. A breakdown of GDP growth by production approach indicates that the agriculture sector grew by 5.9 percent in 2018, against 6.6 percent in 2017, industry sector (10.3 in 2018 against 4.5 percent in 2017) and services sector (8.8 percent in 2018 against 7.9 percent in 2017). Economic growth is projected to remain robust in the near-term (7.8 percent in 2019 and 8.5 percent in 2020) supported by public and private investment. In the outlook, the projected vibrant economy will continue supporting growth and stability of the Rwandan financial sector through increased domestic resource mobilization, increased demand for loans and insurance policies, reduction of NPLs and increased profits.

**Figure2: Real GDP Growth, Inflation and Interest rate Developments**



**Source:** BNR financial stability report, 2019 p.18

These figures mention that the Real GDP was estimated to grow at 8.7% in 2019, higher than the regional average. Growth was mainly in services (7.6%) and industry (18.1%), particularly construction (30%). Investment drove growth, led by public investment in basic services and infrastructure. Real GDP per capita increased 6.1% in 2019. Inflation moved up slightly to 1.6% in 2019, driven by increased domestic demand. Since inflation was below the 5% target, the National Bank of Rwanda reduced the monetary policy rate by 50 basis points to 5% in May

2019, stimulating bank lending to the private sector. Domestic credit to the private sector increased by 0.9 percentage point to 21.1% of GDP in 2019. Despite strong tax revenue growth of 11.5%, similar public investment growth led to a 1.9 percentage point increase in the fiscal deficit to 6.2% of GDP in 2019. Government securities largely financed the deficit. Public and publicly guaranteed debt increased to 50.3% of GDP in 2019, though Rwanda is assessed at low risk of debt distress. Imports grew faster than exports as traditional exports slowed. The trade deficit widened by 3.5 percentage points to 11.3% of GDP in 2019, increasing the current account deficit by 1.5 percentage point to 9.2% of GDP. External reserves increased by 8% to \$1.4 billion in 2019, equal to 4.7 months of imports. The exchange rate depreciated against the dollar by 5.0% in 2019 due to the growing trade deficit. African Development Bank (2020)

Here's a snapshot of Rwanda's economy today:

**a. Rapid growth:** One of the fastest growing economies in Central Africa, Rwanda notched up GDP growth of around 8% per year between 2001 and 2014. The International Monetary Fund expects the economy to slow down this year and pick up in 2018, forecasting around 6% growth in 2016 compared with 6.9% last year. The IMF said Rwanda's growth in 2015 was driven by construction, services, agriculture and manufacturing, but mining exports have slowed.

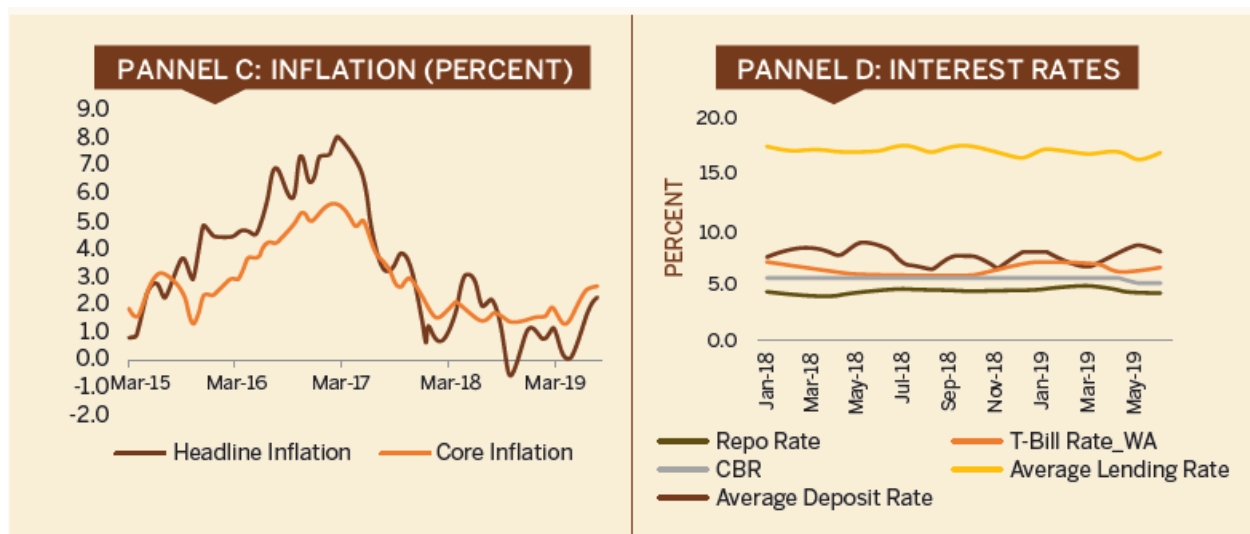
**b. Poverty rates:** The country reduced the percentage of people living below the poverty line from 57% in 2005 to 45% in 2010. Despite this, 63% of the population still lives in extreme poverty, defined by the World Bank as less than \$1.25 a day.

**c. Reducing inequality:** Life expectancy, literacy, primary school enrollment and spending on healthcare have all improved. Rwanda has also made big strides towards gender equality – almost 64% of parliamentarians are women, compared to just 22% worldwide – which has enabled women in the country to make economic advances. Women are now able to own land and girls can inherit from their parents.

**Inflation** remained moderate largely due to a good agricultural harvest (Figure 2A). Headline inflation averaged at 0.8 percent (Y-o-Y) in FY 2018/2019, down from 2.3 percent in FY 2017/16. During the same period, core inflation that represents the long run trend in the price level, by excluding volatile items like fresh food and fuel, remained also moderate, at an average of 1.5 percent, lower than 2.3 percent recorded in the previous year. The slowdown of inflation largely mirrors food and energy lower prices following favorable weather conditions and the

decline in charcoal and firewood prices. The NBR projects inflation to pick-up in the second half of 2019, but thereafter remain within the benchmark of 5 percent with a symmetric band of 3 percent. The stable inflation registered in Rwanda in the recent past is a positive condition for financial market players as it offers savers and investors the reliable estimate of their future returns on investment. Particularly for banks and MFIs, inflation is among the key variables used to determine lending rates. Overall, interest rates are stable in Rwanda and the reprising risk remains minimal for banks. The Figure (2B) below indicates interest rates for the last 2 years, and clearly, there has not been significant shocks on market interest rates, implying that banks can predict their future returns on investments they make. BNR's Annual financial stability report (2019)

**Figure3: Inflation and interest rates**



Source: BNR report, 2019

**Table 1: Main Economic indicators of Rwanda**

Main Indicators	2017	2018	2019(e)	2020(e)	Projection 2021
GDP (billions USD)	9.14e	9.51e	10.21	11.06	12.03
GDP (Constant prices, annual% change, in USD)	6.1	8.6e	10.1	3.5	6.7
GDP per Capita (USD)	774e	787e	825	873	928
General government Gross Debt (in % of GDP)	36.499e	40.663e	49.141	50.571	52.223
Inflation Rate (%)	4.8	1.4	2.4	6.9	5.4
Current account (billions USD)	-0.62	-0.74e	-0.94	-0.96	-1.00
Current Account(in % of GDP)	-6.8	-8.0	-9.2	-16.2	-10.2

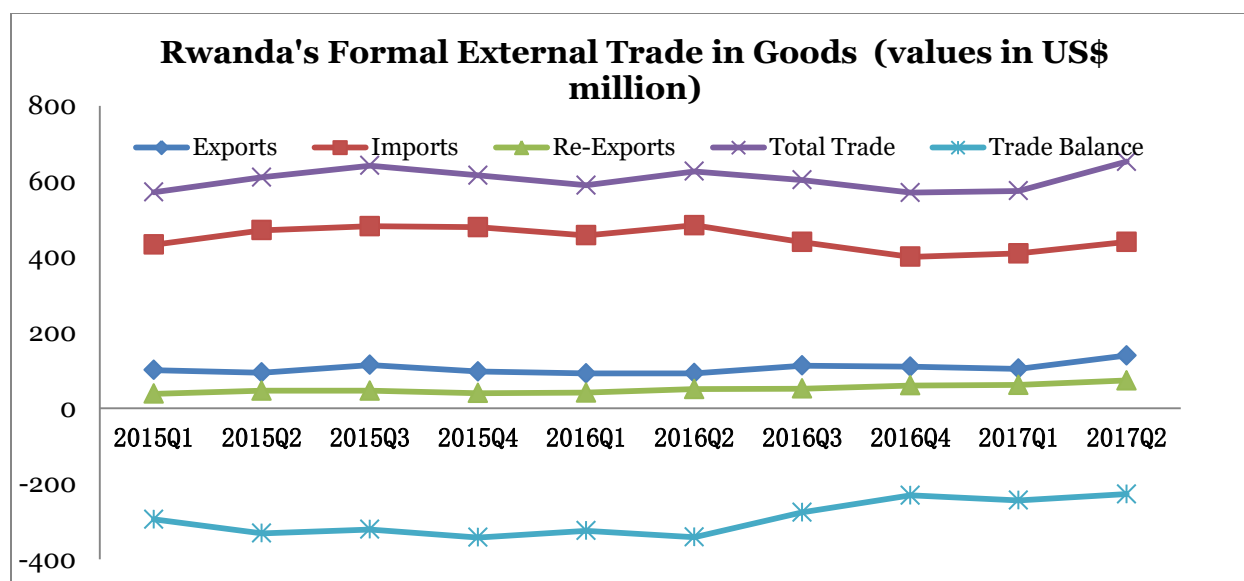
Source: IMF-World Economic Outlook Database (Note: (e) Estimated data)

**Table 2: Main Sectors of industry**

Breakdown of Economic Activity by Sector	Agriculture	Industry	Services
Employment by sector (in % of Total employment)	66.1	9.1	24.8
Value Added (in % of GDP)	29.0	16.2	46.4
Value Added (Annual % change)	5.9	10.3	7.1

Source: world Bank-Latest available data

**Figure 4: Rwanda's trade volume (USD billion)**



Source: NISR, 2018



### **3.2. Overview of Rwandan's financial sector**

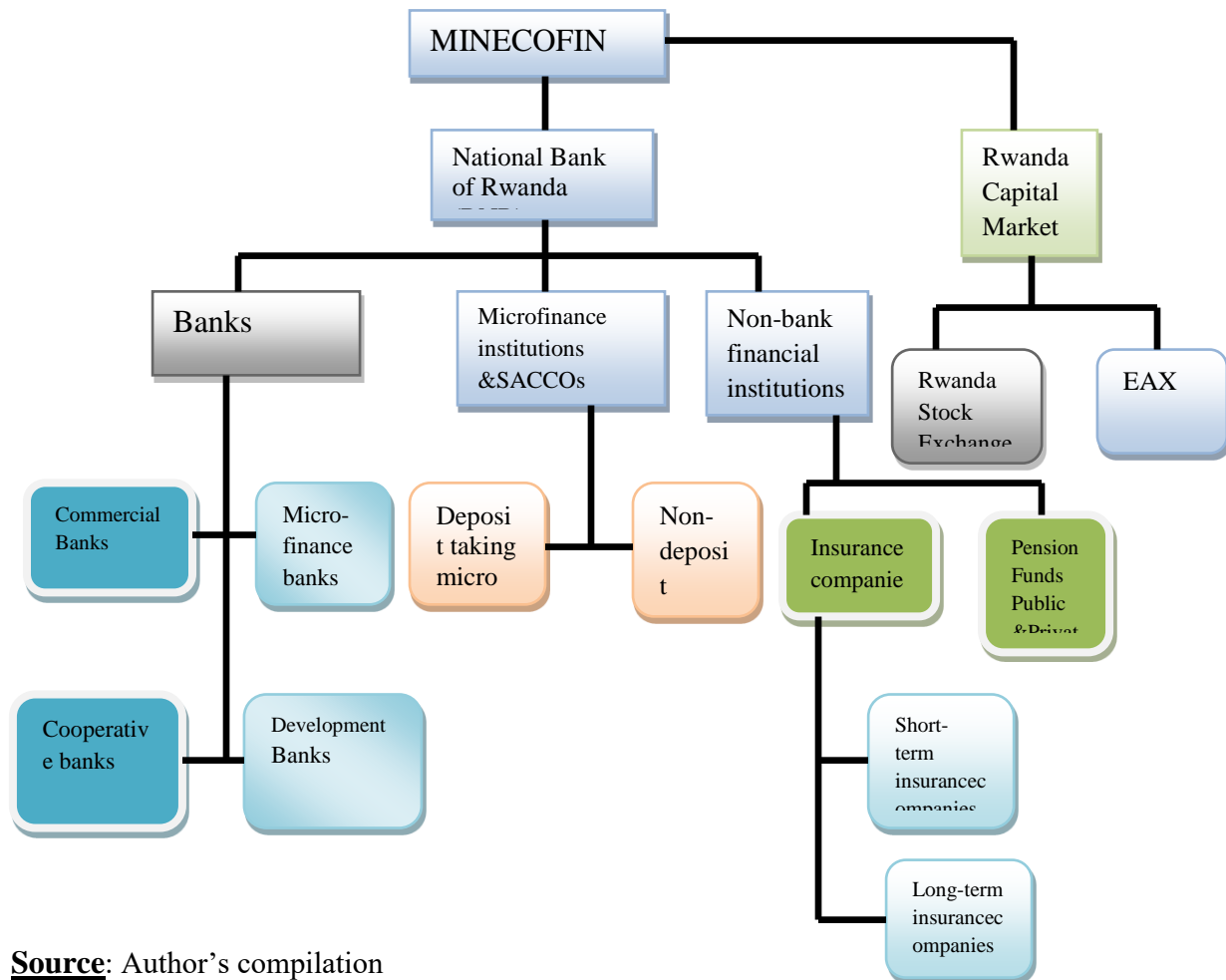
Financial system is important in a modern economy, the primary role of financial institutions is to provide liquidity to the economy and permit a higher level of economic activity than would otherwise be possible. According to the Brookings Institute, banks accomplish this in three main ways: offering credit, managing markets and pooling risk among consumers.

According to Franklin Allen and Douglas Gale, financial system helps contributing to the economic growth by its core-functions of mobilizing and facilitating the allocation of financial resources. However, the form of these financial systems varies considerably among economies due to the differences in size, complexity, available technology as well as the differences in political, cultural and historical backgrounds. In Rwanda, According to BNR financial stability report (2019), the growth of the financial sector's assets improved during the period under review on the back of favorable macroeconomic conditions. As at end June 2019, total assets of the financial sector increased by 14 percent (Y-o-Y) to FRW 4,919 billion, against 12 percent registered in the previous year. As a percentage of GDP, total assets of the financial sector increased from 54.2 percent to 56.9 percent. The uptick in growth of financial sector assets benefited from the conducive macroeconomic environment registered in 2018. Improved economic activities increased the debt servicing capacity of borrowers, which subsequently improved the quality of financial sector assets.

Furthermore, the financial sector will particularly have direct roles in the economic transformation pillar that includes job creation, sustainable urbanization, and increased productivity of agriculture and, promotion of industrialization. The sector has also indirect role to play in the pillar of social transformation through providing the necessary financing of projects that are profitable and developmental. For the financial sector to make significant contribution to the economy, it needs to be sound, stable, inclusive, competitive and deep. In that respect, the NBR is mandated to ensure stability of the financial sector. To help achieve this, the NBR regulates and supervises banks, MFIs, insurers, pension funds, the payment system and other financial market infrastructure, as well as other non-deposit taking financial institutions. The design of the Rwanda financial sector is in accordance to international standards. The structure of most countries lay along the following: Banking sector, Non- bank financial

institutions which include Pension sector and Insurance, Capital market and stock exchange infrastructure, fund management as well as financial sector supervision and regulation which is the mandate of MINECOFIN and BNR (2018).

**Figure5: Structure of Rwanda’s Financial System**



**Source:** Author’s compilation

### 3.2.1. The financial system in Rwanda

The financial sector in Rwanda can be divided into three categories of players: the banking sector, the microfinance sector, and the non-banking financial institutions.

#### 3.2.1.1. The banking sector

The Banking sector is comprised of 11 commercial banks, 4 microfinance banks, one development bank and one cooperative bank in December 2016 (BNR, 2016). It is the most

important component of the financial sector in Rwanda, with 67.6% of the system's total assets (BNR, 2016)

### **3.2.1.2 The microfinance sector**

The microfinance sector in Rwanda counts 493 licensed institutions (13 limited companies, 64 non-Umurenge SACCOs and 416 Umurenge SACCOs) (BNR, 2015). They represent 5.6% of the Rwandan financial system's total assets (BNR, 2016).

### **3.2.1.3. The Non-Bank Financial Institutions**

The Non-Bank Financial Institutions (NBFIs) include insurance companies, and the pension fund. The non-bank financial institutions composed of 10 non-life insurers (private) and 4 life insurers (private) and 2 public medical insurers. They account for 26.7% (insurance 9.4% and pension 17.3%) of the financial system's total assets (BNR, 2014). In December 2014, there were *“ten (10) non-life-insurers, four(4) life insurers , two public medical insurers (2), ten insurance brokers, three hundred and twelve insurance agents , twelve loss adjusters , one pension/ social security fund and forty (40) private pension schemes and* Capital market has registered Market Capitalization going from zero to 2,756,316,278,996 FRW as of 5th September 2017(BNR, 2017). It was noted that over the past 5 years, Rwanda's financial sector has undergone significant changes including the entry of international and regional players into the sector as shareholders and competitors.

### **3.2.2. Banking sector**

The Banking sector is composed of 11 Commercial Banks, 1 Development Bank, 1 Cooperative Bank and 3 Microfinance Banks. All these Banks are regulated under the Banking Law N° 47/2017 of 23/9/2017 governing the organization of banking. Lending remained the main business of Banks. The share of loans in Banks' assets increased from 57.7 percent in June 2018 to 58.8 percent in June 2019. Government securities represented 10 percent of total assets while cash and reserves at NBR represented 8.9 percent. Investments in other securities 5.3 percent, assets held by other financial institutions 10.1 percent, fixed assets 4.4 percent and other assets 2.4 percent. The main earning assets for Banks are loans and investments in Government securities - income from these two accounted for 71.3 percent of total incomes of Banks as at end June 2019. In the period under review, Banks reduced the share of their holding of Government securities in favor of increased lending to the private sector. The asset structure of Banks imply

that credit demand, quality of loans, and interest rate spread determine profits of Banks, which ultimately also determines the solvency positions of Banks<sup>9</sup>. Credit growth particularly increased in transport and communication, water and energy as well as in manufacturing (Table 3). The growth in the transport and communication sector was largely due to Banks' loan portfolio remain concentrated to trade and mortgage sectors, although this slightly reduced in June 2019. The combined share of mortgage and trade loans in the total banking sector loans stood at 50.3 percent in June 2019, down from 54.3 percent in June 2018 as Banks diversify their lending to manufacturing, consumer loans and communication. The high banking sector exposure to trade and mortgage sectors remains among key risks facing the financial sector. On a positive note, the Banking sector is conscious of this risk and has started to diversify by increasing lending to other sectors of the economy (Table 3). Further, to contain risks related to high real estate exposure, the NBR introduced the loan-to-value (LTV) limits on housing properties (details of LTV directive are discussed in section on policy reforms).

**Table 3: Table3: Banks' Outstanding Loans by Sector**

Activity Sector	LOAN –IN BILLIONS, FRW			ANNUAL CHANGE	
	June-17	June-18	June-19	% Change 18/17	% Change 19/18
Consumer loans	121.9	137.8	160.5	13.0	16.5
Agriculture & livestock	28.4	24.6	28.2	-13.5	14.4
Mining activities	1.7	3.4	3.3	104.5	-2.5
Manufacturing	149.9	173.1	208.8	15.5	20.6
Water & Energy	39.6	43.2	82.6	9.1	91.2
Mortgage industries	530.8	609.0	672.6	14.7	10.4
Public works	73.5	119.2	114.0	62.2	-4.4
Residential houses	251.3	259.9	295.0	3.4	13.5
Commercial houses	206.0	229.9	263.6	11.6	14.7
Trade	298.2	282.7	301.7	-5.2	6.7
Restaurant & hotel	157.0	132.9	146.2	-15.4	10.0
Transport & communication	134.4	161.5	249.5	20.1	54.4
OFI & insurance	26.1	21.5	23.6	-17.6	10.0
Other service sector	50.5	54.2	52.8	7.3	-2.5

**Source:** NBR, Financial Stability Directorate

<sup>9</sup> www.bnr.rw

### **3.2.3. The Soundness of the Banking Sector**

According to BNR (2019)' financial reports, all banks are solvent and maintain capital buffers above the minimum prudential requirements. The system-wide total Capital Adequacy Ratio (CAR) increased to 23.3 percent of risk-weighted assets in June 2019, up from 21.9 percent observed in June 2018. Banks also maintained high quality capital by holding a high proportion of Common Equity Tier 1 (CET1) in their capital stock. CET1 accounted for 93.7 percent of total banking sector capital in June 2019 (i.e. FRW 496.7 billion out of FRW 530 billion). Banks CET1 is largely composed of paid-up capital, share premiums and retained earnings. Capital is required by Banks to absorb losses that may arise during the normal course of the Bank's operations. All DSIBs met the additional capital charge as at end June 2019. The sufficient capital buffer held by Banks therefore indicates the resilience of the financial sector to shocks<sup>10</sup>.

### **3.2.4. Banking Sector achievements (opportunities) and challenges**

Rwanda's financial sector is composed of a wide and growing array of institutions, and is becoming increasingly diversified, which is a positive development. The banking system continues to hold the largest combined share of financial sector assets at 66.3 percent as at June 2016. Overtime, this ratio has declined, showing increased diversification in recent years. For example, in 2011, the banks' combined share was 70.8 percent and has gradually declined to 66.5 percent in June 2016. The main contribution to diversification came from increased share of pension, MFIs and SACCOs – the MFIs and SACCOs combined share of financial sector assets increased to 6.7 percent, up from 5.1 percent in 2011, while the share of assets for the pension sector increased from 13.8 percent to 17.1 percent<sup>11</sup>.

#### **(A). Banking Sub-Sector**

As indicated above, this sector has been the main driver of Rwanda's financial sector and a lot has been achieved as indicated by key indicators of financial depth, profitability, soundness and stability. The number of competitors and range of products and services in the banking sector has increased remarkably over the past five years as a result of strong economic growth of the country, good and improving conditions for doing business and an appropriate regulatory environment as shown in above section. The benefit of this competition is expanded outreach

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<sup>10</sup> Idem

<sup>11</sup> Financial sector development strategic plan, 2018

through bring people that were previously excluded into the banking market, enhancement such as accounts with no fee and product innovation such as introduction of credit and debit cards.

#### i) Achievements of banking sector

According to FinScope (2016) revealed that there was an increased uptake of commercial bank products, the banked population that is individuals using commercial bank products/services increased from 23% in 2012 to 26% in 2016;

- Increased bank loans from 3.3% in 2012 to 4% in 2016 and more than 5% in 2017
- The entrance and shareholdings of Access bank, commercial bank of Rwanda, Ecobank, Equity Bank, FinaBank and Kenya Commercial Bank, Crane Bank, Bank of Africa, AB Bank has considerably increased financial sector, these foreign banks hold RwF 374.3 billion and contributed 10% assets of GDP.
- Retail payments landscape has been improved. Bank of Kigali and Atalas Mara acquired former Banque Populaire de Rwanda have been outstanding in retail market as contested competition has led banks to expand their banks networks.
- Revocation of the Simtel monopoly led to market driven solutions, including the entry of Visa and master Card
- Three MNOs (MTN, Tigo and Airtel) have introduced mobile money transfer products.
- Banks in collaboration with MNOs have introduced out mobile and internet banking products.

The banking sector remained sound and liquid, well capitalized and profitable. As shown by overall assets grew by 110.14%, assets doubled to RwF 2,278 billion between 2011 and 2016, holding more than 66% of financial assets in 2016.

**Table 4: Soundness of banking sector for year 2011 to 2016**

	2011			Jun-15			Jun-16		
	Number	Assets (billion Frw)	% of total assets of FS*	Number	Assts (billion Frw)	% of total assets of FS*	Number	Assets (billion Frw)	% of total assets of FS*
<b>Banks</b>	15	1,084	70.8%	17	2,000	66.4%	17	2,278	66.5%
<b>Insurance</b>	8	158	10.3%	14	295	9.8%	15	329	9.6%
<b>Pension</b>	1	212	13.8%	1	530	17.6%	1	585	17.1%
<b>Microfinance</b>	11	77	5.1%	493	188	6.2%	493	230	6.7%
<b>TOTAL</b>	35	1,531	100%	525	3,013	100%	526	3,422	100%

\*FS: Financial sector35

Source: BNR Annual financial stability report 2015-June 2016

## **Credit Reporting System Performance**

The NBR oversees the Credit Reporting System (CRS) that includes the private credit reference bureau (TransUnion), the credit data providers (this includes all regulated financial institutions, utilities, Rwanda Revenue Authority (RRA) and other voluntary data providers). NBR believes credit reporting systems are vital to strengthening financial infrastructure and ultimately support access to finance by providing lenders with objective information that enables them to reduce their portfolio risk, reduce transaction costs, and expand their lending portfolios. The Credit reporting system in Rwanda is composed of one private credit reference bureau (TransUnion), 499 credit-reporting institutions (this includes 17 banks, 12 insurance companies, 455 microfinance institutions, 2 telecoms, 1 utility company and 12 voluntary data providers).

Data providers include mandatory providers, those who are mandated by law to provide information to the bureau and voluntary data provider's -those that voluntarily report to the bureau. By Menyasha, a person simply texts his/her ID to 2272 and gets his/her credit report. Through this implied access, people are able to crosscheck and act to improve their credit score.

The NBR established a legal framework to support the development and efficiency of the credit reporting system. The credit reporting system law (Law N°73/2018 of 31/08/2018 Governing Credit Reporting System) and implementing regulation were revised in 2019 to comply with international standards (the General Principles for Credit Reporting System established by the World Bank). The law and implementing regulation N° 27/2019 of 09/09/2019 relating to Credit Reporting System provide guidance on (1) the kinds of data that can be collected and the permissible purposes for which it may be shared, (2) establishes consumer rights, (3) provides guidance on data security obligations, data retention periods, and other compliance matters, and (4) governance arrangements of credit reporting data providers and credit reporting service providers.

The World Bank Doing Business report for 2019 assessed the credit reporting system in Rwanda as deep and supportive of lending decisions. Rwanda scored the maximum 8 points of the doing business points on depth of the credit information system, higher than Sub-Saharan Africa average at 3.9 points. The World Bank Doing Business Report commends the rules and practices governing coverage, scope and accessibility of credit information system. According to the World Bank methodology, Rwanda's high score on credit information depth was based on 5 principles:

1. The fact that the credit reference bureau collects and keeps both positive credit information (for example, original loan amounts, outstanding loan amounts and a pattern of on-time repayments) and negative information (for example, late payments and the number and amount of defaults).
2. The credit reference bureau compiles data from also utility companies, in addition to data from regulated financial institutions.
3. The credit reference bureau is supposed to retain data up to 5 years from the final date for payment. This means credit bureaus are not allowed to erase data on defaults as soon as they are repaid or distribute negative information for more than 5 years from the date of final settlement of the amount in default.
4. By law, borrowers have the right to access their data in the largest credit bureau or registry in the economy.
5. Banks and other financial institutions have online access to the credit information (for example, through a web interface, a system-to-system connection or both). Rwanda compares favorably to Sub-Saharan Africa (SSA) average on Credit bureau coverage. The World Bank Doing Business Report (2019) indicated that credit bureau coverage in Rwanda at 23.8 percent is higher than the average for SSA at 11.0 percent, but lower than average for OECD countries at 66.7 percent. The NBR aims to work with all players in the CRS ecosystem to increase the credit bureau coverage by on boarding the non-financial institutions data from retailers, Government agencies and other voluntary providers of data relevant for credit bureaus<sup>12</sup>.

## **ii) Challenges of banking sector in Rwanda**

- The banks clientele lack security in form of collateral for the banking sector as security against lending risk. This has a casual effect on credit lending to the private sector.
- More banks are doing the same thing (one size fit All) which limits increased competition but an international bank could bring global scope to the Rwandan market, while an example of a possible innovative business model would be a bank with an SME lending focus.
- Lack of skilled professionals for instance risk managers, skills in managing clients and strategic thinking

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<sup>12</sup>NBR Financial stability report, June 2019



- Exposed to credit risk of default
- Lack of hedging financial products e.g. Currency and interest rate risks<sup>13</sup>.

## **(B) Microfinance Institutions and SACCOs**

Microfinance institutions are widely spread across Rwanda and continue to play a significant role in accelerating financial inclusion. The microfinance sector is composed of 457 institutions as at end June 2019. This includes 19 limited MFIs, 438 Credit SACCOs (416 Umurenge SACCOs and 22 non U-SACCOs). Compared to Banks, MFIs are spread across the country, including rural areas, which facilitate access to finance for unbanked population, especially rural households and micro SMEs and the total clients of MFIs amounted to 3,772,503 (i.e., 54 percent of the total adult population). In terms of products, MFIs mainly offer loans and saving products to their clients. Indicators show that, the micro-finance sub sector recorded a remarkable increase over the years as shown in the table below. Therefore, the profitability and increase in the total asset can be explained by the BNR continuous and strong monitoring of the sector. The sector remained liquid and well capitalized above minimum and capital of 15% and above 10% for G20 and Basel committee new bench mark. (BNR, 2019)

### **Performance of Microfinance Sector**

The balance sheet of the microfinance sub-sector continued to expand during the year ended June 2019. Total assets of this sub-sector increased by FRW 34 billion (i.e. from FRW 279 billion in June 2018 to 313 billion in June 2019). Growth happened to all MFI sub-sectors as follows: Assets of U-SACCOs increased by FRW 10.4 billion to FRW 138.4 billion, assets of limited MFIs increased by 16.7 billion to FRW 85.6 billion, while assets of other non U-SACCOs increased by FRW 6.9 billion to FRW 89.1 billion. The earning assets of MFIs increased by FRW 20.1 billion to FRW 165.3 billion during the period under review; Earning assets of MFIs include loans, placements in Banks, and investments in Government securities. In the year to end June 2019, the MFIs sub-sector loans increased by 18.3 billion to FRW 161.9 billion, while the stock of MFIs' investment in Government securities and placements in Banks increased by FRW 193.7 million. MFIs sector earning assets (altogether) accounted for 52 percent of MFI sector assets, with the rest being un-earning like cash and current account deposits in Banks. This structure of MFI assets (large size of un-earning assets) reflects the still limited financial

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<sup>13</sup> Idem

intermediation performed by MFI. Nevertheless, lending to agriculture picked up during the period under review. The stock of loan in agriculture sector increased by 244 percent from FRW 21.5 billion in June 2018 to FRW 73.8 billion in June 2019. This growth is much stronger than the growth of 3.3 percent registered in June 2018. Reflecting this growth, the share of agricultural loans in total MFIs increased to 44.2 percent in June 2019 from 14.4 percent in June 2018, making the agriculture sector the most financed sector by MFIs ahead of trade (at 26.4 percent) and mortgage (at 10.3 percent). The improved lending in agriculture sector reflects increased demand and improved assets quality in this sector following series of good agriculture performance<sup>14</sup>. Lending also rebounded in trade sector. During the period under review, the outstanding loans in trade sector increased by 7.2 percent from FRW 41.2 billion in June to FRW 44.2 billion in June 2019, after a decline of 17.9 percent in June 2018. However, this growth is lower compared to the performance.

**Table 5: Performance indicators of MFIs**

Table 5: Performance Indicators of MFIs

INDICATORS	JUN-15	JUN-16	JUN-17	JUN-18	JUN-19
Assets (FRW billion)	187.5	230.3	247.7	283.1	313.2
Loans (FRW billion)	93.6	119.5	127.4	142.9	167.7
Deposits (FRW billion)	104.9	126	133.4	156.1	167.3
Equity (FRW billion)	58.8	69.7	82.5	91.9	106.2
Net profit/Loss (FRW billion)	3.4	4.3	-0.1	3.3	7.2
Capital Adequacy Ratio (%)	31.4	30.3	33.3	32.5	33.9
NPLs / Gross Loans (%)	7.4	7.5	12.3	8.0	6.5
ROA (%)	3.9	4	-0.1	2.4	4.6
ROE (%)	12.6	13.3	-0.3	7.4	13.8
Liquidity ratio (%)	95.4	95.1	99.1	103.3	108.8

Source: NBR, Financial Stability Directorate

Observations from the table above show that, the Microfinance sub-sector continues to play an important role in the country's financial development agenda. The sector plays a critical role in driving financial inclusion (connecting the rural population and lower income groups to financial services).

### iii) Key achievements and challenges for MFIs/ SACCO in Rwanda

#### ( a) Achievements

<sup>14</sup>NBR report on financial stability, 2019

-Microfinance institutions are widely spread across Rwanda and continue to play a significant role in accelerating financial inclusion. As at June 2017, out of 473 microfinance institutions operating in Rwanda, 18 are Limited Liability microfinance institutions and 455 are Savings and Credits Cooperatives (SACCOs) consisting of 416 USACCOs and 39 non U-SACCOs.

- FinScope 2016 showed that there has been a successful provision of format financial services through the establishment of SACCOs. The individuals who have opened Sacco's accounts are using these accounts more actively than bank accounts are being used by bank clients.

- There is trust in the SACCO program especially in rural areas with positive perception regarding SACCOs as the people's bank.

*(b)Challenges facing MFIs/ SACCOs in Rwanda*

- There are capacity issues in the management and control of MFIs/SACCOs/SMEs institutional systems/ processes, quality of leadership.

- Human resource capacity issues -Skilled professional for example risk managers

- BNR as regulator lacks sufficient human resource capacity to effectively supervise hundreds of newly established Umurenge SACCOs which have struggled to comply with the reporting requirements which require assistance

- Financial management and reporting. The key challenge for SMEs in accessing the formal sources of financing is the absence of skills in preparing business plans, monthly cash-flow projections, and audited books of accounts which is often a ground for banks to reject loan application<sup>15</sup>.

### **(C) Non-bank financial institutions**

In Rwanda non-bank financial institutions consist of insurance and pension sectors. These institutions are regulated and supervised by the National Bank of Rwanda.

#### **(1) Insurance Sub-Sector**

The insurance sector is an integral component of Rwanda's financial system. It is the third largest component of the financial sector, after banking and the public pension fund. This sector supports the economy by providing risk mitigation mechanisms for households and firms as well as supporting financing from investment of funds mobilized from policyholders. Its growth and performance is therefore critical for economic growth and development. The regulation and

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<sup>15</sup>ADB, Leveraging capital markets for SMEs financing in Rwanda, 2012

supervision of insurances sector is done by BNR to ensure its stability and soundness. The insurance sector in Rwanda consisted of 14 insurance companies as at June 2019. This includes 12 private Insurers (9 non-life and 3 life Insurers) and 2 public Medical Insurers (RSSB Medical and MMI). The number of Insurers dropped by 2 reflecting the merger of SAHAM and SORAS in May 2019 (SAHAM Vie merged with SORAS Vie while, SAHAM Assurance General merged with SORAS Assurance General). The four Insurers that merged held a combined market share of 19.8 percent of the total insurance sector in December 2018. Insurance intermediaries consisted of 707 agents, 17 brokers, and 19 loss adjusters as at June 2019 from 581 agents, 16 brokers and 13 loss adjusters as at June 2018.

According to BNR (2019) reports, the insurance sector contribution ratio of total premiums to GDP stood at 1.7%. Thus, this low level of insurance penetration suggests significant scope for insurance expansion. Low penetration also reflects the current low usage of insurance products and services by the economic agents (households and firms). For instance as at end June 2019 the total insurance policy holders stood at 795, 93 about 11% of the total adult population in Rwanda. The mismatch between insurance products on the market vis a vis to the needs of households especially in the rural areas and the informal sector (farming and SMEs), partly explains this low penetration. It is important that insurance companies widen their client base through tailoring their products to the current needs of economic agents<sup>16</sup>.

The following figure 6 explains clearly the insurers' capital as well as the composition of insurers' capital.

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<sup>16</sup>NBR report on financial stability, 2019

**Figure 6: Capital of insurers**



Source: BNR, financial stability report, 2019

Challenges

Rwanda has third party liability for vehicles as the only compulsory insurance

- The sector also lacks diversified products for instance weather- based insurance products, credit life Insurance and mandatory insurance.
- The insurance lacks updated Rwandan Mortality life tables accompanied by the lack of appropriate assets to match annuity liabilities
- No comprehensive data on insurance are publicly available, and there is no separation between data on short-term and long-term insurance.

**(2) Pension section**

The report of BNR, (2019) stated that, the pension sector is dominated by public pension Fund - the Rwanda Social Security Board (RSSB), accounting for 95% of pension sector’s assets, while licensed private pension schemes account the remaining 5%. These Pension Funds remain the largest contributors to the financial sector deepening, after banking sector. They promote the accumulation of savings from its members for long-term investments mostly in the financial sector, and stimulate the capital markets development. This report also stated that, the pension Funds (both public and private) represented 17.8% of total financial sector assets and remain a key long term sources funds to financial sector, mainly banking sector. In the same period, 18.3 percent of the pension funds’ assets were deposits in local banks and, 11 percent equities in local banks. Further, Pension funds also plays critical role in the capital market development with its

growing investments mostly in domestic listed banks. As at June 2019, Public Pension Fund (RSSB) holds equity investments traded on Rwanda stock exchange (RSE) equivalent to FRW 92 billion compared to FRW 74 billion, the average of the last five years. Pension sector coverage remains low, at 8.2 percent in June 2019, reflecting the large number of people not saving for retirement, mainly in informal sector. The low level of pension sector coverage is linked to low proportion of the population employed in the formal sector.

The results of the labour force survey report by NISR, of December 2018, indicate that 77.6 percent of employed populations are in the informal sector, 15.6 percent are in formal sector and 6.8 percent are in households as employees of domestic personnel. Consequently, the penetration rate of pension sector (the size of assets over GDP), that gives the indication wealth accumulated by the sector, remained low and at 9.8 percent in June 2019, slightly higher than 9.5 percent in June 2018. The initiatives like launching Ejo Heza- National Long Term Savings Scheme (LTSS) and licensing private pension schemes are expected to tap into informal sector and deepen the pension sector coverage. An inclusive pension sector of member contributors with different standard of living, will not only ensure their stable income for retirement, but also increased long-term funds to the financial sector<sup>17</sup>.

**Table 6: Pension sector key financial highlights (FRW billion)**

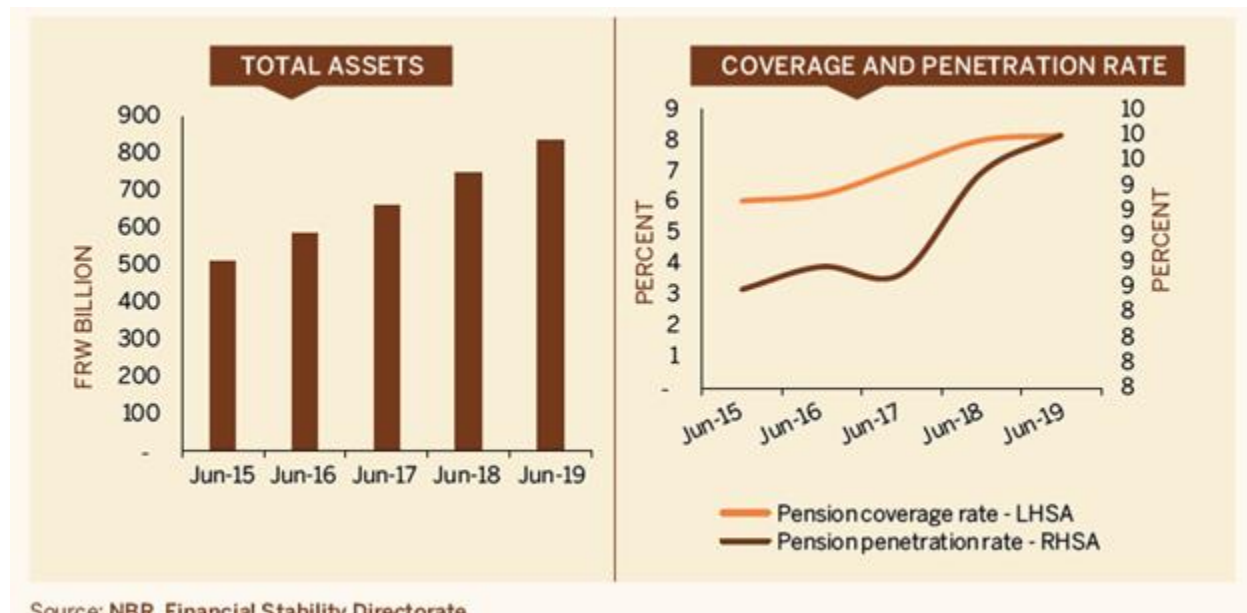
Description	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Percent change Jun-17/Jun-16
Total assets	383.6	455.9	512.1	584.5	661.3	13%
Total contributions	55.3	55.5	59.7	74.5	77.6	4%
Total benefits paid	10	11.9	14.9	15.8	17.7	12%
Total operating expenses	5.8	5.7	5.4	4.7	4.5	-4%
Total investment income	15.9	20.2	21	23.1	26.4	14%

Source: BNR (2017). Monetary policy and financial stability statement, 2017

Therefore, the following figure 7 highlights the Assets Growth, Coverage and penetration rate of pension section in Rwanda.

<sup>17</sup> Idem

**Figure 7: Assets Growth, Coverage and penetration rate**



### Challenges facing pension sector in Rwanda

According to financial report published by BNR (2019), the following challenges were cited:

- Limited contributory capacity due to low and irregular incomes;
- Lack of awareness;
- Distrust of public agencies administering pension schemes.

### (D). Capital markets

According to BNR (2019), the capital markets have a key role to play in supporting Rwanda's economic development. In EDPRS2 Government of Rwanda set out its priorities for achieving the goals of its Vision 2020 program. These priorities are rapid economic growth to middle income status; increased Moving towards a Poverty Free Rwanda; more off-farm jobs and more urbanization; reduced external dependency; and the private sector as an engine growth. The capital markets act as an enabler of these goals stimulating and supporting growth in the private sector, attracting foreign investment inflows, creating employment in the service sector and enabling savings across the economy to be employed productively. The foundation of Capital markets is strengthening the financial management and governance of businesses. This will make them more effective so that they contribute to stronger economic growth and increased employment. This will benefit the banks that lend to them and will enable them to access the capital markets for funding. Without such a foundation, progress is unlikely.

In 2011, the Capital Market Authority was established and Rwanda Stock Exchange is vibrant in terms of operation and listings. The following achievements were registered in debt and equity market. Since 2014, the government of Rwanda, through the National Bank of Rwanda, has been issuing Treasury Bonds on quarterly basis to avail the products on the market and drive the development of the capital market. In all the past issuances, increased participation of institutional and retail investors has been noticed. The share of institutional investors increased from 18.8 percent by December 2013 to 58.9 percent end June 2017 and the share of retail investors increased to 4.2 percent end June 2017 from 0.1 percent in December 2013. On other hand, the share of banks' investments in government bonds declined from 81.2 percent end December 2013 to 37.0 percent end June 2017. This shows the increase in saving opportunities offered by the capital markets and the growing awareness of the T-Bonds market in particular and capital markets in general<sup>18</sup>.

**Table 7: T-Bonds outstanding 2013-June 2017 (Frw billion)**

Year	Banks	In percent	Institutional investors	In percent	Retail investors	In percent	Total
2013	6.9	81.2	1.6	18.8	0.0	0.1	8.5
2014	24.3	50.1	23.4	48.3	0.8	1.6	48.5
2015	46.2	46.2	51.5	51.5	2.3	2.3	100
2016	60.9	39.9	86.5	56.7	5.1	3.3	152.5
Jun 2017	59.0	37.0	94.5	58.9	6.8	4.2	160.0

Source: BNR (2017): Monetary policy and financial statement, 2017

Observation: Over the last 4years, the secondary market performed well and transactions registered a remarkable improvement. The value of deals transacted on RSE increased by 581 percent, from FRW 521 million in first six months of 2016 to Frw 3.5 billion during the first six months of 2017. This increase was mainly attributed to the increased trade in government bonds on the secondary market, which rose by 637 percent during the first half of 2017 compared to the same period of 2016.

<sup>18</sup>Financial sector development strategic plan, 2018



**Table 8: Outstanding Bonds traded on secondary market as of 30th June 2016**

Security	Maturity	Tenor	Face value	Coupon rate %	YTM (%)
FXD 1/2014/ 3yrs	24/02/2017	3 years	Frw 12.5 billion	11.625	11.625
FXD 2/2011/ 5yrs	30/09/2016	5 years	Frw 2.5	11.25 fixed	11.15
FXD 3/2014/ 5yrs	23/08/2019	5 years	Frw 15 billion	11.875	12
FXD 4/2014/ 7yrs	19/11/2021	7 years	Frw 15 billion	12.475	12.5
FXD 1/2015/ 3yrs	23/02/2018	3 years	Frw 15 billion	11.55 fixed	11.7
FXD 2/2015/ 10 yrs	16/05/2025	10 years	Frw 15 billion	12.925	13
FXD 3/2015/ 5yrs	21/08/2020	5 years	Frw 15 billion	11.95 fixed	11.95
FXD 4/2015/ 3yrs	23/11/2018	3 years	Frw 15 billion	11.8 fixed	11.8
FXD 1/2015/ 5yrs	19/02/2021	5 years	Frw 15 billion	12 fixed	12
FXD 2/2015/ 15yrs	09/05/2031	15 years	Frw 10 billion	13.5 fixed	13.5

Source: BNR (2017). Monetary policy and financial statement, 2017

**Observation:** it was observed that, on the equity market, the increase was mainly due to the government's sale of its stake in, Bank of Kigali, BRALIRWA and I&M Bank to the public. The objective of the offer was to allow the Government to implement its divesture plan and to develop the Capital Market in Rwanda by continuously giving investors an opportunity to participate in the success of the leading corporate in Rwanda.

**Table 9: Trading activities on the RSE (FRW million)**

		2013	2014	2015	2016	Jan-Jun-16	Jan-Jun-17	Percent change
Volume traded	Bonds	108.4	2,375.1	1,021.1	1,729.0	520.6	3,546.5	581
		-	1,055.4	884.9	1,633.5	470.7	3,467.1	637
	Equities	108.4	1,319.6	136.2	95.5	49.9	79.4	59
<b>Turnovers</b>		<b>53,982.1</b>	<b>46,312.6</b>	<b>38,547.7</b>	<b>17,115.3</b>	<b>9,000.4</b>	<b>15,770.6</b>	<b>75</b>
	Bonds	-	1,089.7	913.5	1,710.5	514.5	3,551.5	590
	Equities	53,982.1	45,222.9	37,634.2	15,404.8	8,485.9	12,219.1	44
Number of deals		<b>1,738.0</b>	<b>1,542.0</b>	<b>968.0</b>	<b>991.0</b>	<b>438.0</b>	<b>518.0</b>	<b>18</b>
	Bonds	-	13.0	30.0	99.0	33.0	88.0	167
	Equities	1,738.0	1,529.0	938.0	892.0	405.0	430.0	6
Market cap		1,372.7	1,339.5	2,820.4	2,748.0	2,808.4	2,745.9	-2

Source: BNR, Financial Market department

### **3.3. Microfinance development in Rwanda**

#### **3.3.1. History of Rwanda's Microfinance**

According to Angelique Kantengwa (2008), the microfinance sector in Rwanda is relatively young. Although small self-help peasant organizations (such as Tontines-ROSCA or Ibimina) have existed for some time, the sector growth accelerated with the creation of the Rwanda Banques Populaires or Union des Banques Populaires du Rwanda (UBPR) in 1975 whose network dominates the microfinance industry today. After 1994, international humanitarian organizations encouraged rapid growth of microfinance as part of wider relief and reconciliation programs. The period during the mid-1990s was characterized by the emergence of new microfinance providers who used various approaches. Often, there was no clear differentiation between loans, subsidies and donations, causing confusion for savers and borrowers, and a number of unregistered providers were operating. The result was a culture of non-repayment, leading to non-performing loans exceeding 45% of total outstanding credit, which adversely affected the operations of MFIs (AMIR 2011). Due to corruption and poor management of funds, in 2006, the Government of Rwanda, through the National Bank of Rwanda (BNR), stepped in and closed eight MFIs. Around 195,000 depositors lost their savings and although the government agreed to pay 50% of the deposits of all clients in these MFIs the events caused a huge loss of public confidence in the MFI sector. The GoR initiated an urgent response in 2007, publishing the National Microfinance Policy Implementation Strategy 2008-2012 (MINECOFIN 2013) followed in 2008 by the Microfinance Law and its accompanying regulations, and the 416 Umurenge SACCOs in 2009. Each initiative is described further below<sup>19</sup>.

The history of MFIs is better described through the following time line:

- 1965 : Probable date of appearance of the first ROSCA or Ibimina;
- 1975 : Establishment of the first Banque Populaire (BP), the Banque Populaire of NKAMBA, on August 4, 1975; In 1986 : Banques Populaires create a Union called Union of the Banques Populaires (UBPR);
- 1994 : all MFIs stopped their activities and lost their assets during the 1994 war and genocide;
- 1995: Launching of the financial sector reform. After 1995, the Government started reforms of the financial sector aiming at creating an efficient financial system. The principal objectives of

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<sup>19</sup>Microfinance and Economic Growth: Rwanda- Alison Brown, Peter Mackie and Alastair Smith Informal Economy Research Observatory Cardiff University, by Thierry Hoza Ngoga (2015)

these reforms include the reinforcement of the Central Bank (BNR) legal powers of coordination and supervision of the banking structure, the introduction of new financial instruments, the liberalization of interest rates and the opening of the banking structure to foreign banks. These reforms had a considerable impact on the development of the Rwanda's financial sector.

### **3.3.2. Types of Microfinance Providers**

The Microfinance Law governs the organization of activity of microfinance institutions in Rwanda. Therefore, articles 3-7 establish four microfinance categories:

1. **Category 1** – *informal microfinance institutions which do not require prior license*. They are constituted as tontines, which operate on the basis of the contributions made by their members. They require no legal status or licensing from the Central Bank (BNR) to exercise their activities, although they must register with the nearest local administrative entity;

2. **Category 2** – *Quasi-informal infant savings and credit cooperatives*: are microfinance institutions which are governed by laws on savings and credit cooperatives, where their collected deposits total less than RWF 20 million. Such institutions may not have more than one point of service or service outlet No more than 100 Members, The quasi-informal infant SACCO is to keep sound written records of all savings, loans and loan repayments made. Required to submit statistical reports to MINICOM which will copy BNR every quarter, containing the following information:

- o Number, duration and size of loans made, broken down by gender
- o Breakdown of stated purpose of loans,
- o Details of repayments due, received and delinquent
- o Details of any provisions made for any delinquent loans
- o Total number of clients, broken down by gender
- o Any available information on the result of any micro-project funded with a loan
- o Details of any funding received from any donor organization
- o Details of any loan received from a prudentially regulated bank

3. **Category 3** – *Formal microfinance institutions which accept public deposits* and have adopted legal status of a corporation or of a savings and credit cooperative, where their deposits total or exceed RWF 20 million. Such institutions are required to observe all rules of management and prudential norms defined in the microfinance law and applicable regulations, with Minimum

capital of 5 million RWF for SACCOS and 300 million RWF for the other MFIs and they are required to submit statistical reports to BNR every month, containing the following information:

- o Number, duration and size of loans made, broken down by gender
- o Breakdown of stated purpose of loans,
- o Details of repayments due, received and delinquent
- o Details of provisions made for any delinquent loans
- o Total number of clients, broken down by gender
- o Any available information on the result of any micro-project funded with a loan
- o Details of any funding received from any donor organization
- o Details of any loan received from a prudentially regulated bank and

4. **Category 4** – *Credit only microfinance institutions* which do not accept deposits from the public (nonbank financial institutions); Minimum capital 300 millions RWF; May on-lend funds (grants or loans) from any outside organization; No maximum size; Must take the legal form of an S.A.R.L.; Requirement for licensing with BNR; Subject to some prudential regulation:

- o No reserve requirement necessary, as no public money is put at risk
- o Other regulation should remain as per the current instructions<sup>20</sup>.

### **2.3.5. Financial cooperatives in Rwanda-**

Microfinance is defined as the provision of financial services (savings, loans, and insurance) to relatively low income clients who typically lack access to normal commercial bank products. Microfinance loans are typically granted to groups or individuals backed by non-traditional collateral. Kantengwa Angelique, (2008). The microfinance sector in Rwanda is relatively young. Although small self-help peasant organizations (such as tontines-ROSCA or *ibimina*) have existed for some time, the sector growth accelerated with the creation of the Rwanda Banques Populaires or Union des Banques Populaires du Rwanda (UBPR) in 1975 whose network dominates the microfinance industry today. The microfinance sector in Rwanda counts 493 licensed institutions (13 limited companies, 64 non-UMURENGE SACCOs and 416 Umurenge SACCOs) (BNR, 2015). They represent 5.6% of the Rwandan financial system's total assets (BNR, 2014).

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<sup>20</sup> Idem

Financial Cooperatives are therefore, created in situation where people cannot obtain essential services from investor's owned firm. The Cooperatives may reduce the obstacles faced by the farmers or other people and encourage them to create the income generating activities; the financial Cooperatives participate in poverty alleviation. SACCO is an easy way of organizing a community to save and recycle savings in a given locality. Since the nature of a SACCO is local, it mobilizes savings locally, within the community, and then the profits are returned to members in the form of loans (MINICOFIN, 2007). The money stays and works within the membership and the area. This mutually achieved success helps not only build a sense of ownership and pride in an area but also create a culture of saving and investing.

Today, microfinance institutions view permanent reduction of poverty by addressing the multiple dimension of poverty with the aim of reaching specific Millennium Development Goals (MDGs) in education, women's empowerment, and health, among others. Even if developing countries need to integrate microfinance programs, developed countries do also take it as an essential element in their financial system. The microfinance movement has changed perceptions towards helping the poor in both, South Asia and Latin America. In many countries, microfinance has been used as a tool to increase financial depth in rural areas and it has typically targeted very low-income groups who would normally be excluded by conventional financial institutions (Weiss and Montgomery, 2004).

### **3.4. The Role of Rwanda's Government in Microfinance**

Private sector development remains hampered by the perceived high political risks in the region and by the high cost of doing business in a scattered infrastructure and its contribution to the economy and poverty alleviation remains very limited. So, the government is aggressively pursuing a privatization policy and encouraging more investments (foreign and local) in the country through the Privatization Secretariat and the Rwanda Investment Promotion Authority (RIPA) respectively. Rwanda completed its Poverty Reduction Strategy Paper (PRSP) in June 2002. The strategy is geared toward bringing pro-poor economic growth through six broad areas: (i) Rural development and agricultural transformation; (ii) Human development; (iii) Economic infrastructure; (iv) Governance; (v) Private sector development; and (vi) Institutional capacity-building.

Given this growth, the Ministry of Finance, through the Banque Nationale du Rwanda (BNR), became actively involved in formalizing the sector and a regulatory framework has been underdevelopment since 2002 with a view to consolidating the sector. Weak or “ghost” institutions which do not really have the experience nor implement industry best practices will be eliminated be refrained from posing a potential risk to their clients.

Recently, a national microfinance policy was drafted by the Ministry of Finance, where the general objectives and strategies were identified. The objectives aim to:

- (i) support the development of strong MFIs, which offer viable financial services adopted to meet the needs of their market;
- (ii) develop an institutional framework for the coordinated development of the sector;
- (iii) increase the financial and investment capacity for those who would otherwise not have access to financial services;
- (iv) mobilize resources and invest in rural areas for a more equitable distribution of MFIs; and
- (v) Support the development of a national microfinance expertise. Unfortunately, the exercise was not one of broad stakeholder participation, like in other countries, a process critical to any sound microfinance sector development.

### **3.5 Legal and regulatory framework of Microfinance in Rwanda**

The National Bank of Rwanda is mandated to regulate and supervise Microfinance institutions. Microfinance institutions include Savings and Credit Cooperatives (SACCOs) and some limited companies that operate microfinance activities. The supervision is conducted through three main activities: licensing of MFIs, off-site surveillance and on-site inspection of MFIs thus licensed. The activity of supervising Microfinance Institutions (MFIs) by the National Bank of Rwanda is based on the Law n° 55/2007 of 30/11/2007 governing the Central Bank of Rwanda, the Law n° 40/2008 of 26/08/2008 establishing the organization of microfinance activities and its implementing Regulation n°02/2009 of 27/05/2009<sup>21</sup>

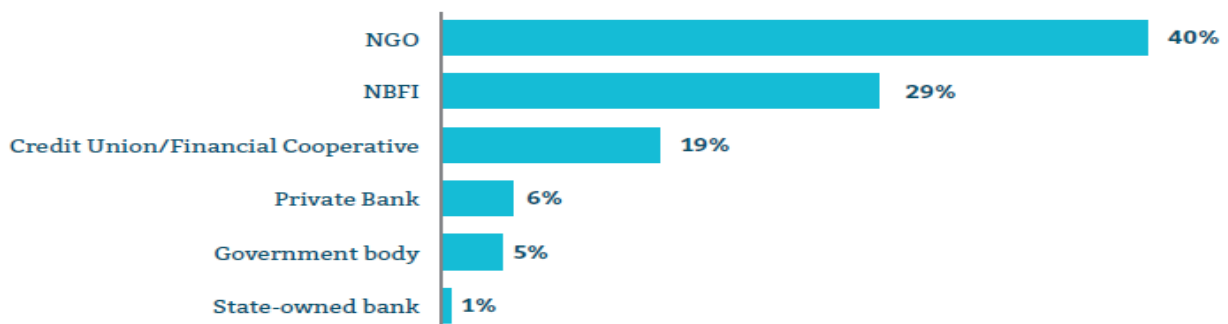
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<sup>21</sup>Microfinance and Economic Growth: Rwanda- Alison Brown, Peter Mackie and Alastair Smith Informal Economy Research Observatory Cardiff University, by Thierry Hoza Ngoga (2015)

### 3.6. Microfinance in Europe

European microloan providers use a variety of institutional models to engage in microfinance activities. Non-governmental organizations (NGOs) (40%), non-bank financial institutions (NBFIs) (29%) and credit union/financial cooperatives (19%) constitute the majority of the survey participants while other legal forms (i.e. private banks, state-owned banks, government bodies) make up the rest of the sample. 72% of MFIs categorized as NGOs, NBFIs, credit union/financial cooperatives and government bodies are regulated. In terms of organizational age, the European microfinance sector is diverse and still relatively young. The majority of respondents (58%) started their activities after 2000. However, there has been a slowdown in the growth of new MFIs, which has decreased in each period since 2005. Only 5% of the surveyed MFIs started micro-lending operations after 2015. For approximately 50% of respondents, micro-lending is the primary operational focus and contributes to more than 75% of their overall turnover. The majority of respondents (79%) employ less than 50 full-time equivalent employees. In 2017, the total number of paid staff for the sample was 14,743, with a substantial share of women staff (59%). European MFIs use a variety of institutional models to engage in microfinance activities. To a large extent, this diversity of institutional types is connected to national differences in the legal and regulatory frameworks. As a result, the microcredit market in Europe is quite fragmented. Figure 2 reports the different institutional types adopted by the 156 MFIs surveyed. The institutional forms adopted include private banks, state-owned banks, non-bank financial institutions (NBFIs), credit unions/financial cooperatives, non-governmental organizations (NGOs), and government bodies<sup>22</sup>.

**Figure 8: Micro-finance types in Europe**



<sup>22</sup>Damla Diriker, Paolo Landoni & Nicola Benaglio (2017), Microfinance in Europe: Survey Report 2016-2017

Similar to previous editions of the Survey Report, the majority of the sample (69%) consists of NGOs and NBFIs. Moreover, when government bodies are included, NGOs represent a total of 45% of the overall sample. Out of 156 respondents, only two are state-owned banks, eight are private banks and nine represent government bodies. The legal and regulatory framework for microcredit provision in Europe differs significantly among different countries.

Microfinance in Europe: Survey Report 2016-2017. We have showed already that, the microfinance sector in Europe is still young. Moreover, most of the actors are very small, it appears that most organizations do not grant more than 100 credits per year; nearly 70% of microfinance lenders employ fewer than 5 people in their microfinance program. Overall in Europe there is no common microfinance business model and there are different types of microfinance actors, most of which are NGOs outside the formal banking system<sup>23</sup>.

- NGOs: 28%
- Foundations: 26%
- Public institutions: 17%
- The rest (28%) is composed of banks, savings banks and other credit institutions.

The credit organizations can be divided into 2 groups:

1. Those whose primary activity is granting micro-credits (35% of all participants);
2. Those for which microfinance is only a side activity (for 46% of participants it represents less than 25% of their activity, and for 61% less than 50%)<sup>24</sup>.

Regionally the market participants can be distinguished according to market surveys prepared on behalf of EIF and according to the market information gathering conducted by EIF, at EU level, MFIs are at different stages of their life cycles and need consequentially differentiated financial support for their business and growth. MFIs in the EU are broadly characterized by:

- in EU-15 (with a few exceptions) small size, very low or inexistence profitability, microfinance institutions heavily rely on subsidies to cover costs, very limited access to external sources of funding, social lending activity mainly targeting disadvantaged groups like immigrants, unemployed, etc operational procedures are often not standardized, very high need for seed/ developing funding for MFIs;

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<sup>23</sup>Jayo, Barbara; Rico, Silvia; Lacalle, Maricruz (2008), in [http://www.european-microfinance.org/characteristic\\_en.php](http://www.european-microfinance.org/characteristic_en.php).

<sup>24</sup>Idem



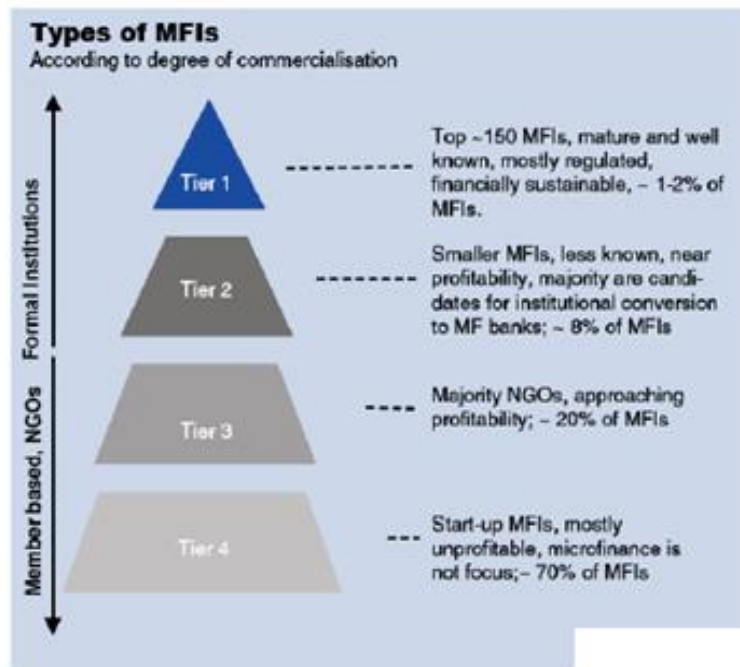
- in CEE by larger average size of the institutions, higher profitability, lending activity more focused towards micro-entrepreneurs, difficult access to stable external sources of funding. Having a look at the microfinance business models in Western Europe specifically, we can distinguish four main types<sup>25</sup>:
  1. NGOs, Microfinance driven approach: institutions with a microfinance driven approach; often they provide business support, too. Typical examples are: ADIE (France), ANDC (Portugal), Aspire (Northern Ireland, UK), or Street UK (UK).
  2. NGOs with a target driven approach: NGOs, who served specific target groups (e.g. unemployed, recipients of welfare benefits, migrants) started to offer financial services, example are Microfinance fund of the City of Hamburg (Germany) or Weetu (UK).
  3. Support programs initiated in existing institutions and development banks existing institutions or development banks include support programs for micro and small enterprises, examples are Finnvera (Finland), Kfw (Germany), BDPME-Oseo (France) or ICO (Spain).
- Specialized units (or parts) of banks: this is still a relatively young development; examples are various caixas in Spain (e.g. Microbank La Caixa). Therefore, there are three large microfinance in Europe, which are Adie (France), Finnvera (Finland), and Fundusz Mikro (Poland). Adie of France was created by volunteers and works in partnerships with banks; Finnvera was set up at the initiative of the Finish state and Fundusz Mikro has received exceptional funding of USAID as start up aid. Thus, there is a transformation process for MFIs: they start as NGOs and finance their business via donations and / or public money. Overtime they “grow” toward formal financial institutions and regulated entities<sup>26</sup>. In general, these Microfinance institutions are classified in four categories as below:

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<sup>25</sup>Damla Diriker, Paolo Landoni&Nicola Benaglio (2017), op.cit

<sup>26</sup> Idem

**Figure 9: Types of MFIs in Europe**



Source: Dieckmann, Raimar (2007) cited Damla Diriker et al. (2017)

Furthermore, in Western European countries like Spain, Germany, UK, and Italy, microfinance has a strong focus on social inclusion and it pays limited attention to its profitability, whereas in Eastern countries of Europe, there is a larger presence of commercial intermediaries. With regard to the commercialization, we can distinguish between 4 business models like;

- The first alternative is the semi-formal MFIs (e.g. NGOs) to supervised financial institutions.
- A second alternative is the so called *downscaling*: existing banks or financial institutions enter into the microfinance business (e.g direct lending to final beneficiaries).
- A third option is “*Linkage banking*”, banks cooperate with MFIs (e.g loans to MFIs by Citibank) and a fourth alternative is the so called “*Greenfield*”: formal financial institutions specialized in microfinance business (build up from scratch)<sup>27</sup>.

### 3.7 Chapter conclusion

The chapter presented a country profile of Rwanda, an overview of recent developments in the country and the global environment within which savings and credit cooperatives or microfinance operations. Many thanks were formulated towards the government of Rwanda for the great supports;

<sup>27</sup>Damla Diriker, Paolo Landoni & Nicola Benaglio (2017), op.cit

microfinance in Rwanda has been established and gradually become part of the national financial system. It was observed that, the Rwandan financial system is largely composed of microfinance institutions. There is much advancement in the legal and regulatory framework that helps open a window for the creation of licensed MFIs however, participation by private sector in this field is limited. This chapter also shows that, the contribution of financial sector to GDP; therefore, the microfinance institutions played an important role to the economic growth of the country.

## **CHAPTER FOUR**

### **RESEARCH METHODOLOGY**

#### **4.0 Introduction**

The previous chapters 1, 2 and 3 presented the background of the study, the statement of the problem, theories and literature review pertaining to the research study and the overview on financial system and microfinance activities in Rwanda. In this chapter the components of research methodology are presented and discussed. The description of the study area is described in the first section and Research design is described in the second section. This chapter also depicts the sampling technique, data collection methodology, tools and techniques used to test the hypotheses formulated at the end of chapter 2.

#### **4.1. Description of the study Area**

The research was carried out in Huye-District, one of the 30 districts making up the republic of Rwanda. Huye District is located in South Province and the specific time period selected for this research was 2012-2019. Umwalimu SACCO Huye Branch is located also in Ngoma Sector which is one of the fourteen sectors of Huye District (*see the Map in appendix 5*). There are 10 sectors (imirenge) that make up Huye-district, which are: Gishamvu, Karama, Kigoma, Kinazi, Maraba, Mbazi, Mukura, Ngoma, Ruhashya, Huye, Rusatira, Rwaniro, Simbi and Tumba. The population of Ngoma Sector is 27 705 (Ngoma Sector Statistics, 2016) whereas Huye district has a population of 314,022 *inhabitants* with an average of 540 *inhabitants* per square kilometer. The majority of who are involved in subsistence farming. Employment and income rates are low, resulting in limited access to sufficient farm lands and financial services which lead to inability to acquire basic needs such as food, clothing, health and education (Alesina and La Ferrara, 2000). The reason for choosing Ngoma Sector was that, it's where USACCO Huye Branch is located and it was ranked the lowest in social development and farming land shortage (NISR, 2015). The major subsistence activity is farming. Besides, Ngoma Sector is in Huye District that is overpopulated with 548 inhabitants per square kilometer (DDP-Huye, 2013). The population is classified into extremely poor and the poor are the majority where 25% are extremely poor and 21% are poor (NISR, 2015).

#### 4.1.2. Rwanda map with districts-



Source: Map of maps.rwanda.com

#### 4.2. Research design

Research methodology refers to the methods, techniques, and procedures that are put in place in the process of executing the design or plan of the research. This includes underlying principles and assumptions used in informing and shaping the proposed research. Research methodology also encompasses identifying how the study will affect elements being studied, and how the research is aligned with ethical rules governing research (Babbie and Mouton, 2001).

The study has adopted a combination of correlation and descriptive research design. Therefore, the study employs regression models to investigate the contribution of saving and credit cooperatives on the improvement of socio-economic welfare of members. According to Creswell (2003), there are three common approaches to conduct a research namely, quantitative, qualitative and a mixed method approach. Quantitative research is a way for testing objective theories by examining the relationship among variables. On the other hand, qualitative is a means for exploring and understanding the meaning individual or groups ascribe to a social or human problem with intent to developing a theory or pattern inductively. Mixed methods help emphasize the research problem and use all available approaches to understand it. These approaches are often utilized in empirical research to collect and analysis data to make a general statement about a certain issue on the world

based on a sample of observations. The use of quantitative and qualitative approaches in combination provides a better understanding of research problem than either approach alone (Creswell and Plano Clark, 2007). This type of design was used because data were obtained at a single point in time. Furthermore, the use of this research design was helpful in studying the status of Umwalimu SACCO members as they are appeared at the time of this study and provided a snapshot of the existing situation. According to (Sedgwick, 2014), this research design is also quick, easy, and cheap to perform since it is based on a questionnaire survey and interview. Thus, the use of this research design was also supported by (Bluman, 2013), who states that, this design allowed the collection of both quantitative and qualitative data gathered from a subset of the population sampled through a descriptive statistics which consists of the collection, organization, summarization and presentation of data (Bluman, 2013).

Therefore, the combination of both forms of data satisfies the need to gather multiple forms of data from diverse audiences (Creswell, 2007). Quantitative approach is used to collect and analyze data within a reasonable shorter period of time than required in qualitative data (Creswell, 2009). In addition, quantitative approach explains a phenomenon where numerical data are collected and analyzed using mathematical based methods and models. This covers a lot of people and the results can be generalized to the target population (Creswell, 2009). On the other hand, qualitative approach is used to help understand or describe meaning, experiences or ideas of things or notions (Hancock, Windridge& Ockleford, 2009).The researcher in qualitative study seeks to know perceptions; experiences, actions and understandings of people in natural situations (Kothari, 2004; Mc Millan &Schumacher, 2014). In this regard, qualitative approach has been chosen as, it helped the researcher to assess teachers' experience on the implementation of Umwalimu SACCO and the data from qualitative approach were used to complement quantitative data for better analysis and interpretation. The quantitative approach involved the use of questionnaires to survey both teachers and SACCO staffs, while qualitative approach helped the researcher to conduct interview with local leaders, USACCO management staff and focus group discussion meeting with local teachers' representatives committee from selected schools, where the case study (USACCO) is located. Hence, a good picture and control of the level of influence of USACCO were obtained on the improvement made on members' wellbeing. This study also adopted the conclusive research design. It tests the specific hypotheses and

examines the relationship between variables. Conclusive nature is meant to provide information that is useful in reaching conclusions or decision making.

### **4.3. Population of the study and sampling technique**

#### **4.3.1. Population**

The population describes the total quantity of cases of the type which are the subject of the study. Therefore, a population may consist of objects, people or events (Waliman, 2005). In this research, the population of the study is focused mostly on the teachers of primary and secondary schools members of USACCO, Umwalimu SACCO's staffs and officials of the Huye District in charge of education, at Ngoma sector level. The rationale behind the selection of these populations was because they are unique informants regarding the case study. According to Umwalimu SACCO (2019), Huye branch has about 1932 members, five staff (5) members from USACCO, 1 local leader from Ngoma sector and 2 representatives' members of USACCO' from two schools, Hence, the total population concerned by the study was 1940.

#### **4.3.2. Sampling technique**

Sampling is the selection of some parts of an aggregate or totality on the basis of which, judgment about the aggregate or totality is made (Cohen et al., 2007; Kothari, 2008; Creswell, 2014). The study involved primary and secondary schools teachers' members of USACCO; USACCO's staff and local officials or leaders as respondents. To select the samples for this study, the purposive sampling, Universal sampling and stratified sampling and systematic random sampling techniques were used. The purposive sampling means sampling in deliberate way, with some purpose or focus in mind (Maxwell, 2009). This technique was employed to select fifteen schools of Huye District of Ngoma sector to be involved in the study. Universal sampling method was used to select all administrative staff and officials from (Huye Branch). The questionnaire was circulated to all these staff in the yielded list. After repeated reminders, continuous follow ups and personal, mail and phone contacts were used. The accomplished response rate of 100% is satisfactory for statistical generalization. Also, stratified sampling and systematic random sampling were used in selecting respondents from all the five schools selected. This was done by the help of a list of members in each school selected. In addition,

teachers from selected schools were also stratified according to their levels and gender to make sure that all categories of teachers and genders are represented in the sample.

### 4.3.3. Sample size

According to Walliman (2005), a sample is regarded as a selected number of cases in a population. A sample is preferred in circumstances where populations are huge and may be extremely difficult if attempts were made to reach all units of the whole population. Because of limited time and resources, the researcher could not be able to study the whole population; it is from that point of view that the researcher had determined the sample size to represent the whole population. This sample was taken referring to the formula proposed by Alain Bouchard. For that, when the entire population is inferior to one million (1,000,000), the sample size correspond to 96 persons and 10% as significance level of error (Bouchard, A. 1984).

Therefore, Perriens, G. (1974) cited in Mugenda (2008), had explained us how to find out the number 96 as the sample size which represent whole population as below:

**n:** Sample size for infinite (or large) population;

**P :** Expected probability of individual to be included in the sample;

**Q :** failure (probability of individual to be excluded in the sample, 1-p) and

**d:** Significance level of the error

**Z $\alpha$ :** Normally distributed value of the population (Represents the 95% of the confidence interval).

$$n = \frac{(Z\alpha)^2 x P x Q}{d^2} ; \text{ where: } Z\alpha = 1.96 \quad P = 0.5 \quad Q = 0.5 \text{ and } d = 0.1\%$$

$$*n = \frac{(1.96)^2 x 0.5 x 0.5}{0.1^2} = 96; \text{ this is the way that 96 which is used in the computation as below is}$$

found.

$$NC = \frac{Nxn}{N+n}$$

Where: (NC: Corrected sample)

N= The total finite population in which the sample is taken, correspond to 1940 informants is composed of 1932 teachers, 5 managerial staffs of USACCO and 3 local leaders and schools' representatives.

$$\text{Thus, } NC = \frac{1940 * 96}{1940 + 96} = \frac{186,240}{2,036} = 91.47 \sim 92 .$$



The total of respondents is 92 who are the informants. Five members of staff & management, 84 teachers' members of USACCO and 3 leaders & schools' representatives from Huye District were selected who are directly involved in the saving and credit functions. The composition of the sample size is presented in the table.

**Table 10: Sample size**

Category of respondents	Population	Sample size
Management and staff	5	5
Clients ( USACCO' members)	1932	84
Leader from Ngoma sector in charge of primary and secondary schools and local representatives' committee	3	3
<b>Total</b>	<b>1940</b>	<b>92</b>

Source: Primary data

Along this study, the interview was conducted with the management of USACCO (1), staff in charge of loan (1) and 3 representative of teachers in local board committee from three different schools were purposefully selected. The questionnaire was given to teachers and staff from USACCO.

Therefore, the researcher used the following formula to determine the sampling interval in order to establish the sample size of schools that is:

$K=N/n$ . where: **N** is the population while **n** is the number of units needed as sample size. The researcher used Systematic random sampling which gave all schools and teachers an equal chance of participating in the study. As Mugenda (2008) said that 30% or 10% of the accessible population is enough for a descriptive survey; 10% of schools were selected randomly from 149 primary and secondary schools of Huye District; 10% of 149 = 14.9 =15 schools.

**K** is the sampling interval  $149/15=9.93 \approx 10$  teachers per school (Nachmias & Nachmias, 1987).

#### 4.4 Data Collection sources and instruments

##### 4.4.1. Data collection sources

Data was collected from primary or secondary sources. Primary data refers to information obtained firsthand by the researcher on the variables of interest for the specific purpose of the study. Secondary data refers to information gathered from sources already existing.

#### **4.4.1.1 Primary Data**

Primary data refers to first hand data obtained from the respondents. The primary data was collected through the administration of a questionnaires to USACCO members and USACCO staff and it was supplemented by interviews of local leaders of Ngoma sector, management of USACCO and representative of teachers' association in Huye district who are considered to be experts in that domain. Primary data was used to gather first hand information about the contribution of Umwalimu saving and credit cooperatives (USACCO) on the improvement of members' socio-economic development in Rwanda. In order to fulfill the objectives set, a questionnaire was devised to administer among the respondents. The questionnaire was circulated to a few numbers of teachers and business analysts considered as experts in Microfinance institutions for pilot testing. Necessary corrections have been made as per their suggestions. The reliability result is presented in the next section. The questionnaires were addressed to the USACCO members and USACCO staff. The following techniques were adopted to collect data, because of the wide geographical area involved: Personal contact and mailed the questionnaire. To encourage their willingness to participate in this survey, respondents were promised a copy of the results, with due permission from the University. This helped to increase the percentage of response. After continuous follow up, all the respondents participated actively to the study, which represented a participation rate of 100%.

#### **4.4.1.2 Secondary Data**

Secondary data means data that are already available i.e., they refer to the data which have already been collected and analyzed by someone else (Kothari, 2004). By collecting secondary data, the researcher used the secondary data was collected using documentations techniques whereby, financial reports, bylaws, Manual of procedures and Credit policies of SACCOs have been consulted. A number of textbooks were studied to obtain pertinent literature on USACCO. The other sources of secondary data include Monograph, Working papers, Conference and Seminar proceedings at PIASS, Research publications and interactions with subject experts.

#### **4.4.2. Data collection instruments**

From this research, different data were collected by means of different techniques including questionnaires, documentary study, observation and interviews. In collecting data, the self-prepared questionnaire for teachers and USACCO staffs, focus group discussion with officials

from several sectors of Huye District, observation checklist and documentary guide were used in this study. The questionnaire was chosen due to the fact that, it is more applicable and could gather information from large number of people within a short time (Amin, 2005). Further, the focus group discussion guide was used to provide teachers and officials with an open forum to discuss their experiences on Umwalimu SACCO services provided and socio-economic development of teachers based on size of loans granted, repayment periods, level of savings as condition for having a loan, the cause of defaults loans and challenges which teachers are facing to acquire loan and loan repayment procedure.

Finally, the study used also the observation which is described by John & Christensen (2012), as the watching of behavioral patterns of people in certain situations to obtain information about the phenomenon of interest. The observation is more used in case studies where a group of individuals participating in events, activities or organizations are in focus (Maxwell, 2005; Gall et al., 2007). Hence, the researcher visited several secondary schools teachers so as to identify diverse behaviors of working conditions and especially their happiness of being member of USACCO.

**Interview schedule,** this helped the researcher to get first information from the officials and USACCO staffs, as researcher interacted with the respondents face to face. Interviews allowed pursuance of in depth information around the topic and were useful as follow ups to certain respondents to the questionnaire and to further investigate their responses. Also, data collected from the interview helped to complete data provided by questionnaire in providing meaningful information for better understanding of responses given by the respondents.

**Observation:** This helped the researcher to witness what was going on by use of her naked eyes through visual behavior. The last category of instruments for data collection is documentary analysis guide. This was used to get information on goals and mission of Umwalimu SACCO during its implementation and USACCO financial reports. The availability of these documents helped researcher to experience teachers in implementing USACCO.

**Focus groups discussion:** one Focus Group Discussion at each selected school level was conducted by using four five teachers' members of USACCO. The aim was to get the collective opinions of how USACCO contributed to the welfare of their members.

#### 4.5. Validity and Reliability of data

Validity and reliability are important concepts as they are used for enhancing the accuracy of the tool and consistence of research findings (Tavakol and Dennick, 2011 and Gibbs, 2007 cited in Creswell, 2014). Reliability refers to random error in measurement. Reliability indicates the accuracy or precision of the measuring instrument (Norland, 1990). It is the degree to which the observed variable measures the true value and is error free. Concerning the internal consistency of tools, the researcher tested this reliability by calculating the Cronbach alpha which is an established method to work out the internal consistency. The Cronbach'Alpha provides a coefficient of inter-item correlations that is the correlation of each item with the sum of all the other items. The higher the coefficients, the better the measuring instruments. The closer the Cronbach' Alpha is to 1, higher the internal consistency. A reliability value of at least 0.7 is acceptable (Nunnally, 1978). Further Bagozzi and Yi (1998) state that a scale is said to reliable, if the reliability value of each construct is greater than 0.60. The reliability score of the construct is tabulated below for better understanding.

**Table 11: Results of reliability analysis**

S. No	Construct	Cronbach's Alpha	No of items
1	Contribution of saving and credit cooperatives (SACCO) on the improvement of members' socio-economic development in Rwanda.	0.984	10

Source: Author's computation

Table 11above represents the results of reliability analysis. The Cronbach's Alpha value is found to be closer to 1 (i.e 0.984). Usually 0.7 and above value is acceptable (Nunally 1978). The results show that instrument is highly reliable. The former was assured by means of a comprehensive literature review. Also, to ensure the correctness of the information, the tools were written and conducted in Kinyarwanda to easy communication with the respondents. The data had later been translated into English.

#### 4.6. Data Analysis

Ader H.J (2008) defined data analysis as the process inspecting, cleaning, transforming, and modeling data with the goal of discovering useful information, suggesting conclusion, and supporting decision making.

#### **4.6.1 Data analysis techniques**

According to Grawitz M. (1990) cited in Sheria Ruvugiro (2015), the data analysis techniques are tools used in the process and forms of reasoning and perception which make the reality to be accessible. Data was analyzed through the combination of descriptive statistics and multiple linear regression analysis. The multiple linear regression models were used to estimate the causal relationship between dependent variable and the independent variable. During this study, the entry and analysis of data were done using SPSS (Statistical Package for the Social Scientists), the data was analyzed using the frequencies, descriptive and Pearson correlation tools in SPSS v21 and Microsoft excel, f-Test and student t-Test was also employed to assess the impact of independent variable on the dependent variable and assess the significance of the entire model.

Qualitative and quantitative data were collected from USACCO members, key informants and focus group discussants. Qualitative data were analyzed by using content analysis. Descriptive statistics helped in describing quantitative data which was summarized in a meaningful way. The research questions were answered through the use of graphs, percentages and frequencies of different categories of responses from the USACCO members.

#### **4.6.2. Analysis model specification and criteria**

According to this model, the researcher assumes that the improvement of Umwalimu SACCO members' socioeconomic development is a function of several variables including: access to USACCO loans, amount of loan obtained (credit size) from USACCO, level of saving, educational level of members, occupation of respondents, increase in monthly income, and government policy. It was assumed that Umwalimu SACCO services like saving and granting loans to members have a positive effect on the improvement of Umwalimu SACCO members' socioeconomic development. Again, it is assumed that occupation of each respondent, educational background, income and government programs against socio-welfare of teachers in place among other: Girinka Mwalimu program (One cow per teacher program), nine and twelve years basic education program, community based insurance scheme (Mutuelle de santé), Bye bye Nyakatsi campaign etc, all have positive contributions on USACCO members' welfare improvement. Unlike the household size or dependent has a negative effect on teachers' welfare.

The above model is fully explained as below, Socio-Economic Development (SED) as dependent variable and saving, educational level, occupation of respondent, income level, government policy, loan, and family size, shelter as dependent variable. Thus, the model is exhibited as:  $SED = f(Y, Ed, L, Gov, Fs, Md)$ , the researcher assumes that there is a linear relationship between the variables of the model. Hence, it gives the formulation as follows:

$$SED = a + bY + cEd + dL + eGov + fFs + gMd + Er$$

Where: SED=Socio-Economic Development (or, Standard of living); **a**: is the constant that is the level of improvement of teachers' welfare when all other factors or variables are equal to zero. The letters **b, c, d, e, f, g** are considered as coefficients in the function and we assume values **b, c, d, e** and **g** to be positive that is **b, c, d, e, g > 0** while value **f** is assumed to be negative that is **f < 0**.

Thus, **Y** stands for income, **Ed**: Education background of respondents, **L** stands for loan as size of loan received by a member from USACCO, **Gov**: Government program, **Fs**: Family size or number of dependents, **Md**: is the membership duration, while **Er**: is error term.

#### 4.6.3. Estimation and evaluation of the model

The researcher has drawn a scatter diagram to show if any correction exists between the independent, dependent and intervening variables. This diagram helped the researcher to estimate the analysis model. Parameters of the model and the scatter diagram have been estimated (produced) using an econometric computer program called SPSS. The regression results have been evaluated using the standard statistics. That is, student t-test (at 10 % significant level or with 90% confidence), to determine whether we should *accept or reject* the null hypothesis which is subjected to test. In this way, the researcher compared t-value (**critical value**) and the computed value.

Accordingly, if the calculated value of **t** is larger than the critical value, we can conclude that variables under study are significantly related with a 90% confidence level. Other standard regression statistics that was used to evaluate the estimated results include: the correlation coefficient (**R**), which is a measure of linear correction between two or more variables (the dependent and the independent variables). The value of **R** lies between *-1 and +1*.i.e. ( $-1 \leq R \leq +1$ ). If the value of  $R > 0.5$  we say that, there is a strong correlation between the dependent and independent variable, while if  $R < 0.5$ , there is a weak correlation between variables. Another

statistic that has been used is the coefficient of determination ( $R^2$ ). This statistic tells what proportion in term of percent of the variation in the dependent variable is explained by the explanatory variable it is a summary measure that tells how well the simple regression line fits the data. This  $R^2$  lies between 0 and 1. i.e.  $0 \leq R^2 \leq 1$ ; In other words, an  $R^2$  of 1 means perfect fit, on the other hand, an  $R^2$  of 0 means that no variation in dependent variable is explained by the change in independent variable.

Again, the Fischer-statistic (*F-statistics*) for the overall significance of the model has been also used. It is obtained by dividing the explained variance by the unexplained variance. By rule, *if the calculated F-value is greater than the critical F-value found in F-table then the whole model (equation) is said to be statistically significant*. If the mean is comprised between 1 and 2.49, the frequencies is weak on the other hand, If the mean is comprised between 2.5 and 4 there is a frequencies is strong. Furthermore, the standard deviation was used to indicate the degree of variability of data, if the standard deviation ( $\sigma$ ) is less than 0.5 there is homogeneity of respondent ( the respondent have a similar characteristics) while if it is above 0.5 there is heterogeneity of respondent (the respondent do not have similar characteristics).

## **4.7. Data Processing**

### **4.7.1. Data Coding**

According to Churchill, (1992), Coding is the technical procedure by which data are categorized. The answers acquired were coded and tallies were used to determine the frequencies of each response. Coding was done in this study by summarizing data and classifying different responses given by respondents into various categories for easy manipulation.

### **4.7.2. Data Tabulation**

According to Gilbert and Churchill (1992), tabulation refers to the orderly arrangement of data in a table or other summary format achieved by counting the frequency of responses to each question. The results have been presented in tables and figures for easy understanding for the readers.

### **4.7.3. Editing Data**

Editing is defined as the process involving the review and adjustment of collected survey data. The purpose is to control the quality of the collected data<sup>28</sup>. Data editing can be performed

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<sup>28</sup> Data editing in Research methodology. Online: <http://readingcraze.com/index.php/data-editing-research-methodology/> Retrieved: 12.04.2020.

manually, with the assistance of a computer or a combination of both. This method was used mainly in arranging the collected data, sorting out any mistakes and any unnecessary or irrelevant information detected in the study. In editing process the researcher was expected to put much emphasize on ensuring accuracy, completeness, uniformity, legibility and comprehensiveness in answering the questions.

#### **4.8. Ethical Consideration**

Before going to the field work for data collection, a research recommendation letter (see appendix 1) was issued from Koblenz-landau University. Then, the approval to conduct field research in Ngoma Sector boundaries was requested and obtained from the Executive Secretary of Ngoma Sector. The researcher also got a permission letter from USACCO main branch-Kigali, before launching questionnaire and conducting interview with USACCO staff (see appendix 2). The respondents were requested to read carefully all the necessary instructions in to fill properly the questionnaire. Thus, a privacy and confidentiality of research information was also maintained.

#### **4.9. Dissemination of Results**

After the study is done, presented and accepted at Koblenz-Landau University's academic forum, the findings and recommendations will be shared with the Umwalimu SACCO board of management and the management staff in Huye district as well as with the head of educational department at Ngoma Sector. The findings will also be made available to the Koblenz-landau University's main library.

#### **4.10. Summary of the chapter**

This chapter regarding research methodology was very helpful for this paper as it has described clearly the research design, sampling techniques and sample size. This chapter also showed the data collection instruments, data analysis techniques, validity and reliability of data (Estimation and evaluation of the model) and data processing and ethical consideration. The data analysis and interpretation of results presented in the following chapter five were analysed based on the techniques and regression model found in this chapter 4.



## **CHAPTER FIVE**

### **DATA ANALYSIS AND INTERPRETATION OF RESULTS**

#### **5.0. Introduction**

This chapter deals with the analysis, presentation and interpretation of research findings on the data collected from field work in Huye District based on the contribution of saving and credit cooperatives (SACCOS) on the improvement of members' socio-economic development in Rwanda; case of Umwalimu SACCO. The main objective pursuing by this research is to assess how primary and secondary school teachers were experienced the implementation of the Umwalimu SACCO regarding the improvement of their standard of living in Rwanda and being focused on USACCO located in Huye District. The data was analyzed and interpreted as per the research objectives based on the regression model mentioned in chapter four above.

Hence, this chapter also is subdivided into three sections where the first section focuses on the bio-demographic characteristics of the respondents such as age, sex, marital status, educational level, the experience in U-SACCO activities. The second sections deals with the socio-economic status of the teachers before and after joining U-SACCO. The third section is based on socio-economic status of respondents after joining U-SACCO. This is followed by the use of savings and loans received from U-SACCO by teachers in establishment of small income generating activities and finally, the challenges faced by U-SACCO members and verification of hypothesis.

#### **5.1. Socio- demographic characteristics of the respondents**

The following section describes the respondents in terms of age, gender, marital status, level of education and experience in U-SACCO activities and findings are summarized and presented in the tables as below.

##### **5.1.1. Distribution of respondents by Age group**

The researcher asked the respondents to state their age group. The aim of this question was to find out whether age has effects on respondents that would like to establish a small business while still working in teaching profession. The Results are shown in table 12 below.

**Table 12: Respondents' age**

	Frequency	Percent
Valid		
Between 21-25	11	12.0
Between 26-45	69	75.0
46 and above	12	13.0
Total	92	100.0

**Source: Primary Data**

Table 12 above shows that the majority of the respondents 69(75.0%) were aged 26-45 years followed by those aged 21-25 years at 11 (12.0%) and finally over 46 years at 13.0%. This implies that the majority of Umwalimu SACCO members was very active and is amongst those who ask for loan to finance income generating activities in order to get an additional income for their households. This implies also that, all the respondents are within the age group that is accepted by the Rwandan labor law to exercise any income generating activity.

**5.1.2. Distribution of respondents by gender**

The researcher asked this question the respondent with the aim to investigate the extent to which female and male teachers have responded to the initiate to improve their living wellbeing because the Rwandan government policy is to create awareness about the gender balance in all activities. The gender of respondents was found to be as presented in the table 13 below.

**Table 13: Gender of Respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	41	44.6	44.6	44.6
Female	51	55.4	55.4	100.0
<b>Total</b>	<b>92</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Primary Data**

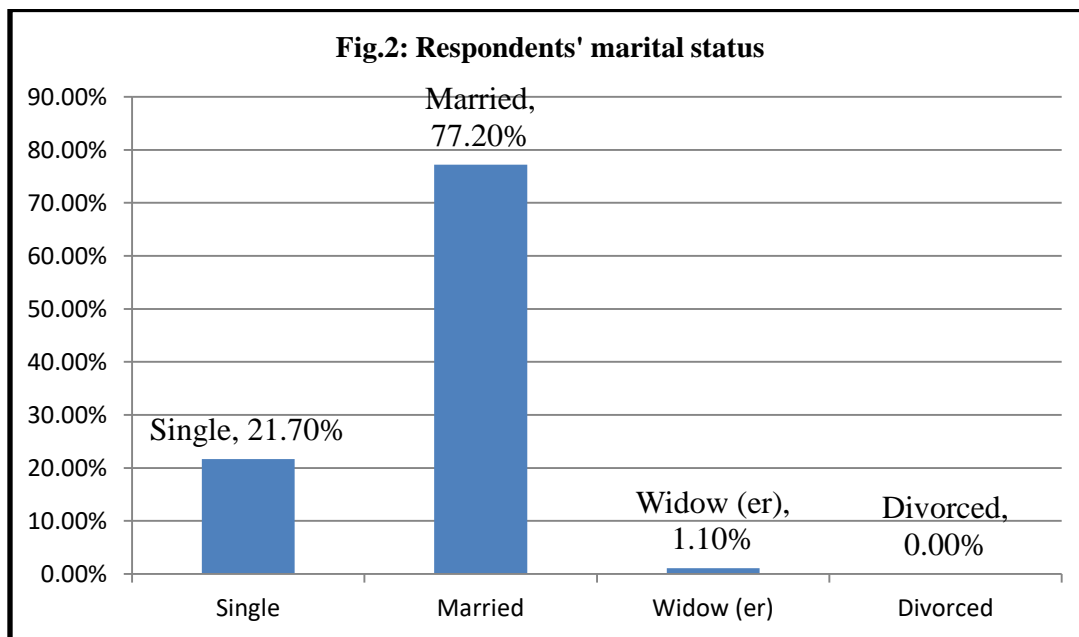
The table 13above shows that, 51 (55.4%) of respondents were female whereby male accounts for 41(44.6%) of the total sample of 92. This implies that the female were more eager to the improvement of their social welfare through joining Umwalimu SACCO than males. Also, the implication is that gender balance was considered as the number of respondents participated in this study and every member had equal chance of being selected. These findings were supported by the a slogan which states that women are the sources and soul of development and it is

testified in this part because normally female are having much responsibilities to the families ranging from taking care and providing food for their families which is a factor driving them to join U-SACCO for accessing loans to supplement family income especially for the married couple having no formal employment to the male. Taylor et al(1992) point out that the increase of women in income generating activities was necessitated by the increase number of female headed households and cultural factors because women in many African societies are brought up to take responsibilities for providing food for their families.

### 5.1.3. Distribution of respondents by marital status

Researcher asked this question to the respondent in order to indentify the category of teachers that are eager to exploit the opportunities offered by U-SACCO to improve their socio-status than always relying on the salary only. The respondents’ answers are provided in the following figure.

**Figure 10: Respondents' marital status**



Source: Primary Data, 2020

The findings of the figure above showed that 77.2% of the respondents were married, 21.70% were still singles, 1.10% of respondents were widowed; 0.0% of respondents were divorced or separated. From the findings, a big number of USACCO members were married which had a good implication on socio-economic contribution at the household level. Married and widowed

people were dominant; this can be because the majority of members ranged from 26 to 65 years old. The accepted age of getting married in Rwanda is 21 years for girls and 25 years for boys.

#### 5.1.4. Distribution of respondents by educational levels

The study also accessed the educational level of the U-SACCO’s members. Education is very important to human life and the reason understanding as well as improving social welfare. The findings to this question were summarized and presented in the following table 14.

**Table 14: respondents' school attendance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	100.0	100	100.0	100.0
	No	0.0	0.0	0.0	100.0
	<b>Total</b>	<b>92</b>	<b>100.0</b>	<b>100.0</b>	

**Source:** Primary Data, 2020

The findings from the table 14 above, highlights that all the respondents 92 (100%) have attended school. This implied that data regarding the study were obtained from educated informants.

Indeed, the respondents were asked to state their education level to determine if education background has an impact on the management of loan granted by USACCO. The findings to this question were presented in the table 15 as below.

**Table 15: Educational level of respondents**

		Frequency	Percent
Valid	Primary	0	0.0
	Secondary	47	51.1
	Diploma(certIFICATE for higher education (A1)	30	32.6
	Bachelor	15	16.3
	Masters	0	0.0
	Doctorate (PhD)	0	0.0
	Other	0	0.0
	<b>Total</b>	<b>92</b>	<b>100.0</b>

**Source:** Primary Data, 2020

It is evident from table 15 that, 47 (51.1%) of teachers have attended secondary school level (A2), 30(32.6%) hold a diploma (A1) and 15(16.3) hold the bachelor’s degree level. This implies that the majority of the respondents are the primary school teachers mean that their percentage in the teaching profession was higher than those of secondary school teachers and a big number has responded very positively towards on the contribution of USACCO to their welfare. This implies that data for the study was obtained from well educated respondents who know well the impact of USACCO on their living status. These findings were also completed by USACCO management through interview, secondary school teachers used to save greater amount of money than primary school teachers because their salary is at least higher than the salary earned by primary school teachers which give them the capacity to pay back loan on time.

### 5.1.5. Distribution of respondents by occupations

The researcher asked to the respondents to indicate also their occupations or nature of work that respondents were engaged so as to understand the level of commitment towards improving their socio- welfare, and hence use Umwalimu SACCO as one of the sources of finance. Respondents’ work is presented in the table 16 below.

**Table 16: Occupation of respondents**

	Frequency	Percent
Teacher	86	93.4
Farmer	0	0.0
Seller	0	0.0
Herder	0	0.0
Other	6	6.6
Total	92	100.0

**Source:** Primary Data, 2020

The findings from the table 16 above shows that, 86 (93.4%) of respondents which represents the majority were the teachers (primary and secondary school teachers), 6 (6.6%) of respondents were involved in other activities while 0.0% was observed for farmer, seller and herder. The main reason for the big numbers of respondents to involve in U-SACCO membership is the facility to save (Compulsory saving) and getting loan at least reduced interest rate. According to the management of USACCO through interview, primary and secondary school teachers who are

member of USACCO have not access to compulsory savings of 5% including other social benefits granted by USACCO to their members. This is the reason why the majority of the teachers from public as well as private schools were members of USACCO. Finally, the teachers who are involved in some income generating activities said having given the responsibilities of these small businesses to their spouses and husbands because they don't have enough time to make the follow up of these business smoothly as they are working before and afternoon( from Monday to Friday and sometimes on Saturday for some schools).

**5.1.6. Distribution of respondents by size of dependents**

The table 17 below shows the number of the household members of respondents as we know well that, the number of dependents of a person affects his or her ability to work, to save and to consume, etc the findings to this question were presented in the following table 17.

**Table 17: Dependent size**

	Frequency	Percent	Valid Percent	Cumulative Percent
1-3	55	59.8	59.8	59.8
4-6	30	32.6	32.6	92.4
Valid 7-10	5	5.4	5.4	97.8
11 and above	2	2.2	2.2	100.0
Total	92	100.0	100.0	

**Source:** Primary Data, 2020

Table 17 shows that the majority of respondents have dependents which are equal or below 3 family members (59.8%) followed by those who have dependents between 4 and 6 persons (32.6%), those who have dependent between 7-10 represents 5.4% while the minority representing 2.2% have the number of dependents which was 11 and above.

**5.1.7. Findings on membership duration of respondents**

The membership duration for a saving and credit cooperative's member plays a very important role as it raises its ability to save and utilization of loan granted that cooperative. The results in the table 18 below shows the membership duration of USACCO members

**Table 18: Membership duration of respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
1-3months	2	2.2	2.2	2.2
4-6months	6	6.5	6.5	8.7
Valid 7months-1 year	12	13.0	13.0	21.7
2 years and above	72	78.3	78.3	100.0
<b>Total</b>	<b>92</b>	<b>100.0</b>	<b>100.0</b>	

**Source:** Primary Data, 2020

As indicated in the table above, the majority of 72(78.3%) of respondents have been USACCO members for a period of 2 years and above, followed by 12(13.0%) of respondents who have been members to USACCO for a period between 7 months and 1 year, while 6(6.5%) of respondents have joined USACCO in the period between 4 months and 6 months and only, 2(2.2%) of respondents have also joined USACCO for a period between 1 and 3 months only. This implies that the majority of respondents have access to USACCO loans and ability to save. This is due to the fact that, according to USACCO' loan requirements, in order to get loan in Umwalimu-SACCO you must be an active member for at least three months.

### **5.1.8. Membership condition**

From this sub-section the researcher utilized coding technique for analysis of the conditions to become USACCO member, where the answers provided by the respondents were coded using a Likert-type scale from one (1) to five (5). In this regards, Strongly Disagree (SD) =1; Disagree (D) =2; Neutral (N) = 3; Strongly Agree (SA) = 4 and Strongly Agree (SA) =5. Furthermore, the researcher employed SPSS 21 to compute Means and Standard deviation for each statement included in the following table 19. Therefore, a statement whose mean value is between 4.5 and 5 inclusive is rounded to 5 and said to be strongly agree; a statement between 3.5 and 4.4 inclusive is rounded off to 4 and said to be agree; a statement whose mean value is between 2.5 and 3.4 inclusive is rounded off to 3 and said to be Neutral; a statement whose mean value is between 1.5 and 2.4 is rounded to 2 and said to be Disagree, while a statement whose mean value is less than 1.5 is said to be strongly disagree.

Thus, the *Standard Deviation* used by the researcher shows the extent to which respondents' answers are different from the each other, and in general a standard deviation which is **0.5** and below shows that respondents answers are not far from the mean that is they are very close or similar to each other, while the standard deviation greater than **0.5** shows that regardless of the mean value, respondents provided very different answers on a similar statement.

**Table 19: The conditions to be U-SACCO member**

<b>Respondents' membership condition</b>	<b>Mean</b>	<b>Std. Deviation</b>
It is not complicated to become a member of the USACCO	4.78	.810
Share value is affordable	4.96	.293
Requirements to open account are easy to fulfill	4.65	.999
Many people are aware of the services offered by the USACCO	4.68	.851
There is a good customer care	4.48	1.355
The distance to reach to USACCO is fair	4.70	.767

**Source:** Primary Data, 2020

The above table 19 highlights the position of the mean value for the First, Second, Third, Fourth and sixth statements were respectively recorded as 4.7, 4.9, 4.6, 4.6 and 4.7 which are rounded to 5 the code for strongly agree. This implies that the majority of respondents have strongly agreed that, it is not complicated to become a member of the Umwalimu SACCO, share value is affordable, requirements to open account are easy to fulfill, many people are aware of the services offered by the USACCO and the distance to reach to USACCO is fair. However the mean value for fifth statement was 4.4 around 4 the code for agree. This implies that in general respondents have agreed that, there is a good customer care at USACCO. Again, the standard deviation for statements 1, 3, 4, 5 and 6 were above 0.5 meaning that respondents' responses were far different from the mean while only the standard deviation of the second statement was below 0.5. This means that their answers to the statement were close to each other. According to the interview conducted with the management of USACCO, some respondents' find it complicated to reach USACCO as for them the USACCO was far from their residence and some staff do not have good customer care to teachers. This is the reason



that, there is some kind of arrangements between the management of USACCO with those of Umwalimu SACCO to help teachers from each sector to withdraw their cash with USACCO which is near their lieu of residence. Furthermore, the management of USACCO argued that it is not complicated for the primary and secondary to become of USACCO as you that USACCO is a saving and credit cooperative for all teachers in Rwanda without any exclusion of members.

### 5.1.9. Findings on Umwalimu saving facilities

This section presents the attitude of respondents toward the saving product offered by Umwalimu SACCO in Huye District after joining Umwalimu SACCO. Accordingly, respondents were asked to indicate their attitude toward savings facilities at USACCO. The findings to this question are presented in the following table 20. Remember that, the coding style is the same like the above statement relating to membership where 1 represent strongly disagree, 2 stand for disagree, 3 for neutral, 4 for agree and 5 for strongly agree.

**Table 20: Respondents view on the saving facilities at USACCO**

Statement	Mean	Std. Deviation
Saving policies for USACCO are clear and well set	4.87	.714
Members get their savings on demand	4.59	1.071
Minimum liquidity are maintained to serve members	4.20	.451
Security of members 'deposits is ensured	4.30	1.365
Members get fair interest on their term deposits	4.89	.619

**Source:** Primary Data, 2020

The table 20 shows that, the mean value for the third and fourth statements were respectively 4.20 and 4.30 which are rounded 4 the code for agree. This implies that in general respondent have agreed that minimum liquidity is maintained to serve members and the security of members 'deposits is ensured at Umwalimu SACCO. While the mean value of the remaining statements, the first, second and the fifth which are: 4.8, 4.5 and 4.89 rounded 5 the code used for strongly agree. This implies that, in general the respondents have strongly agreed that saving policies for USACCO are clear and well set, members' get their savings on demand and that members get fair interest on their term deposits.

Furthermore, the standard deviation for all statements is above 0.5 excluding the third statement meaning respectively that respondents' answers were responses to the statement were not close to each other and closed to each only for the third statement. Again, this implies that in general all the respondents argued that there no problem of saving facilities at USACCO.

The findings from the interviewees show that, some respondents were not aware of saving policy of Umwalimu SACCO and most of teachers are attending to make only the compulsory saving of 5%, unless there are other types of savings such as fixed savings, school fees, voluntary savings, etc this is an indication which shows that, some borrower was not aware of saving policy of USACCO so they could not answer favorably that the policy is well set, some respondent did not know how to answer the question about interest rate, so most of them answered by neutral. The management of USACCO argued that, *teachers could not save with other financial institutions (commercial banks and other MFIs) before joining USACCO because of their low income earned and they were not able to start any small income generating activity that could help them having an additional monthly income.* These findings testified that, at least all the teachers' members of USACCO have saved after joining USACCO, because it is an obligation and compulsory to all teachers to be deducted 5% of the net pay from every teacher in government schools as well private schools. Actually, teachers themselves started asking to have their saving being increased above 5%, because they have realized how usefulness the savings would be in the near future. They are also motivated by the fact that when they want to acquire loan, the level of their savings in based on by USACCO. This means that low savings equals to low level of loan (fewer amounts) granted. This product (saving) creates saving culture among USACCO members and thus creates wealth and wellbeing of people.

#### **5.1.10. Respondents' view toward SACCO loan facilities**

In this section we are going to present the attitude of respondent toward the loan product offered by USACCO operating in Huye district. The coding style is the same like the above statements where 1 represent strongly disagree, 2 stand for disagree, 3 for neutral, 4 for agree and 5 for strongly agree. The table below presents the findings of respondents view toward saving facilities offered by USACCO.

**Table 21: Respondents view on the loan facilities at USACCO**

<b>Statement</b>	<b>Mean</b>	<b>Std. Deviation</b>
Collateral required is affordable	4.45	1.189
USACCO offers loans to members at affordable interest rates	4.87	.578
The Loan repayment period is long enough and fair	4.22	1.405
Loan is quickly processed	4.51	1.191
The loan requirements are affordable	4.41	1.233
Loans offered by USACCO are enough	4.09	1.396
Loan monitoring is well done by USACCO Staff	4.73	.827

**Source:** Primary Data, 2020

After the observation of the table above, it was observed that, the mean value for all statements except the second, fourth and seventh was between 4.07 and 4.45 which are rounded 4, the code for Agree. This implied that the majority of respondents who are teachers' members of USACCO have agreed that loans offered by USACCO are enough; the loan's requirements are affordable, the loan repayment period is long enough and fair and collateral required is affordable. While, the mean value of the second, fourth and seventh statements are 4.87, 4.51 and 4.73 around 5, which is the code for strongly agree. This means that, in general respondents have strongly agreed that USACCO offers loans to members at affordable interest rates, loan is quickly processed and loan monitoring is well done by USACCO Staff. Again, the standard deviation for all statements is above 0.5 which means that USACCO' members responses to the statements were not close to each other and every single respondent has provided the answers to each statement according to his understanding to the situation.

Furthermore, in order to analyze well the meaning of the answers provided by the respondents, the researcher conducted an interview with USACCO management. According to the interview, the interest rates on loan offered by USACCO were not high compared to other MFIs operating in Rwanda, by adding that, teachers were offered loan at a lowest interest rate, which is arranged between 11% to 13%; where the interest rate at other MFIs and commercial banks lines between

18% and 25%. They added that, *because Umwalimu SACCO started his activities with short term loans against members' savings as loan security. This means it considers savings of members as security or guarantee. It is an interval that includes the amount of money accessed by many teachers considering salary earned without taking into account other collaterals. Furthermore, he adds that, the amount of loan granted to USACCO members would not exceed eight times (8) of the member net salary which is still very low. Long terms loans are especially for heavy business and investment that lead to heavy business generating income and for mortgages are still represented by a lesser percent of applicants due lack of collaterals among most of the members. And furthermore, amount borrowed depends on savings made by members and shares owned by shares owned.*

Indeed, according to the interview with some USACCO leaders or representatives from schools, some borrower said that the interest rate on loan was high, that the collateral requirement was not affordable to them, others said that the amount of loan offered by USACCO to single borrower is not enough, some other respondent answered that the loan is not quickly processed and that the repayment period is not long enough. Based on the results presented in table 21, 20 and 19 above, the researcher accepted the first hypothesis, which was stated as “There is a good awareness of respondents on USACCO’ services in terms of membership, credit (loan) and savings”.

## **5.2. Contribution of USACCO activities on the improvement of teachers’ welfare.**

This sub-section highlights the contribution of USACCO services on the improvement of teachers’ standard of living. In order to describe the extent to which USACCO’ services have improved the wellbeing of teachers; the researcher used Likert-type scale coding technique during the analysis. In this regards, 5 stands for strongly agree, 4 for Agree, 3 for neutral, 2 for Disagree, 1 which stands for Strongly Disagree were considered for analysis. The following table 22 presents the results on USACCO activities contributions on member’s standard of living improvement.

**Table 22: Contribution of USACCO loan on the improvement of teachers' welfare**

<b>Statement</b>	<b>Mean</b>	<b>Std. Deviation</b>
USACCO loan allowed me to start an income generating activities which facilitate me to get an additional income out of my monthly salary.	4.41	1.169
Loan received from USACCO enable me to pay school fees for my children and other school supplies' they need	4.43	.668
Loan got from USACCO enable me to buy house equipments or furniture such as: chairs, bed, mattress, cupboard, etc which have improved my wellbeing	4.66	.986
USACCO loan enable me to buy my own piece of land that has improved my welfare	4.40	.757
I was able to acquire domestic animals (cow, goat, pig, sheep, hare, hens,...) because of the loan I got from USACCO	4.76	.669
USACCO loan enable me to acquire means of transport (bicycles, motorcycle, ...)	4.33	1.376
USACCO loan helped me to acquire shelter or improve the existing house with install tapped water &electricity to my existing house	4.42	1.188
USACCO loan and saving enable me to get meal twice a day satisfactorily	4.73	.681
I'm able to pay Health Insurance and medical expenses because of the loan I got from USACCO	4.51	1.074
USACCO loan enable me to acquire electronic devise such as: radio, TV, computer, cell phone, etc	4.78	.912

**Source:** Primary Data, 2020

The observation from the table 22 shows that, the mean value for the first, second, fourth, sixth and seventh statements were between 4.41 and 4.43, 4.40, 4.33 respectively which were rounded 4, the code for Agree. This implies that the respondents have agreed that USACCO loan allowed them to start an income generating activities which facilitate them to get an additional income out of my monthly salary; loan received from USACCO enable them to pay school fees for their children and other school supplies' they need; USACCO loan enable them also to buy their own piece of land that has improved my welfare; USACCO loan enable them to acquire means of transport (bicycles, motorcycle, ...) and USACCO loan helped respondents to acquire shelter or improve the existing house with install tapped water &electricity to my existing house. Again, the mean values of the third, fifth, eighth, ninth and tenth are between 4.5 and 5 respectively 4.66, 4.76, 4.73, 4.51 and 4.78 that are around 5, the code for strongly agree. This implies that in

general respondents have strongly agreed that because of loan got from USACCO enable me to buy house equipments or furniture such as: chairs, bed, mattress, cupboard, etc which have improved my wellbeing, others said, they were able to acquire domestic animals (cow, goat, pig, sheep, hare, hens,...) because of the loan they got from USACCO, indeed USACCO loan and saving enable me to get meal twice a day satisfactorily and some respondents said they were able to pay health insurance and medical expenses because of the loan got from USACCO and finally, USACCO loan enable them to acquire electronic devise such as: radio, TV, computer, cell phone, etc Furthermore, the standard deviation for all statements are above 0.5 which means that respondents' answers were not close to each other. These findings are in line with the following statement of one of the interviewees, who revealed that: *“there are many contributions Umwalimu SACCO has resolved to teachers in Rwanda out of accessibility of getting loans and savings for their future but also in terms of assets acquired by them such, cows, small domestic animals, others have built their own shelters and other household facilities such as furniture, mattresses, cupboard, television devises and radios, etc which have sincerely improved their wellbeing.”* (One USACCO Leader, 25 Nov, 2019)

Again, researcher asked to respondents to indicate the number of times they have received loan from USACCO. The purpose of this question was appropriate the motivation of teachers to request loans for various activities, because as the number of time a member required loan as there is an increase in income earned by a member.

**Table 23: Number of time respondents received loans from USACCO**

	Frequency	Percent	Valid Percent	Cumulative Percent
Once	11	12.0	12.0	12.0
Twice	19	20.7	20.7	32.6
Three times	10	10.9	10.9	43.5
Four times	18	19.6	19.6	63.0
Five times and above	34	37.0	37.0	100.0
<b>Total</b>	<b>92</b>	<b>100.0</b>	<b>100.0</b>	

**Source:** Primary Data, 2020

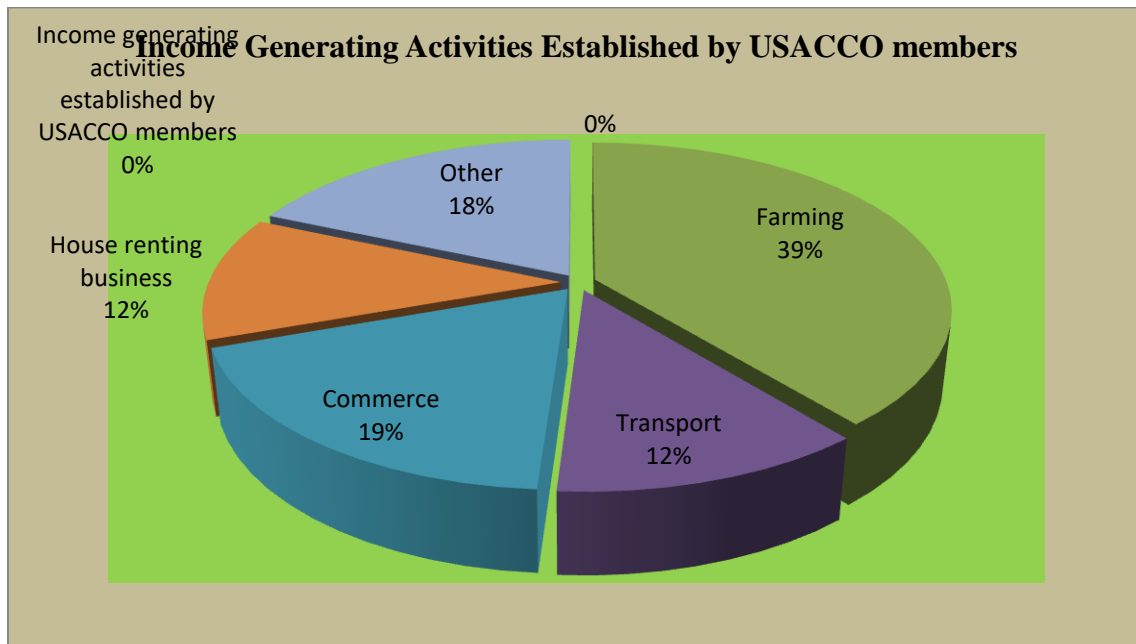
Table 23 shows that, the majority 34 (37.0%) of respondents have received loan from USACCO for five times and above, followed by 18(19.6%) of respondents who argued having got loan from USACCO four times and the remaining respondents received loan from USACCO respectively once for 11(12.0%), twice for 19(20.7%) and three times for 10 (10.9%). This implies that Umwalimu SACCO loans play a very important role on the improvement of members' living standards. This is the reason why they want this loan for being invested in different income generating activities for their wellbeing improvement. It is one of the reasons why, the researcher asked to respondents to indicate the types of income generating activities they have established after joining Umwalimu SACCO.

The following section describes the income generating activities generated by USACCO members as results of joining USACCO.

**5.3. Respondents' type of Income generating activities established after joining USACCO**

The aim of this section is to find out whether respondents' income has increased through loan oriented through income generating activities that are financed by USACCO (teachers' Cooperative). The usage of loans received from USACCO is presented in the following figure 10 and table 24.

**Figure 11: Income from Income generating activities established by USACCO members**



**Figure 10:** Income generating activities established by USACCO members

This question is also illustrated through the table 24 below.

**Table 24: Small income generating activities established by members**

		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	Farming	36	39.1	39.1	39.1
	Transport	11	12.0	12.0	51.1
	Commerce	17	18.5	18.5	69.6
	House renting business	11	12.0	12.0	81.5
	Other	17	18.5	18.5	100.0
	<b>Total</b>		<b>92</b>	<b>100.0</b>	<b>100.0</b>

Source: Primary Data, 2020

The table 24 indicates that most of respondents 36(39.1%) are involved in farming activities, followed by 17(18.5%) of respondents who are engaged in commerce (trade), 11(12.0%) of respondents are engaged in transport and house renting business respectively while the remaining 17(18.5%) of respondents are engaged in other business activities such as buying equipment and mortgages and other expenses such as family celebrations like weddings. Indeed, the majority of loans were oriented in farming and livestock because they live in rural area. Some respondents invested their loans in business or commerce which means that loans from USACCO provide a start-up funding for consolidating their business activities. The reason which pushes teachers through small business is that these commercial activities are more beneficial than teaching. These income generating activities have created job opportunities to their family members and community at large.

### **5.3. 1. Respondents' type of farming business established after joining USACCO**

Respondents were asked to indicate the type of farming that they are running as income generating activity. Their responses are provided in the table 25 below.



**Table 25: Type of farming activities established by USACCO members**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Crop farming	34	36.9	36.9	36.9
Daily business(milk supplier)	13	14.1	14.1	51.0
Animal farming(cow, goat, chickens, etc)	8	8.7	8.7	59.7
Mixed farming	17	18.6	18.6	78.3
Other	20	21.7	21.7	100.0
<b>Total</b>	<b>92</b>	<b>100.0</b>	<b>100.0</b>	

Source: Primary Data, 2020

Results of the table 25 indicate that, majority 34(36.9%) of respondents are involved in crop farming, followed by 17(18.6%) of respondents who are engaged in mixed farming activities, 13(14.1%) of respondents are engaged in milk supply and 8(8.7%) of respondents are involved in business of trading animal farming (cow, goat, chicken, etc) while 20(21.7%) of respondents were engaged to other farming business. These results imply that the most useful business activity in Huye District is crop and mixed farming, because this District is located in rural area. This type of business generates an additional income to teachers in District. These results testified also that USACCO loan improves the welfare of teachers in Huye District.

### 5.3. 2. Respondents' type of commerce established after joining USACCO

Respondents were also asked to indicate the type of commerce that they established after joining USACCO. Their answers are presented in table 26 below.

**Table 26: Type of commerce established by respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Small restaurant	18	19.6	19.6	19.6
Kiosk and canteen	8	8.7	8.7	28.3
Night club/cabaret or bar	5	5.4	5.4	33.7
Small shop of clothing	3	3.3	3.3	37.0
Other	58	63.0	63.0	100.0
<b>Total</b>	<b>92</b>	<b>100.0</b>	<b>100.0</b>	

Source: Primary Data, 2020

This table 26 depicts that 18(19.6%) of respondents had established small restaurant, 8(8.7%) of respondents had established kiosk and canteen, 5(5.4%) of respondents had established cabaret

or bar business and 3(3.3%) had established small clothing shops. Finally, 58(63.0%) of respondents were not interested by commerce as they had invested their money in other category of business activity. These results reveal that teachers are earning an additional income that could help them to improve their wellbeing.

### 5.3. 3. Respondents’ type of transport business established after joining USACCO

The type of transport business run by respondents is presented in the table 27 below.

**Table 27: Type of transport business established by respondents after joining USACCO**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Motorcycle	20	21.7	21.7	21.7
Taxi car/bus	6	7.6	13.0	34.7
Other	56	60.8	65.3	100.0
<b>Total</b>	<b>92</b>	<b>100.0</b>	<b>100.0</b>	

**Source:** Primary Data, 2020

The findings provided by this table 27 depicts that, 20(21.7%) of respondents are engaged in motorcycle transportation business, 12(13.0%) of respondents are running bus or tax car while 56(60.8%) were engaged in other activities which is not transportation of goods and people. These results are the evidence that teachers generate additional income from other activities for their wellbeing.

### 5.3. 4. Respondents’ house renting business established

Respondents were asked to indicate at least how much money this activity had generated to them. The table 28 below presents their responses.

**Table 28: Income generated from house renting established by respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 5000-10000	2	2.2	2.2	2.2
10000-20000	15	16.3	16.3	18.5
20000-30000	5	5.4	5.4	23.9
Above 30000	1	1.1	1.1	25.0
None	69	75.0	75.0	100.0
<b>Total</b>	<b>92</b>	<b>100.0</b>	<b>100.0</b>	

**Source:** Primary Data, 2020

These findings depicts that 2(2.2%) of respondents had earned between Frw 5,000 to Frw 10,000 from house renting business, 15(16.3%) earned between frw 10,000 and Frw 20,000, 5(5.4%) of respondents between Frw 20,000 and frw 30,000; and 1(1.1%) of respondents had earned income which is above Frw 30,000 from house renting business. These findings show the commitments of teachers to improve their living conditions somewhat. The additional income earned by teachers from house renting business improves also their wellbeing.

**Figure 12: Respondents' type of farming activities established after joining USACCO**



#### **5.4. Respondents' level of income before and after joining USACCO**

This subsection was used by the researcher in order to ensure that there was any kind of improvement in income among teachers before and after joining USACCO.

##### **5.4.1 Respondents' income before joining SACCO**

The monthly income of respondents before joining the USACCO was summarized in the following table 29.

**Table 29: Monthly income of members before joining USACCO**

Level of income earned before joining USACCO	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 50,000 Frw	59	64.1	64.1	64.1
Frw 50,000-Frw 100,000	21	22.8	22.8	87.0
Frw 100,000- Frw 200,000	7	7.6	7.6	94.6
Valid Frw 200,000- Frw 300,000	3	3.3	3.3	97.8
Above 300,000 Frw	2	2.2	2.2	100.0
<b>Total</b>	<b>92</b>	<b>100.0</b>	<b>100.0</b>	

**Source:** Primary Data, 2020

The table 29 above, shows that before joining USACCO on monthly basis, the majority 59(64.1%) of respondents were earning less than Frw50, 000; followed by 21(22.8%) of respondents who were earning between 50,000-100,000 Frw; 7(7.6%) of respondents were earning between 100,000-200,000 Frw; 3(3.3%) of respondents were earning between 200,000-300,000 Frw; there were only 2(2.2%) of respondents have an monthly income above 300,000 Frw. This implies that majority of USACCO members were earning Frw 50,000 before joining USACCO.

#### **5.4.2 Respondents' income after joining SACCO**

This section shows whether there was an improvement of members' income on monthly basis after joining USACCO. The table 30 below presents respondent monthly income after joining the USACCO.

**Table 30: Monthly income of members after joining USACCO**

Level of income earned after joining USACCO	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 50,000 Frw	4	4.3	4.3	4.3
Frw 50,000-Frw 100,000	25	27.2	27.2	31.5
Frw 100,000- Frw 200,000	45	48.9	48.9	80.4
Frw 200,000- Frw 300,000	10	10.8	10.9	91.3
Above 300,000 Frw	8	8.7	8.7	100.0
<b>Total</b>	<b>92</b>	<b>100.0</b>	<b>100.0</b>	

**Source:** Primary Data, 2020

Table 30 highlights that only 4(4.3%) of respondents have earned less than Frw 50,000 after joining USACCO; 25(27.2%) of respondents were earning between 50,000- 100,000 frw; 45(28.9%) of respondents were earning between 100,000-200,000 Frw; 16(17.4%) of respondents were earning between 200,000-300,000 Frw ; there only 2(2.2%) of respondents who have earning above 300,000 frw on the monthly basis. These findings imply that, there was improvement of monthly income earned by members after joining Umwalimu SACCO as the rate of respondents with monthly income less than Frw 50,000 has decreased 64.1% to 4.3%, the rate of respondents with monthly income above Frw 300,000 has risen from 2.2% to 8.7%. The findings from the section 5.3, 5.4 and 5.5 above are in line with (Dogarawa, 2005) who stated that, *“today, in an era when many people feel powerless to change their lives, cooperatives represent a strong, vibrant, and viable economic alternative (Dogarawa, 2005). The author furthermore posited that cooperatives are formed to meet peoples' mutual needs (Idem). They are based on the powerful idea that together, a group of people can achieve goals that none of them could achieve alone”*.

Finally, based on the findings presented above from sections 5.3 and 5.4, it can be confirmed that Umwalimu SACCO loan and income generating activities established by members have a positive effect on the welfare members, in terms of assets acquired, shelter, education and increase of members' income level, and hence the *researcher rejected the first null hypothesis and Accepted the alternative hypothesis*.

### 5.5. Contribution of government programs’ on the improvement of teachers’ welfare

This subsection was considered by the researcher to describe the role played by the governments’ programs on the improvement of the teachers’ welfare or standard of living. For the better analysis of this subsection, some coding techniques were involved during the analysis where the USACCO responses were coded using a Likert-type scale from Strongly Agree (SD) =5; Agree (A)= 4; Neutral or undecided=3; Disagree (D)=2 and Strongly Disagree (SD)=1. The answers provided by the respondents on the government programs were summarized and presented in the following table 31.

**Table 31: Governments’ program on USACCO members’ standard of living**

Statement	Mean	Std. Deviation
Girinka Mwalimu (one cow per teacher) program improved my welfare through the provision of milk, additional money, which increased my saving level	3.32	1.815
Nine and Twelve years’ basic education assisted me to send my children to schools and afford school requirements and helped me to improve my savings.	4.79	.655
The district officials encourages us to have savings with USACCO as main criteria for accessing high amount of loan	4.65	.999
Community based insurance scheme/ Mutuelle de santé or RAMA enabled me to increase access to medical services at affordable costs which helped me to improve my savings.	4.63	.969
Bye bye Nyakatsi campaign helped me to start saving which enables me to get own shelter.	3.62	1.568

**Source:** Primary Data, 2020

**Observation:** the table 31 above shows that, the mean values for the second, third and fourth statements are between 4.79, 4.65 and 4.63 respectively which are rounded to 5 the code for strongly agree. Which implies that most of the respondents have strongly agreed that the nine and twelve years’ basic education assisted them to send their children to schools and afford

school requirements and helped them to improve their savings; the district officials encourage them to have savings with USACCO as main criteria for accessing high amount of loan and the Community based insurance scheme/ Mutuelle de santé or RAMA enabled them to increase access to medical services at affordable costs which helped them to improve my savings. While, the first and fifth statements are between 3.32 and 3.62 which are rounded 3, the code for neutral or undecided. This implies that teachers in Huye District did not at least benefit from Girinka Mwalimu (one cow per teacher) program and they were neutral to confirm that it has improved their welfare through the provision of milk, additional money, in increasing their saving level and Bye bye Nyakatsi campaign helped me to start saving which enables me to get own shelter. This statement means that teachers were undecided to confirm that Bye Bye Nyakatsi campaign helped them to save their money. As this program was mostly used for the very poor people who do not have any job or any income generating activity.

Furthermore, the standard deviation for all statements were above 0.5 which means that USACCO's members responses were to the statements above were not close to each other. According to the researcher observation the heterogeneity of respondent is due to the fact that there is some sector where some government program are not yet installed to teachers like Bye Bye Nyakatsi campaign, however according to interview other respondent has said they have not yet accessed the one cow one family program. Beside all respondents have accesses the government program of Mutual health, nine and twelve years' basic education, the district officials encouragements to have savings with USACCO and have benefited from them.

## **5.6. Testing of other hypotheses**

The study hypotheses were tested and analyzed using the combination correlation as below.

### **5.6.1. Correlation between USACCO services and the members level of income**

This section describes the correlation and statistical regression between Umwalimu SACCO services and members income level. The statistical regression between these variables is presented in the table 32 below.

**Table 32: The correction between USACCO services and members' level of income**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.	
1	.910 <sup>a</sup>	.828	.816	.358	68.186	.000 <sup>b</sup>	
Model			Un-standardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
1	(Constant)		-.070	.264		-.264	.792
	Level of Education of the respondents		.347	.110	.319	3.155	.002
	Respondent occupation		.157	.059	.187	2.638	.010
	Respondents number of dependent.		-.001	.138	-.001	-.008	.994
	For how long have you been a member of the USACCO?		.336	.156	.281	2.157	.034
	Number of times a respondent received loans from USACCO		.230	.092	.404	2.510	.014
	Have you ever benefitted from government program?		-.010	.036	-.064	-.287	.775

a. Dependent Variable: Monthly income after joining USACCO



**Observations:** The above (table 32) describes the contribution of USACCO services on monthly income of the members. The statistical findings computed shows the correlation coefficient (R) which is equal to 0.910 which implied that there is a strong positive relationship between Umwalimu SACCO' services and monthly income of members. Again, the coefficient of determination  $R^2$  of 0.828 showing that the variation in members' income was explained by various services of USACCO is 82.8% meaning that 17.2% variation of income earned by USACCO members' is caused by other than USACCO' services (Products). In addition, the up-part of the table 32 above indicated also that F-value of 68.186 this showed that the model is significant at 90% confidence level given significance level of 0.000. The constant of 0.910 rounded to 1 in this model showing that the individual member's monthly income is less than Frw 50,000 while a person is not a member of Umwalimu SACCO (before joining USACCO). From the student T-table given 90 Degree of freedom (df) and 0.1 significance level with 90% confidence level, the critical value for a 90% confidence level (for two tailed test) from z-score equal to 1.645. While the computed t-value from the (table 32) above is  $2.157 > 1.645$  for membership duration a member of the USACCO and  $2.510 > 1.645$  for the number of times a respondent has received loans from USACCO. This implies that there is enough evidence which is statistically significant that the period of duration and number of loans received by members impacted positively on the monthly income earned by members at 90% confidence level. From this model one can draw an income function or equation as:  $Y = -0.70 + 0.336Md + 0.230C$  where **Y** is the monthly income of the members, **Md** is the membership duration with USACCO and **C** is the number times a member received credit or loan from USACCO.

Therefore, from this model, there are other four independent variables that have differently impacted on the members' socio-economic development improvement. These are listed as: the education level of respondents which has a positive and statistically significant effect on members' income level, its responding coefficient of  $0.347 > 0$  and the value of t-value of  $3.155 > 1.645$  at 90% confidence level. This result implies that the higher is the educational level of a teacher, the higher is also the monthly income. As we know that, the education level plays an important role in monthly salary earned by teachers. The teachers who are the bachelor's degree hold will get a monthly salary which is at least higher than those who secondary school certificate  $A_2$ .

Again, the second independent variable is the family size or number of dependent which has a negative effect on the level monthly of income earned by a member with a

coefficient of  $-0.001 < 0$ . However, one can note that given the t value ( $-0.008 < 1.645$ ) the effect is not statistically significant at 90% confidence level.

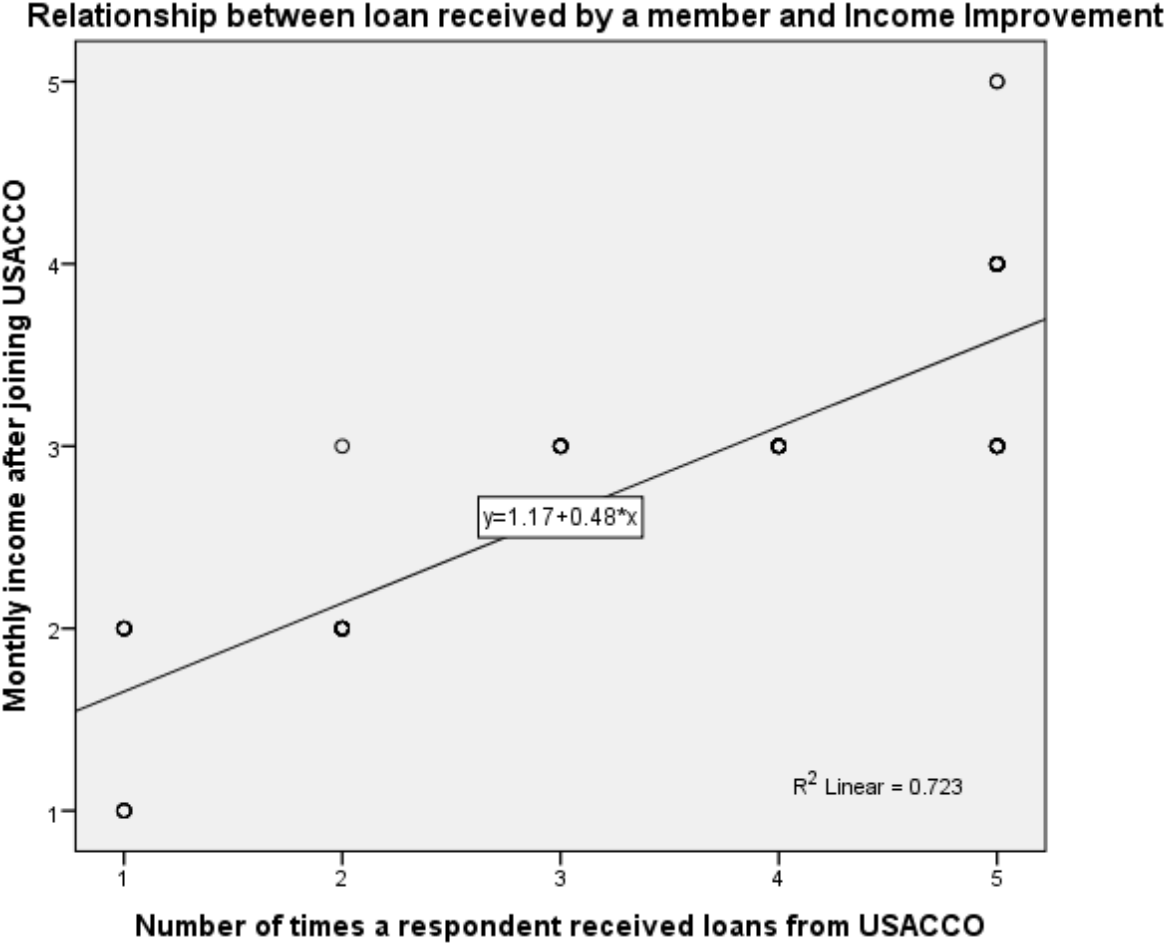
Indeed, the third independent variable is occupation of a member which is a positive and statistically significant on monthly income of a member at 90% confidence level. This variable indicates a coefficient of  $0.157 > 0$  and its t-value of  $2.638 > 1.645$  the critical value of 0.1 significance level and degree of freedom of 90. These findings imply that the better the occupation of a respondent, the higher is the monthly income of a member. These results are understandable in the profession of education where the primary school teacher wants to be a secondary school teacher in order to get higher salary and allowances on salary.

The fourth independent variable involved in the table 32 above, is the government programs which contribute to the improvement of teachers' standard living and alleviate poverty among teachers. The findings of the linear regression model presented in the study have also showed that government policies and programs against welfare have a positive and statistically significance on the members' monthly income at 90% confidence level. The government programs presented in this paper have a coefficient of  $-0.010 > 0$  and the corresponding T-value of  $-0.287 < 1.645$  the critical value. This implies that the more the government programs against welfare, the higher is the monthly income of the people. After the comparison of the t-value against critical value computed, the findings showed that, government programs does not contribute so much to the welfare of teachers.

After the combination of all these parameters, one can write down the following equation representing the model as” **Monthly income** “Y”=  $0.070 + 0.157 + 0.347 + -0.001 + 0.336 + 0.230 + (-0.010)$ . Monthly income=  $0.070 + 0.157$  occupation of respondents+ $0.347$  respondent' education level + $-0.001$ dependent size+  $0.336$  membership duration+ $0.230$  number of loans got from USACCO+  $(-0.010)$  government programs against welfare of teachers.

*Based on the findings discussed above pushed the researcher to accept the alternative hypothesis (2) that was formulated as  $H_1$ : Umwalimu SACCO activities (services) have a significant effect on members' monthly income, in terms of membership duration, credit received and saving.*

**Figure 12: Relationship between loans received by a member and Income improvement after joining USACCO**

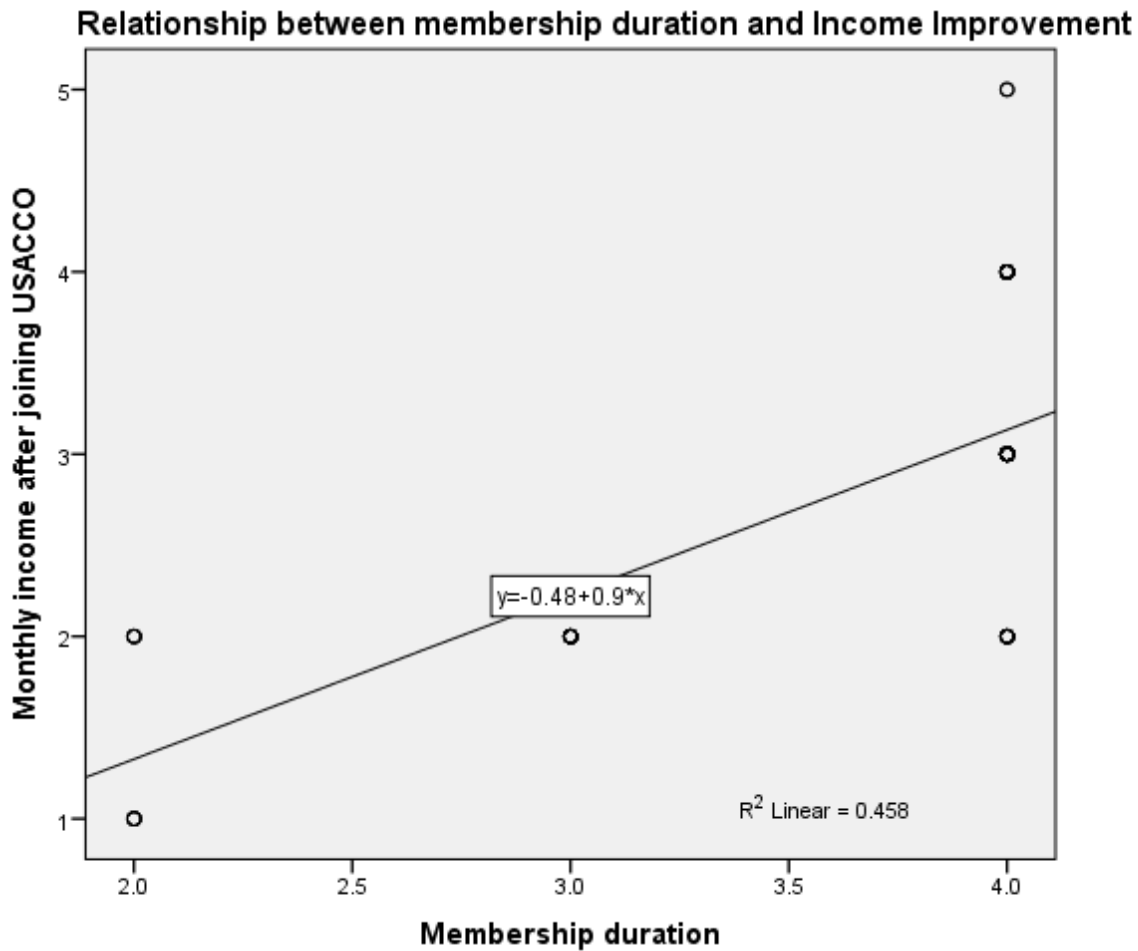


for the purpose to measure the relationship between loan received by a member and its income improvement after joining USACCO, the researcher used the figure above in order to measure that parameter. According to statistical data provided by this figure, there is a positive coefficient for of loan received with Linear R square of 0.723, this implies that USACCO member’s income, and number of loans received from USACCO has positive relationship. In addition, the more the number of times a USACCO member has received loans, the higher the level of income of the member. Usually, the larger the  $R^2$  Linear, the better the regression model fits the observation.

Furthermore, the researcher would like to verify the relationship between membership

duration and the level of income improvement of a member after joining USACCO. The figure 13 below highlights that relationship.

**Figure 13: Relationship between membership duration and income improvement**



The figure 13 above highlights a positive coefficient of  $R^2$  Linear of 0.458 for membership duration, which implies that there is a positive relationship between Umwalimu SACCO membership duration and member's income. Thus, the longer the membership duration, the higher is the member's income. These statistical findings explain that, the members who have benefited more from USACCO were those who have been members for a period which is more than two years because they have benefitted loans for more times.

### 5.6.2 Correlation between USACCO services and improvement of member’s standard of living

Statistically, a correlation is the statistical association between two variables. Thus, a correlation exists between two variables when one of them is related to other in some way. For the purpose of describing this correlation, a statistical table was designed by the researcher. The table 33 below shows the correlation and statistical regression between USACCO services and members’ welfare or standard of living.

**Table 33: Correlation between USACCO Services and improvement in member’s Standard of Living**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		F	Sig.
1	.987 <sup>a</sup>	.974	.972	1.434		6.38760	.000 <sup>b</sup>
Model			Un-standardized Coefficients		Standardized Coefficients	T	Sig.
			B	Std. Error	Beta		
1	(Constant)		4.166	1.056		3.944	.000
	Respondent occupation		.220	.177	.025	1.239	.219
	Family size		-0.011	0.138	-0.008	-0.0012	0.995
	Level of Education of the respondents		1.092	.386	.097	2.827	.006
	For how long have you been a member of the USACCO?		5.245	.625	.425	8.389	.000
	Have you ever benefitted from government program?		1.397	.143	.834	9.763	.000
	Number of times a respondent received loans from USACCO		1.359	.335	.231	4.058	.000

a. Dependent Variable: Standard of living of respondents after joining USACCO

**Observations:** the table 33 above, highlights the correlation between USACCO’ services and the level of improvement of members’ Standard of living after joining USACCO. The finding shows the correlation coefficient (R) equal to 0.987 explaining that there is a strong positive

relationship between USACCO' services (products) and improvement of standard of living of members. While the coefficient of determination  $R^2$  equal to 0.974 explaining that, the variation in member's standard living was more explained by services or activities of USACCO is equal to 97.4% meaning that only 2.6% of improvement in standard of living of Usacco members is caused by other factors than USACCO's services or products. A look to the up-part of the table also showed F-value of 6.38760 showing that the model is significant at 90% confidence level given significant level of 0.000.

The further look to the student T-table given 90 degree of freedom and 0,1 significance level that with 90% confidence level the critical t-value observed from the z-score is 1.645. The computed t-value from the above table was  $8.389 > 1.645$  for membership duration, this explained that there is enough evidence to show that there is a positive and statistically significant effect between membership duration and the living standard of members. Again, the computed t-value for number of times a member has received loan from USACCO equal to  $-4.058 < 1.645$  indicated that, there is no enough evidence which is statistically significant that the number of loans received from USACCO effect positively on the number of times member's received loan and standard of living of members with 90% confidence level. The regression equation was drawn by the researcher between these variables as follows:  $MSL = 4.166 + 5.245Md - 1.359C$ ; where **MSL** is member's standard of living, Md is the membership duration while C is the number of times a member has received loan from USACCO.

The model of the table 33 above includes other 4 independent variables which have impacted different on the member's standard of living improvement. The firstly, there is the education level of USACCO' members which presented a positive and statistically significant effect on member's standard of living with corresponding coefficient of  $1.092 > 0$  and t-value of  $2.827 > 1.645$  at 90% confidence level. This indicated that, the higher the education level, the higher the standard of living, because the most highly educated teachers earn some reasonable monthly salary (income), some of them get more allowances out of their monthly pay which help them to improve their welfare than others.

Secondly, there is the family size which has a negative effect on standard of living of a member with the coefficient of  $-0.011 < 0$ . This negative relationship means that the bigger the number of

dependents, the lower is the standard of living of an individual. While the computed t-value was  $-0.0012 < 1.645$  which that, there is no enough evidence to conclude there is a statistically significant at a 90% confidence level. There is a negative effect of family size on the welfare of USACCO members.

Thirdly, the occupation of a member was also considered as the third independent variable from the above table which has a positive but not statistically significant on welfare or standard of living of a member at 90% confidence level. The computed coefficient for occupation is  $0.220 > 0$  and its computed t-value of  $1.239 < 1.645$  on the critical t-value at 0.1 significance level and degree of freedom of 90. This data implied that, the better the occupation of a member, the higher is the living standard of the member which is very understandable in educational system where all the teachers do not get the same salary. Teachers of primary schools are supposed to earn meager income than those of secondary who hold the bachelor's degree. Better occupation also provides income to meet and satisfy most of the human desire and afford basic needs.

Fourthly, the government programs and policies were also considered as the fourth independent variable from the table 33 above. These programs and policies aimed to improve the welfare of citizens and poverty alleviation. The related coefficient of  $1.397 > 0$  where the computed t-value of  $9.763 > 1.645$  the critical value; which meaning that, the more the government policies against poverty alleviation, the higher the welfare or standard of living of the people is. Government policies have a positive and statistically significant on the member's living standard at 90% confidence level. Again, if people or USACCO members have difficulties to satisfy its basic needs like food, shelter, clothes, access to medical services, education, etc hence, there is no improvement of their standard of living and vice versa. Thus, the members standard of living equation can be write down as below:

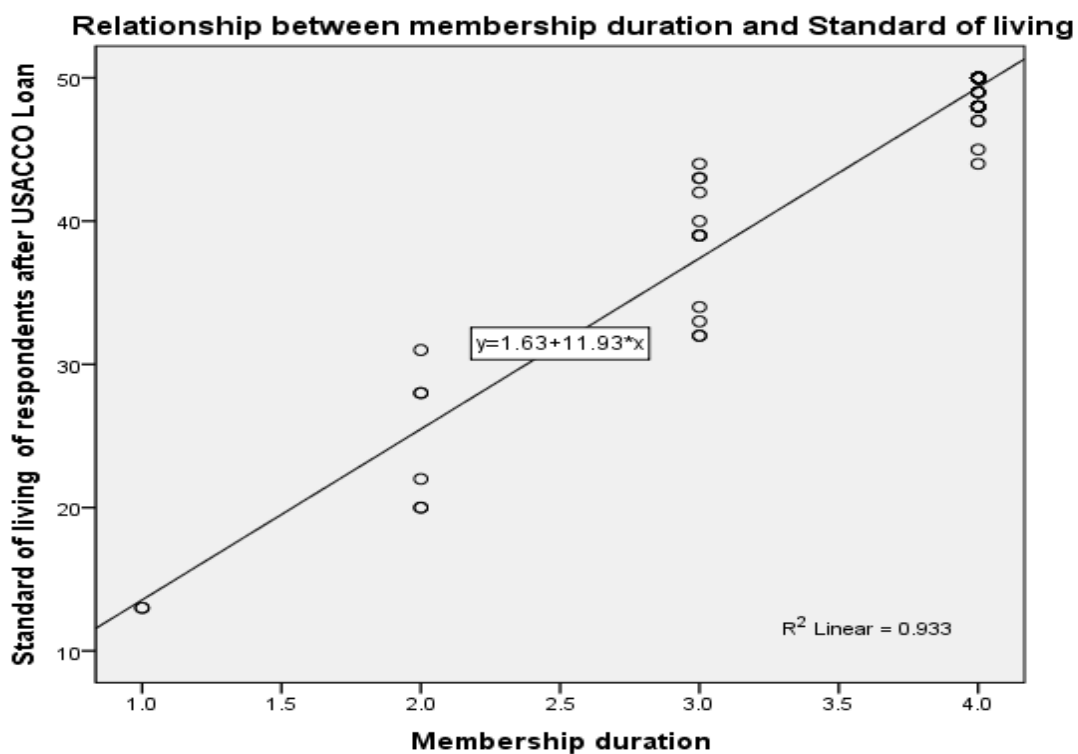
$$\text{MSL} = 4.166 + 0.220 \text{ Occ} + 1.092 \text{ Ed} - 0.011 \text{ Family size} + 5.245 \text{ Md} + 1.397 \text{ Gp} + 1.359$$

*Thus, based on the information presented above, pushed again the researcher to accept the alternative hypothesis which was stated as:  $H_1$ : Umwalimu SACCO activities (services) have significant effect on members' monthly income, in terms of membership duration, credit received and saving; which enables members rising their monthly income, assets owned, undertaking new income generating activities, access to medical services, take their children to schools and improving shelter and access to potable water.*

### 5.7. The relationship between USACCO services and the standard of living improvement of members.

According to the conceptual framework of this study, USACCO activities or services were stated as: Membership duration, loan and saving. All these services should be related each other. Before getting USACCO loan or saving with it, one must a membership the cooperative; this is membership come to first position. Indeed, in order to test the third hypothesis of this study, the researcher set up a scatter diagram to show the relationship between USACCO activities and standard of living of members. The figure 14 below shows the implication of that relationship.

**Figure 14: Relationship between membership duration and standard of living**



**Observation:** after the observation of the fig14 above, it was observed that there are positive coefficients for membership duration with R<sup>2</sup> Linear of 0.933. This indicated that member's standard of living and membership duration have a positive relationship; which means that, the longer the membership duration with USACCO, the higher the member's improvement in standard of living is. In addition, the number of times a member has received loans from USACCO, the higher is the improvement in the standard of living level.

*The findings presented in scatter graph above, pushed the researcher to reject null hypothesis and accept the alternative hypothesis (Hypothesis 3), which was stated as "There is no an*



existing of a statistically significant relationship between USACCO services and the standard of living improvement of members”. As the computed ( $R^2$ Linear=0.933) is positive and significant.

### 5.8. Standard of living of respondents after Joining Umwalimu SACCO

The respondents were asked to indicate whether in general there have been improvements in their standard of living after joining Umwalimu SACCO. The findings to this question were summarized and presented in the following table 34.

**Table 34: Standard of living of respondent AJUSACCO**

Statement	Frequency	Percent	Valid Percent	Cumulative Percent
My living standard remained constant	15	16.3	16.3	16.3
Valid My living standard has improved	77	83.7	83.7	100.0
<b>Total</b>	<b>92</b>	<b>100.0</b>	<b>100.0</b>	

**Source:** Primary Data, 2020

**Observation:** the table 34 above indicates that, the majority 77(83.7%) of respondents confirmed that USACCO has improved their standard of living, while only a minority 15(16.3%) of respondents were undecided with this statement by saying that their welfare remained constant since they decided to join USACCO. These findings implied that USACCO has improved the standard of living (welfare) of primary and secondary school teachers as argued by the majority of 83.7% of respondents and those who are undecided are counted in the group of the teachers who joined USACCO for the period between 1 to 3 months only.

Again, according to the research findings, the standard of living or welfare of teachers residing in Huye district have greatly improved. Because by being members of USACCO, members are able to obtain loans that enable them to educate their children and get involved in activities that empower them economically. The loans enable USACCO members to smooth their cash flows and also enable them to save for future investment and consumption. This proves the fact that USACCO has positively impacted on the improvement of household economic conditions since its establishment.

Again, these findings are in lines with group discussions I had with one of USACCO members on the socio economic status before becoming U-SACCO members. The following Box “A” provides the revelation of one of the teachers’ member of USACCO.

*I have been teaching for many years but I was not able to do anything before joining USACCO, I felt lonely. I was thinking that life was a big mountain on my shoulders. Unfortunately, with my meager teaching salary I could not do anything. I had lost my self-esteem and dignity from my neighbors. For example we were living with my 5 children in a rented house, where the rent was very dear to me. I couldn't imagine that one day I could hold my own house with tapped water and electricity. I could not again imagine that, a poor teacher like me could have cows and supplying milk to my neighbours and collecting cash at the end of each month, which is the triple of my monthly salary. Finally, I got information about USACCO from one of my co-workers. I accepted to join USACCO. Soon after, I took a loan of Rwf 200,000 for buying a small cow with a hope of getting milk to feed my children. Today, because of Umwalimu SACCO my dream has changed into reality. Now, I have my own shelter, cows, house furniture, all my children have grown up and succeed well with their studies and I'm able to pay the medical expenses for myself and my children. Brief, USACCO is a solution for me not a problem, because it has improved my standard of living. Thanks to UMWALIMU SACCO and many thanks to the Government of Rwanda for the support. Umwalimu SACCO member (School representative, 13<sup>rd</sup> November, 2019)*

This box “A” reflects some revelation of a teacher based on the improvement of its standard of living got after joining USACCO. These findings were also in line with one of the interviewees, who revealed that: *“there are many contributions Umwalimu SACCO has resolved for teachers in Rwanda out of accessibility of getting loans and savings for their future but also in terms of assets acquired by them such, cows, small domestic animals, others have built their own shelters and other household facilities such as furniture, mattresses, cupboard, television devises and radios, etc which have sincerely improved their wellbeing.”* (One USACCO management, 25 Nov, 2019)

The findings from interviewee conducted with Ngoma sector leader who said that *“ USACCO plays a very important role to teachers in terms of integration of new teachers, harmony among teachers, social networks, norms and social trust ”*. For example, when a teacher accepts to be a guarantor of his co-worker, which is one of loan requirements by USACCO. Also, before the establishment of the cooperative called USACCO, the teachers in Rwanda were facing with

several difficulties regarding their living conditions. USACCO has tried to find solutions to difficulties faced its members before such as: access to loans, saving and establishment of small income generating activities which actually help those teachers to have an additional income out of their monthly salary. These findings are in line with Woolcockin (2000) who reported that, “*social capital helps the poor to manage risk and vulnerability*”. Thus, the growth or high level of social capital was associated with a high level of altruism among individuals; this makes it possible to take into consideration the welfare of other members of the group.

Furthermore, the researcher asked to interviewees to indicate which *challenges USACCO* was facing in improving the wellbeing of theirs members. The findings from this question were given as below:

- Loans defaulters: Officials from the cooperative added that, some teachers, after acquiring loans from the cooperative, change schools and open accounts with other banks through which their salaries are channeled thereby avoiding or defaulting on the loans.
- Some teachers are dismissed or sacked and others dropout before having paid back the loans granted by the cooperative because others were more concentrated on businesses activities that bring more income to them instead of being concentrated to teaching profession.
- Financial and social viability of the Cooperative has not yet been attained due to lack of enough funds to finance long term project like teacher’s enterprise cooperatives, mortgage loans and one laptop loan per teacher.
- Some teachers revealed that they face with the problem of lack of loan collateral, the amount of loan requested is not enough for starting an income generating activities and It was noticed that the USACCO demanded for collateral or security as a prerequisite for accessing loans and yet, most of the would-be beneficiaries happened not have any kind of collateral in sight. The majority of the respondents cited that lack of security as a key challenge they faced while accessing the loans from the USACCO.
- The respondents, too, expressed their dissatisfaction with the initial amount of loan disbursed to them by the USACCO for they found it not quite enough for the business ventures that intended to undertake. The saying often resulted into the members changing from the initially planned investment to make to others that were totally new to them and hence, often, leading to failure to recovery loans issued.

- Sometimes there are complicated terms and conditions to acquire loan: interviewees they said that, there is complex terms and conditions or requirements before acquiring a loan. Being a USACCO member is not a guarantee for loan securing. It was discovered that the loans provided are monitored with the simplest administration procedure relying solely in credit discipline to guarantee their repayment. The member to be eligible to secure loan have to the following conditions: (i) Members must have 18years and above; (ii) Members must have savings with the USACCO and he /she is within the society for more than three months at least; (iii) Member must state clearly loans security and must have three guarantors who are also members of the society; (iv) A member should borrow amount, which is three time of his/her share not exceeding 8 times his income; (v.) All members must follow procedures required by the loan policy of the society. Such procedures include: A borrower must fill a loan application form within such form the applicant must indicate the amount he/she applying for amount of installments he/she is going to pay periodically; Applicant must show guarantors and security for the loan; An application form must be filled with three guarantors with promise to repay the loan in case if an applicant fails to pay loan; The loan committee has all authority of accepting or rejecting the requested loan.
- The respondents revealed also that they face several challenges ranging from lack of loan collateral; inadequacy of the amount requested for a loan; short time for the loan payment to the long process, it takes to acquire loans. It was noticed that the SACCO demanded for collateral or security as a prerequisite for accessing loans and yet, most of the would-be beneficiaries happened not have any kind of collateral in sight. Moreover, the researcher asked to interviewees from USACCO management to state whether there are some cases of loan defaults or non-performing loans among teachers in Huye District. The results from this question revealed that: “ *there is no way that members can escape from paying off their loan on time because the entire or installment of loan paid is withdrawn immediately from their net pay through the computerized system and the member will find the balance due in their respective bank accounts. He adds that sometimes the cases of loan defaults exist in the case where one of the members has abandoned job or dismissed (lacked) from teaching profession. It was noted that, sometimes USACCO teachers’ or unqualified teachers are dismissed before they have paid off their debts.*

The next following chapter six presents the summary of the major findings, conclusion and recommendations based on the findings described by the study.

## **CHAPTER SIX**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **6.0 Introduction**

As seen in previous chapter five related to data analysis and interpretation of results where the collected data was interpreted based on specific objectives and hypotheses. This chapter involves the summary of the study, conclusion and recommendations; and proposals for further research. The summary is based on the major findings on the study objectives and the recommendations are based on the discussion of the findings and analysis as well as interpretation of findings. This study was based on the contribution of Umwalimu SACCO on the improvement of members' socio-economic development in Rwanda: Opportunities and Challenges– A evidence from USACCO Huye District.

#### **6.1 Summary of the major findings**

The researcher undertook a task of exploring the contribution of USACCO on the improvement of members' socio-economic development. The researcher analyzed all the services offered by USACCO which have allowed USACCO members to improve their living conditions or welfare. Data was collected through questionnaires and interview guide. The total population concerned by the study was 1940. The study used a sample size of 92 respondents, which comprised of Umwalimu SACCO members, management staff and board members committee. The researcher presented the data by the use of tables, charts and graphs. The findings of the study highlighted that, the majority of USACCO members used by the study were women 55.4% with 44.6% of males. Also the majority of USACCO members' age is between 26 to 45 years which shows that majority of respondents were in active age group or productive group. Furthermore, the majority 77.20% of respondents were married where only 21.7% of respondents were still single. 100% of respondents attended school, where the majority of respondents attended secondary school with certificate A<sub>2</sub>. 86 (93.4%) of respondents which represents the majority were the teachers (primary and secondary school teachers), 6 (6.6%) of respondents were involved in other activities and the majority of respondents have the size of dependents which are equal or below 3 family members (59.8%) followed by those who have dependents between 4 and 6 persons (32.6%), those who have dependent between 7-10 represents 5.4% while the minority representing 2.2% have the number of dependents which was 11 and above.

The general objective of the study was subdivided into three specific objectives that guided the study during the data collection. The specific objectives were formulated as: (1) to determine the type of contributions generated by Umwalimu SACCO' activities (services) to its members, in Huye District; (2) To assess the type of small income generating activities generated by members and their contributions on the improvement of their standard of living, as results of becoming USACCO members, in Huye District; and (3) to evaluate the relationship between USACCO's services and the socio-economic development improvement of beneficiaries. The researcher formulated the corresponding following research null hypotheses (Ho) based on the specific objectives: (i) Saving and credit cooperatives' loan and income generating activities established by members have no a positive effect on the welfare of members, in terms of assets acquired, shelter, education and increase of members' income level. (Ho); (ii) Saving and credit cooperatives' activities (services) have no significant effect on members' monthly income, in terms of membership duration, credit received and saving.(Ho); and (iii) There is no an existing of a statistically significant relationship between USACCO services and the standard of living improvement of members (Ho).

The summary of the findings for each specific objective are given below:

### **6.2.1 Summary of findings related to the type of contributions generated by USACCO activities (services) to its members.**

The study revealed that, in general respondent have strongly agreed that, it is not complicated to become a member of the Umwalimu SACCO, share value is affordable, requirements to open account are easy to fulfill, many people are aware of the services offered by the USACCO and the distance to reach to USACCO is fair. However the mean value for fifth statement was 4.4 around 4 the code for agree. This implies that in general respondents have agreed that, there is a good customer care at USACCO. While, the question related saving facilities with USACCO, the mean value for the third and fourth statements were respectively 4.20 and 4.30 which are rounded 4 the code for agree. This implies that in general respondents have agreed that minimum liquidity is maintained to serve members and the security of members 'deposits is ensured at Umwalimu SACCO. While the mean value of the remaining statements, the first, second and the fifth which are: 4.8, 4.5 and 4.89 rounded 5 the code used for strongly agree. This implies that, in

general the respondents have strongly agreed that saving policies for USACCO are clear and well set, members' get their savings on demand and that members get fair interest on their term deposits. Again, the majority of also respondents confirmed that, they did not find opportunities to save with other financial institutions.

The findings related to loan facilities, it was observed that, the mean value for all statements except the second, fourth and seventh was between 4.07 and 4.45 which are rounded 4, the code for Agree. This implied that the majority of respondents who are teachers' members of USACCO have agreed that loans offered by USACCO are enough; the loan's requirements are affordable, the loan repayment period is long enough and fair and collateral required is affordable. While, the mean value of the second, fourth and seventh statements are 4.87, 4.51 and 4.73 around 5, which is the code for strongly agree. This means that, in general respondents have strongly agreed that USACCO offers loans to members at affordable interest rates, loan is quickly processed and loan monitoring is well done by USACCO Staff. The minority of respondents only had access to loan before joining USACCO where the majority of 67.4% did not have access to loan from other financial institutions due to complicated loan requirements and lack of collaterals.

The findings also reveal that, the mean value for the first, second, fourth, sixth and seventh statements were between 4.41 and 4.43, 4.40, 4.33 respectively which were rounded 4, the code for Agree. This implies that the respondents have agreed that USACCO loan allowed them to start an income generating activities which facilitate them to get an additional income out of my monthly salary; loan received from USACCO enable them to pay school fees for their children and other school supplies' they need; USACCO loan enable them also to buy their own piece of land that has improved my welfare; USACCO loan enable them to acquire means of transport (bicycles, motorcycle, ...) and USACCO loan helped respondents to acquire shelter or improve the existing house with install tapped water & electricity to my existing house. Again, the mean values of the third, fifth, eighth, ninth and tenth are between 4.5 and 5 respectively 4.66, 4.76, 4.73, 4.51 and 4.78 that are around 5, the code for strongly agree. This implies that in general respondents have strongly agreed that because of loan got from USACCO enable me to buy house equipments or furniture such as: chairs, bed, mattress, cupboard, etc which have improved my wellbeing, others said, they were able to acquire domestic animals (cow, goat, pig, sheep, hare, hens,...) because of the loan they got from USACCO, indeed USACCO loan and saving

enable me to get meal twice a day satisfactorily and some respondents said they were able to pay health insurance and medical expenses because of the loan got from USACCO and finally, USACCO loan enable them to acquire electronic devise such as: radio, TV, computer, cell phone, etc Furthermore, the standard deviation for all statements are above 0.5 which means that respondents' answers were not close to each other. The findings found in this section regarding the first specific objective were in line with the study conducted by Isaboke Peter Kennedy Nyataya (2018), the study revealed that: the members/beneficiaries of the SACCO were noted to have been able to lead a better living, had increased their incomes through the establishment of income generating activities; mobilized savings and opened personal bank accounts; they were able to raise school fees for their school-going children and managed to purchase household property such as furniture, land, houses, solar equipment, beds and beddings, clothes and food. Another notable observation from paper was that 46.7% of the respondents invested their loans in agriculture and livestock; 41.1% in starting businesses; 7.6% on transport projects and 4.3% of them in housing projects. Hence, as it can be seen from the aforementioned projects, it is indeed the acquisition of capital from the SACCO that enabled the respondents to start up the indicated income generating activities which led to the increment of their respective incomes.

### **6.2.2 Summary of findings related to the contribution of small income generating activities established by members to their standard of living, as results of becoming USACCO members.**

The findings related to this question revealed that most of respondents 36(39.1%) are involved in farming activities, followed by 17(18.5%) of respondents who are engaged in commerce (trade), 11(12.0%) of respondents are engaged in transport and house renting business respectively while the remaining 17(18.5%) of respondents are engaged in other business activities such as buying equipment and mortgages and other expenses such as family celebrations like weddings. Indeed, the majority of loans were oriented in farming and livestock because they live in rural area. Some respondents invested their loans in business or commerce which means that loans from USACCO provide a start-up funding for consolidating their business activities. The reason which pushes teachers to be involved into small income generating activities is that, these commercial activities are more beneficial than teaching profession. These income generating activities have



created job opportunities to their family members and community at large and the additional income earned by teachers from house renting business and others improved also their wellbeing. These findings also reveal that, there was improvement of monthly income earned by members after joining Umwalimu SACCO as the rate of respondents with monthly income less than Frw 50,000 has decreased 64.1% to 4.3%, the rate of respondents with monthly income above Frw 300,000 has risen from 2.2% to 8.7%. This shows that USACCO has impacted positively on the improvement of members' welfare due to increase of their monthly income. These findings were in line with, Sharma et al (2005) cited by Joseph John Magali (2013), whose the study noted that, loans were mostly taken for productive purposes, social activities, purchasing and repairing assets and for repaying previous loans. Also the study noted that most women took loans for social activities and for repaying the previous loans, thus loans were diverted to other purposes. However, SACCOS' members registered higher increases of incomes, assets, food consumption, education expenditure, improved housing and decline of health expenditures compared to non-members.

### **6.2.3 Summary of findings related to the relationship between USACCO's services and the socio-economic development improvement of beneficiaries**

The study findings shows the correlation coefficient (R) between microfinance activities and monthly income level of members that is equal to 0.698 implying that there is a strong positive relationship between SACCO activities and monthly income of members. The statistical findings computed shows the correlation coefficient (R) which is equal to 0.910 which implied that there is a strong positive relationship between Umwalimu SACCO' services and monthly income of members. Again, the coefficient of determination  $R^2$  of 0.828 showing that the variation in members' income was explained by various services of USACCO is 82.8% meaning that 17.2% variation of income earned by USACCO members' is caused by other than USACCO' services (Products). The results of study also show positive a positive coefficient for of loan received with Linear R square of 0.723, this implies that USACCO member's income, and number of loans received from USACCO has positive relationship. In addition, the more the number of times a USACCO member has received loans, the higher the level of income of the member. Usually, the larger the  $R^2$  Linear, the better the regression model fits the observation.

The constant of 0.910 rounded to 1 in this model showing that the individual member's monthly income is less than Frw 50,000 while a person is not a member of Umwalimu SACCO

(before joining USACCO). From the student T-table given 90 Degree of freedom (df) and 0.1 significance level with 90% confidence level, the critical value for a 90% confidence level (for two tailed test) from z-score equal to 1.645. While the computed t-value from the (table 32) above is  $2.157 > 1.645$  for membership duration a member of the USACCO and  $2.510 > 1.645$  for the number of times a respondent has received loans from USACCO. This implies that there is enough evidence which is statistically significant that the period of duration and number of loans received by members impacted positively on the monthly income earned by members at 90% confidence level.

After the combination of all these parameters, one can write down the following equation representing the model as” **Monthly income** “Y”=  $0.070 + 0.157 + 0.347 + -0.001 + 0.336 + 0.230 + (-0.010)$ . Monthly income=  $0.070 + 0.157$  occupation of respondents+ $0.347$  respondent’ education level + $-0.001$ dependent size+  $0.336$  membership duration+ $0.230$  number of loans got from USACCO+  $(-0.010)$  government programs against welfare of teachers. *Based on the findings discussed above pushed the researcher to accept the alternative hypothesis (1) that was formulated as  $H_1$ : Umwalimu SACCO activities (services) have significant effect on members’ monthly income, in terms of membership duration, credit received and saving.*

Furthermore, the study revealed that the correlation coefficient (R) equal to 0.987 explaining that there is a strong positive relationship between USACCO’ services (products) and improvement of standard of living of members. While the coefficient of determination  $R^2$  equal to 0.974 explaining that, the variation in member’s standard living was more explained by services or activities of USACCO is equal to 97.4% meaning that only 2.6% of improvement in standard of living of Usacco members is caused by other factors than USACCO’s services or products. A look to the up-part of the table also showed F-value of 6.38760 showing that the model is significant at 90% confidence level given significant level of 0.000.

The further look to the student T-table given 90 degree of freedom and 0,1 significance level that with 90% confidence level the critical t-value observed from the z-score is 1.645. The computed t-value from the above table was  $8.389 > 1.645$  for membership duration, this explained that there is enough evidence to show that there is a positive and statistically significant effect between membership duration and the living standard of members. Again, the computed t-value for number of times a member has received loan from USACCO equal to  $-4.058 < 1.645$  indicated

that, there is no enough evidence which is statistically significant that the number of loans received from USACCO effect positively on the number of times member's received loan and standard of living of members with 90% confidence level.

Thus, the members standard of living equation can be write down as below:

$$\text{MSL} = 4.166 + 0.220 \text{ Occ} + 1.092 \text{ Ed} - 0.011 \text{ Family size} + 5.245 \text{ Md} + 1.397 \text{ Gp} + 1.359$$

*Thus, based on the information presented above, pushed the researcher to accept the alternative hypothesis which was stated as:  $H_1$ : Umwalimu SACCO activities (services) have significant effect on members' monthly income, in terms of membership duration, credit received and saving; which enables members rising their monthly income, assets owned, undertaking new income generating activities, access to medical services, take their children to schools and improving shelter and access to potable water.*

The above findings were in line with Gibson (2005) who argued that MFIs and SACCOs are perfect ways through which the lives of poor and low income people can change and he noted also that the process of developing and sustaining a cooperative involves the processes of developing and promoting community spirit, identity and social organization as cooperatives play an increasingly important role worldwide in poverty reduction, facilitating job creation, economic and social development.

Therefore, the indicators revealed by the study on the achievements of USACCO in improving social and economic welfare of teachers are listed as under:

- b) there is easy access to loan and finances: this has helped USACCO members to finance both personal and family needs in terms of food, health, education, clothing, etc
- c) Education and wellbeing knowledge: USACCO helped its members to improve their earnings, investments, and expenditure through social interactions and exchange of ideas among members. USACCO has allowed gender balance, women empowerment, etc.
- d) Financing education of members: through education loan and school saving account products, USACCO members managed to pay for themselves and children and dependants education expenses.
- e) The employment opportunities: USACCO creates both formal and informal employment by financing economic activities established by teachers in different sectors of activities such as farming, agriculture and small businesses (kiosk, canteens, small restaurants; all

these income generating activities have created some direct and indirect employment to teachers family members.

- f) Through emergency loans and personal loans teachers can finance medical insurance (health care).

## **6.2. Conclusion of the study**

The saving and credit cooperatives in Rwanda were expected as the proximate economic and social welfare enhancing instruments. Poverty alleviation programs established by the government can be effective and efficient if and only if saving and credit cooperatives work towards increasing the productivity of agriculture besides to other sectors. Based on this, Umwalimu Sacco is an important financial institution for providing financial services to marginalized communities of teachers and must be harnessed to help alleviate poverty in Rwanda and providing the improvement of welfare of teachers and their respective households. Based on the study findings presented in chapter five of this paper, the researcher has been able to achieve the pre-set objectives and concluded that Umwalimu Saving and credit cooperative' activities have slightly contributed to the improvement of the standard of living of teachers not only in Huye District, but also in entire Country (Rwanda).

Again, the findings of this paper have enabled the researcher to confirm the three pre-set hypothesis. The study has revealed that Umwalimu SACCO services or activities mainly membership condition, credit or loan and saving products have positively contributed to the improvement of members socio-economic status by helping them to increase their monthly income or additional income out of their monthly salary, acquired assets, establish small income generating activities, access to education and medical care, pay school fees of their children, renovate their exiting shelters or acquiring their own shelters and access to potable water.

Moreover, findings of the study helped the researcher to conclude that, USACCO activities improved the wellbeing of teachers as argued by the majority of 83.7% of respondents and because by being members of USACCO, members are able to obtain loans and pulling savings that enable them to educate their children and get involved in activities that empower them economically. Thus, after they have joined Umwalimu SACCO, their lives improved and they

have recovered their lost social dignity. The study findings showed that, today, USACCO members are able to access to loan for several purposes.

### **6.3. Recommendations of the study**

Based on the findings and analysis of data, the following recommendations were formulated for future betterment of USACCO members as well as Umwalimu SACCO itself and to the government of Rwanda.

#### **6.3.1. Recommendations to USACCO members**

(a) USACCO is the best designed institution in empowering low income earners teachers; however USACCO members should sensitize all other teachers' non-members of USACCO as to save as well to get facility to loan at non-competitive interest rate, from 11% to 13%.

(b) There should be a need for teachers to participate effectively in lending programs which are the unconditional ways for teachers to establish a supplement activity and getting an additional income for their wellbeing.

(c) The members should keep increasing their savings in order to enable USACCO getting enough funds to grant huge amount of loan and to a big number of members.

(d) Members should also request for loans in USACCO and to utilize the loan obtained effectively and efficiently in order to develop their household and the country in general and to repay the loan on time in order to contribute to the performance of USACCO.

(e) Teachers' members of Umwalimu SACCO should be further encouraged to study the operation of the USACCO before accessing its services and also support each other with skills, supervision and monitoring as a team.

(f) Teachers also should get more investment opportunities instead of only one, having a small income generating activity before borrowing the money and not to use credit to start investments but rather to expand or diversify investments.

#### **6.3.2. Recommendations to the management of Umwalimu SACCO**

(a) USACCO should review their internal regulations and loan requirements as guidelines to all teachers before accessing to loans. This will help these low income earners to boost their economic activities for the better of their livelihood.

(b) USACCO should provide frequent and regular trainings on business management game to their members. This could help members for good management of their loans and reducing loan defaulters' cases at USACCO.

(c) USACCO should also review their loan requirements especially concerning physical collateral security and administrative documents, and guarantors (known as endorsers) asked to teachers before accessing loan.

( d) Higher education has been revealed to increase the income and improve the living standard of the members of USACCO: Members should therefore, be encouraged by USACCO to improve on their current level of education by engaging in adult education or holiday and weekends programs organized by several high learning educational institutions in Rwanda, as this will have the potency to increase their level of income;

(e) Umwalimu SACCO should establish and sensitize teachers to loan products like the school fees and asset loans and they should not ask for group security where groups are just formed for loan purposes.

### **6.3.3. Recommendations to government and other stakeholders**

(a) The government should develop and formulate a policy that facilitates USACCO operations for the sustainability of their members.

(b) The government should install or develop appropriate risk mechanisms or system. This protects and guarantees USACCO fund from being misused, miss-utilized and unsecured loans cases. It enables them to disburse loans as per the demand of members to increase their income and improved their standard of living; and

(c)The study has found that USACCO has positively impacted on the improvement of welfare of teachers in Huye District and their respective households but the government should subsidize enough loans to these meager income earners to make the loans more affordable for members, keep assisting USACCO in saving mobilization to increase loanable funds, assist USACCO in training members on loan utilization, saving culture and business management game.

(d) The Government should get involved in determining the interest rate, centralize the interest rates which are affordable to all teachers such that the rate is uniform for all teachers from private as well as public schools and also monitor their services.

#### **6.4 Proposals for further research**

For the analysis of the factors contributing to SACCOs on the socio-economic development of teachers in Rwanda, the thesis has been conducted to deal mainly with was conducted to deal with three main tasks: the effect of loan granted by USACCO to their members on small income generating activities and on welfare of members in Rwanda, on the other hand. However, the research needs to be extended by investigating the effect of USACCO's activities on the welfare of members after joining USACCO, and finally to highlight whether there exists a statistically significant relationship between USACCO services and the standard of living improvement of members in national level. Using cross-country data and a quantitative empirical regression method, we could analyze how saving and credit cooperatives' financial performance affect economic growth of SACCOS in EAC. We made a comparison of these effects on MFIs' financial performance among three countries of EAC (Evidence from Uganda, Rwanda and Kenya). These elements are necessary but not sufficient conditions, for SACCOs to play their role.

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# APPENDICES

## Appendix 1: Clearance letter



Universität, August-Croissant-Str. 5, D-76829 Landau

Executive Secretary  
Ngoma sector, in Huye District,  
RWANDA



Campus Landau

FACHBEREICH 6:  
KULTUR- UND SOZIALWISSENSCHAFTEN  
INSTITUT FÜR SOZIALWISSENSCHAFTEN,  
ABTEILUNG WIRTSCHAFTSWISSENSCHAFT  
Prof. Dr. Werner Sesselmeier

August-Croissant-Str. 5  
D-76829 Landau  
Telefon: +49 (0)6341 280-34102/100  
Telefax: +49 (0)6341 280-34110  
e-mail: sesselmeier@uni-landau.de

Landau, 21.10.2019

*Approved by  
ED Ngoma  
25/10/2019*

To whom it may concern

I am pleased to recommend **NTUITE SYLVAIN ROBERT**, who is a PhD candidate at Koblenz-Landau University. The mentioned candidate is planning to undertake research activities in your areas as part of requirements for the degree of Doctor of Philosophy (in Economics) in the School of Economics, department of Social Science, University of Koblenz-Landau, Landau, Germany.

I therefore, request that the student visiting scientific research mentioned be given the necessary assistance so that he accomplishes his research undertakings. The main assistance he needs is permission to meet different people from your area so that he can interview them, just for collection data related to the study case.

The main objective of the research is "*Contribution of saving and credit cooperatives (SACCOS) on the improvement of members' socio-economic development in Rwanda: opportunities and challenges; A case study of Umwalimu SACCO Huye Branch, in Ngoma Sector, Huye District.*"

The areas selected for conducting the research are:

- If there are restricted areas, it is upon you to allow the researcher from visiting them.
- The expected date of commencing is 25/10/2019 up to 5/11/2019.
- If there are any queries, please contact the undersigned.

Looking forward to your cooperation

Sincerely yours,

Werner Sesselmeier

Anschriften: Präsidialamt Mainz  
Rhabanusstraße 3, 55118 Mainz  
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Fortstraße 7, 76829 Landau  
Telefon +49 (0)6341 280-0  
Telefax +49 (0)6341 280-31101

## Appendix 2: Authorization for collecting data



Kigali, on 07/11/2019  
No. 1124/JUSC.07/2019

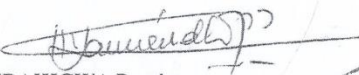
NTUITE Sylvain Robert  
C/O KOBLENZ-LANDAU UNIVERSITY  
Tel: +250788751884

**Subject:** Authorization for collecting data.

Reference made to your letter demanding for facilitation to collect data/ lunched questionnaires and conducting interview for your research in UMWALIMU SACCO in order to fulfill your academic requirements as PhD candidate;

After analyzing the demand, I would like to inform you that UMWALIMU SACCO has no objection to carry out your research "*Contribution of saving and credit cooperatives (SACCOs) on the improvement of members' socio-economic development in Rwanda. Case study: UMWALIMU SACCO Huye Branch*". However, you are requested not to disclose any confidential information relating to the Cooperative's operations, and also to present your finding to UMWALIMU SACCO for proofreading before submission to your Department. However, the Management of KOMBLEZ-LANDAU UNIVERSITY, who receives a copy of this letter has to make sure that the candidate has gotten the approval for proofreading from UMWALIMU SACCO before submitting his thesis.

Best regards,

  
NDAHIGWA Damien  
Human Resources Manager

  
NDAYISABA N. Willy  
Director of HR & Administration

**CC:**

- Director General's Office
- Director of Department (All)
- Branch Manager/ Huye  
Umwalimu SACCO
- Prof. Dr. Werner Sesselmeier  
KOMBLEZ-LANDAU UNIVERSITY



Address: Kimirunko-Gasabo-Kigali, Street N°: KG 205 8T  
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Website : [www.umwalimusacco.rw](http://www.umwalimusacco.rw)  
TIN/VAT : 101522783

### Appendix 3 : QUESTIONNAIRE FOR UMWALIMU SACCO'S MEMBERS

Introductory letter

Hello, my name is Robert S. NTUITE, a PhD candidate with the University of Koblenz-Landau University in Germany. I am conducting a study regarding the contribution of saving and credit cooperatives (SACCOS) on the improvement of members' socio-economic development in Rwanda; opportunities and challenges; A case study of Umwalimu SACCO- Huye branch. You have been selected to participate in the study because of your potentiality in provision of the required research information. Your name will be held in strict confidence, and will NOT appear on any documents or publications unless with your express permission. Please answer the questions as honestly and openly as possible. There is no "right" or "wrong" answer. Kindly, I request your cooperation in order to make this exercise successful by filling all areas of the questionnaire.

#### Section A: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Q1. Respondent's age:

[18-25]	
[26-45]	
[46+]	

Q2. Respondent's gender:

a) Male	
b) Female	

Q3. Marital status:

a) Single	
b) Married	
c) Divorced	
d) Widow (er)	

Q4. Did you go to school?

a) Yes	
b) No	

Q5. If your answer is "Yes", what is your highest grade obtained?

a)Primary	
b) Secondary (Certificate A2)	
c) Diploma/ certificate of higher education (A <sub>1</sub> )	
d) Bachelor	
e) Masters	
f) Doctorate	
g) others, please specify	

Q6. What is your occupation?

a) Teacher	
b) Farmer	
c) Trader	
d) Herder	
e) if other, please specify	

**Q7. Number of dependent**

- a) 0-3 [ ]    b) 4-6 [ ]    c) 7-10 [ ]    d) 11 and Above [ ]

**Q8. For how long period have you been a member of the Umwalimu SACCO?**

- a) 0-3 months [ ]  
 b) 4-6 months [ ]  
 c) 7 months to 1 year [ ]  
 d) 2 years and above [ ]

**SECTION B: Umwalimu SACCO activities or services offered to members**

Please, complete the following questions on a scale of **5= strongly agree** to **1= strongly Disagree** SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA= Strongly Agree  
 Indicate how easy were the conditions to become a USACCO member?

	Statement	1	2	3	4	5
<b>Q9</b>	<b>Membership</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
1	It is not complicated to become a member of the USACCO	1	2	3	4	5
2	Share value is affordable	1	2	3	4	5
3	Requirements to open account are easy to fulfill	1	2	3	4	5
4	Many people are aware of the services offered by the USACCO	1	2	3	4	5
5	The is a good customer care	1	2	3	4	5
6	The distance to reach to USACCO is fair	1	2	3	4	5
	<b>Q10.How do you appreciate the Savings facilities at USACCO</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
7	Saving policies for USACCO are clear and well set	1	2	3	4	5
8	Members get their savings on demand	1	2	3	4	5
9	Minimum liquidity are maintained to serve members	1	2	3	4	5
10	Security of members 'deposits is ensured	1	2	3	4	5
11	Members get fair interest on their term deposits	1	2	3	4	5
	<b>Q11.How do you appreciate the Loan facilities at USACCO?</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
12	Collateral required is affordable	1	2	3	4	5
13	USACCO offers loans to members at affordable interest rates	1	2	3	4	5
14	The Loan repayment period is long enough and fair	1	2	3	4	5
15	Loan is quickly processed	1	2	3	4	5
16	The requirements are affordable	1	2	3	4	5
17	Loans offered by USACCO are enough	1	2	3	4	5
18	Loan monitoring is well done by USACCO Staff	1	2	3	4	5

**SECTION C:** Contribution of USACCO services on socio-economic status of members after joining USACCO.

**Instruction:** Complete the following questions on a scale of 5= strongly agree to 1= strongly Disagree

	<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Q12</b>	<b>Improvement in Socio-Economic welfare (Standard of Living)</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
1	USACCO loan allowed me to start an income generating activities which facilitate me to get an additional income out of my monthly salary.	1	2	3	4	5
2	Loan received from USACCO enable me to pay school fees for my children and other school supplies' they need.	1	2	3	4	5
3	Loan got from USACCO enable me to buy house equipments or furniture such as: chairs, bed, mattress, cupboard, etc which have improved my wellbeing.	1	2	3	4	5
4	USACCO loan enable me to buy my own piece of land that has improved my welfare.	1	2	3	4	5
5	I was able to acquire domestic animals (cow, goat, pig, sheep, hare, hens,...) because of the loan I got from USACCO	1	2	3	4	5
6	USACCO loan enable me to acquire means of transport (bicycles, motorcycle, ...)	1	2	3	4	5
7	USACCO loan helped to acquire shelter or improve the existing house with install tapped water & electricity to my existing house	1	2	3	4	5
8	USACCO loan and saving enable me to get meal twice a day satisfactorily	1	2	3	4	5
9	I'm able to pay Health Insurance and medical expenses because of the loan I got from USACCO	1	2	3	4	5
10	USACCO loan enable me to acquire electronic devise such as: radio, TV, computer, cell phone, etc	1	2	3	4	5
<b>Q13</b>	<b>What is the number of time have you received loans from USACCO?</b>					
A	Once	[ ]				
B	Twice	[ ]				
C	Three times	[ ]				
D	Four times	[ ]				
E	Five times and above	[ ]				
	<b>Statement on the type of income generating established by USACCO members</b>					
<b>Q14</b>	<b>After joining Umwalimu SACCO, which of the following income generating activities have you established?</b>					
A	Farming					
B	Commerce					
C	House renting business					
D	Transport					

E	Other income generating activity					
<b>q15</b>	<b>If your income generating activity is farming, indicate which type of farming?</b>					
A	Crop farming	1				
B	Dairy business (milk supplier)	1				
C	Animal farming (cow, goat, chickens, etc)	1				
D	Mixed farming	1				
<b>q16</b>	<b>If you are dealing with commerce or trade activities, tick the appropriate type of trade</b>					
A	Small restaurant					
B	Kiosk and canteen					
C	Night club/ cabaret or bar					
D	Small shop of clothing and shoes					
E	Other type of trade					
<b>q17</b>	<b>If you are in transportation business, which type of transport is it?</b>					
A	Motorcycle					
B	Taxi car / bus					
C	Others					
<b>q18</b>	<b>If you are in house renting business, indicate how much income it generates monthly?</b>					
A	Less than Frw 10,000					
B	Frw 10,000- Frw 20,000					
C	Frw 20,000 – Frw 30,000					
D	30,000 RWFand above					
<b>Q19</b>	<b>Monthly income of members before joining USACCO</b>					
A	Less than 50,000 Frw					
B	Frw 50,000-Frw 100,000					
C	Frw 100,000- Frw 200,000					
D	Frw 200,000- Frw 300,000					
E	Above 300,000 Frw					
<b>Q20</b>	<b>Monthly income of members after joining USACCO</b>					
A	Less than 50,000 Frw					
B	Frw 50,000-Frw 100,000					
C	Frw 100,000- Frw 200,000					
D	Frw 200,000- Frw 300,000					
E	Above 300,000 Frw					

**Section D: Contribution of Government programs and Improvement of teachers' welfare**

*Instruction:* Complete the following questions on a scale of **5**= strongly agree to **1**= strongly Disagree

	<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Q21</b>	<b>Government programs and Improvement of teachers' welfare</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
A	Girinka Mwalimu (one cow per teacher) program improved my welfare through the provision of milk, additional money, which increased my saving level	1	2	3	4	5
B	Nine and Twelve years' basic education assisted me to send my children to schools and afford school requirements and helped me to improve my savings.	1	2	3	4	5
C	The district officials encourages us to have savings with USACCO as main criteria for accessing high amount of loan	1	2	3	4	5
D	Community based insurance scheme/ mutuelle de santé or RAMA enabled me to increase access to medical services at affordable costs which helped me to improve my savings.	1	2	3	4	5
E	Bye bye Nyakatsi campaign helped me to start saving which enables me to get proper shelter.	1	2	3	4	5

**Q22. Indicate your standard living after joining USACCO:**

- A. My living standard remained constant [  ]
- B. My living standard has improved [  ]

**Thank you for your cooperation.**



#### **Appendix 4: Questionnaire for staff members of USACCO**

Hello, my name is Robert S. NTUITE, a PhD candidate with the University of Koblenz-Landau University in Germany. I am conducting a study regarding the contribution of saving and credit cooperatives (SACCOS) on the improvement of members' socio-economic development in Rwanda; opportunities and challenges; Evidence from Umwalimu SACCO- Huye branch. You have been selected to participate in the study because of your potentiality in provision of the required research information. Your name will be held in strict confidence, and will NOT appear on any documents or publications unless with your express permission. Please answer the questions as honestly and openly as possible. There is no "right" or "wrong" answer.

Kindly, I request your cooperation in order to make this exercise successful by filling all areas of the questionnaire.

#### **Section A: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS**

1. Respondent's age:

[18-25]	
[25-45]	
[46+]	

2. Respondent's gender:

a) Male	
b) Female	

3. Marital status:

a) Single	
b) Married	
c) Divorced	
d) Widowed	

4. Did you go to school?

a) Yes	
b) No	

5. If your answer is "Yes", what is your highest grade obtained?

a) Primary school	
b) Secondary school	
c) Diploma/ certificate in higher education	
d) Bachelor's degree	
e) Masters	
f) Doctorate	
g) others, please specify	

6. What is your occupation?.....

Q7. What kind of financial services/ products does the USACCO offer to its members?

.....  
.....  
.....

Q8. What are the benefits do the services offered by the USACCO have on the USACCO members living conditions?

.....  
.....  
.....

Q9.What type income generating activities established by teachers due loans obtained from Umwalimu SACCO in Huye District?

.....  
.....  
.....  
.....

Q10. What challenges which Umwalimu USACCO members are experiencing in working with USACCO

.....  
.....

11. What are your suggestions and advices to improve the welfare of USACCO members, in Huye District?

.....  
.....  
.....

**Thank you for your cooperation.**

**Appendix 5: Interview guide for USACCO management & leaders (Representatives) from Ngoma Sector**

**Interview Date:** .... /...../....

Name of interviewee (if accepted).....

**Topic:** Contribution of saving and credit cooperatives (SACCOS) on the improvement of members’ socio-economic development in Rwanda; opportunities and challenges; Evidence from Umwalimu SACCO- Huye branch.

**Investigator’s name:**.....

Time required for interviews: **25-35 minutes:**

**Introduction (10 minutes):**

- a. Researcher self-introduction and welcoming the interviewee
- b. Elucidating the general purpose of the interview and the recorder will be used. However, after the research report will be already accomplished, all that was recorded will be deleted to be in line with confidentiality dictates.

**Interview questions:**

Q1. According to you what were the living conditions of teachers’ members of Umwalimu SACCO before and after joining USACCO?

Q2. What services or products do Umwalimu SACCO offers to its members?

Q3. What are the types of small income generating activities established by teachers as results of being USACCO members?

Q4. According to you, what are the main contributions of Umwalimu to the members’ socio-economic development? How did Umwalimu SACCO improve the wellbeing of its members?

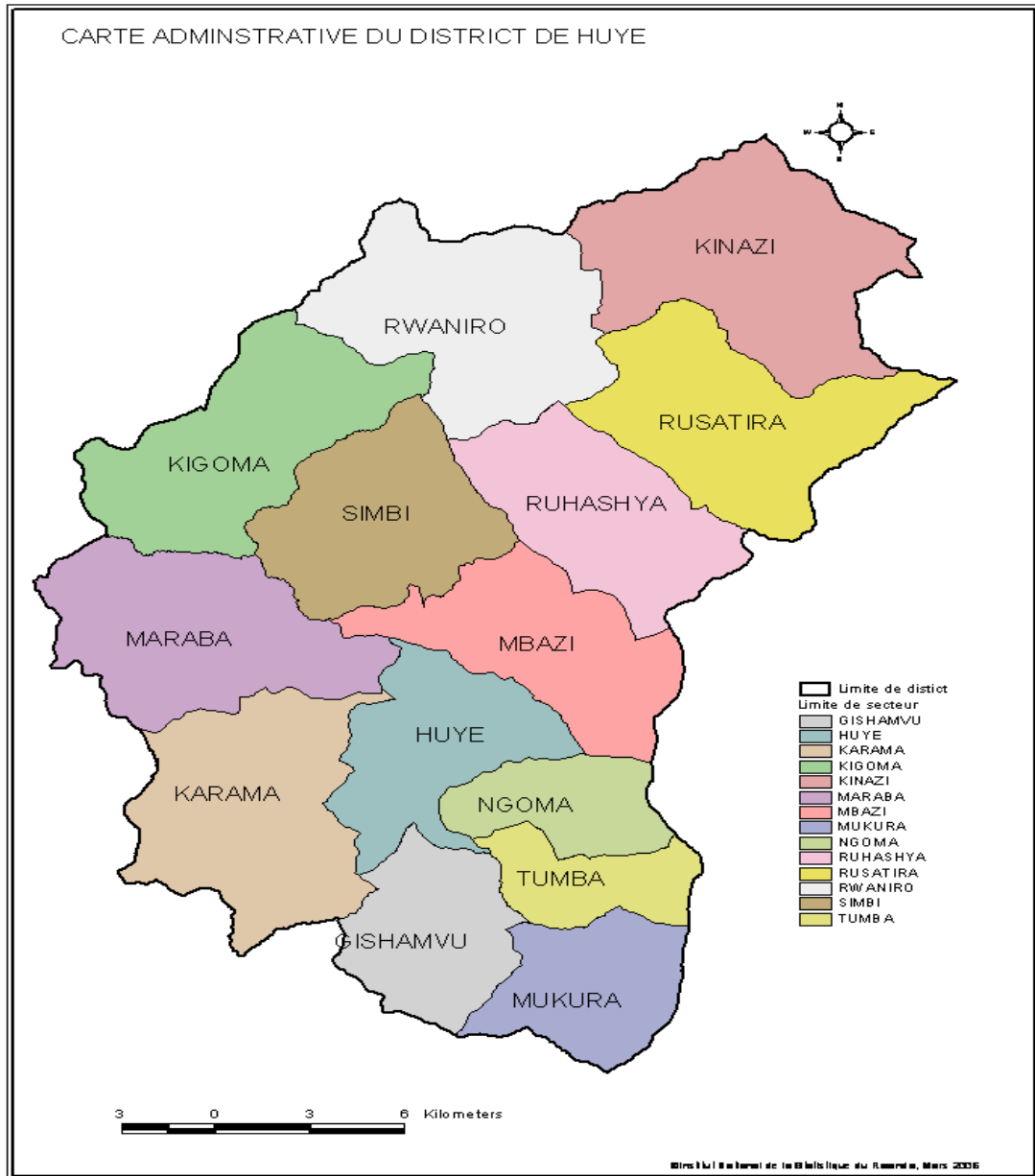
Q5. How do the members repay back their loans? Are there some cases of loans defaulters?

11. What are the challenges does Umwalimu SACCO face that prevents you from satisfying your members’ expectations?

Q5. Do you have any additional suggestions for the improvement of this research?

**Thank you for your cooperation!**

## Appendix 6: Administrative Map of Huye District



**Appendix 7: PLAN OF ACTIVITIES (Overall timetable of the thesis)**

	Activities	Year 2019				Year 2020				Year 2021										
		Jan - March	Apr- June	Jul-Sept	Sept- Dec	Jan- Mar	Apr- June	Jul- Sept	Oct-Dec	Jan - March	Apr- June	Jul-Sept	Sept- Dec							
1	Formulating research topic																			
2	Research proposal is approved by the supervisor																			
3	Develop questionnaire & interviews questions for pre-test and approval of questionnaire & interview questions by the supervisor.																			
4	Pilot test and revise questionnaire. (1 month)																			
5	Administrate questionnaire & conducting of interview																			
6	Drafting of Chapter one of the thesis is completed on Research context, history, and background of research problem.																			
7	Literature review & Draft of chapter Two & Chapter Three.																			
8	Enter data collected into computer for analysis.																			
9	Analyze of data collected																			
10.	Drafting findings chapter & complete remaining chapters.																			
11	Submit the first draft of thesis to supervisor & await feedback																			
12.	Revise draft, format for submission																			
13.	Write final draft																			
14	Final examination (Thesis defence @ Landau University																			

**Note:** During some period of the year, I will be most likely to attend some conference to present my work. If possible my supervisor will help me to select conferences that publish full papers in proceedings. It's why I did not schedule all these periods in the above overall milestones.