



COLLEGE OF BUSINESS AND ECONOMICS

**CRITICAL ANALYSIS OF OPPORTUNITIES AND CHALLENGES IN AGRICULTURAL
BANKING IN SUB SAHARIAN COUNTRIES: RWANDA PERSPECTIVE**

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DECLARATION

I hereby declare that **CRITICAL ANALYSIS OF OPPORTUNITIES AND CHALLENGES IN AGRICULTURAL BANKING IN SUB SAHARIAN COUNTRIES: RWANDA PERSECTIVE** is my own work and has never been presented elsewhere for any other academic qualification.

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DEDICATION

This work is dedicated to my parents, entire family, friends and classmates.

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The successful completion of this study has been possible through help of different people. With this concern, I would like to thank you all who contributed directly and indirectly in the success of this thesis.

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ABSTRACT

This study investigates opportunities and challenges in agricultural banking sector in Sub-Saharan countries: Rwanda perspective. The study compares opportunities and challenges found in agriculture banking system in Rwanda, the role of agricultural banking and its contribution to the economic growth as well as the role played by financial institutions in financing agriculture sector. The case studies are 7 cooperatives and their 210 members in total. The researcher used purposive sampling and questionnaire method in addition to interviews. The findings confirm that there are potential opportunities in agriculture financing which is the justification of the establishing the agricultural bank in Rwanda as recommended in the chapter 5. Those opportunities are: High turnovers from agriculture, the sustainable and economic growth of Rwanda, emerging of insurance companies, the need of food security in the world, the increase of the agro-processing plant, land consolidation, irrigation system, the farmers cooperatives and association, more funds and grants as well as security cover, shifting from subsistence to market oriented agriculture and regional integration. The findings shows that the Government of Rwanda have invested a lot in agricultural in terms of land consolidation, the irrigation system, crops intensification, the guarantees funds, creation and welcoming the investors to establish the plants for agricultural products transformation as well as market availability which created the high need of finances in this domain also the researcher noted a very big gap in agricultural financing system. It was revealed to the researcher that farmers in the cooperative that were involved in the survey are planning to extend their credit limit due to the high production and high demand. Financial institutions have low participation in financing their businesses nevertheless though 100% of cooperatives and individuals surveyed have requested financial support from different banking institutions, the latter seem to be reluctant to finance the agricultural sector due to the unawares of the raised opportunities.

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ACRONYMS AND ABBREVIATIONS

BNR: National Bank of Rwanda

BDF: Business Development Fund

MINAGRI: Ministry of Agriculture and Animals resources

AGRA: Alliance for a Green Revolution in Africa

EAC: Easter Africa Green Revolution

GDP: Gross Domestic Production

EDPRS: Economy Development and poverty reduction Strategy

BNDA: Bank National de Development Agricole

KCB: Kenya Commercial Bank

IFAD: International Fund for Agriculture Development

NIS: Nation Institute of Statistic of Rwanda

GoV: Government

SME: Small and Medium Enterprises

CMDT: Comanie Malienne pour le Development de Textile

MFI: Micro Finance Institution

CEO: Chief executive Officer

NACRDB: Nigerian Agricultural Cooperative Bank and Rural Development Bank

VBARD: The Vietnam Bank for Agricultural and Rural Development

NGO:Non-Government Organization

VBP: Vietnam Bank for Poor

FDI: Foreign Direct Investment

IFC: International Finance Corporation

ADF: Africa Development Bank

SSA: Sub-Saharan Africa

ICT: Information and communication Technology

SACCO: Saving and Credit Co-operative

NAES: National Agriculture Extension Strategy

CHAPTER I: INTRODUCTION

1.1 Background to the study

For many, agriculture and natural resources largely contribute to the African economic standing. According to the Alliance for a Green Revolution in Africa (AGRA, 2013) agriculture in sub-Saharan Africa contributes a large share of GDP. Research has shown that 65% of people are employed in agriculture and the sector accounts up to 32% of GDP (Alliance for a Green Revolution in Africa, 2013). Rural Africa in particular faces a number of challenges in eradicating poverty basically due to its inability to transform the economic activity of agriculture to its highest level of productivity. Moreover, due to its important role in enhancing economic growth, the poor performance of the agricultural sector is considered a key barrier to the development of Africa in general and Eastern Africa Community (EAC) in particular. Africa is rich in natural resources and agriculture but its trade balance is negative mainly due to its negligence to promote this sector which can feed the entire globe. According to the AGRA report (AGRA, 2013), in twelve of the 16 countries surveyed, agriculture contributes between 25% and 40% of GDP.

In the context of Rwanda, the agricultural sector is a driver of the local economy (NAES, 2009). In 2005 this sector contributed 39% of Gross Domestic Product (GDP) with 80% of exports income and employing 88% of active population. In effect, the government of Rwanda has prioritized this sector by crafting strategies to revamp the economy, and thus establishing NAES.

The development of the agricultural sector in line with the strategic program to achieve Vision 2020 is compounded with many challenges including the know-how to optimize the output and more seriously, poor financing of agricultural projects. Over the two decades to 2012, the agricultural sector has been prioritized for funding, taking up over 6% of the development project allocations annually and growing steadily (GoV, 2013). According to the Rwandan government, this financing is mostly external and there is more potential in enhancing it further through internal resources. (Mulunda, 2013) also sees financing of agricultural Small and Medium Enterprises' (SME) as key to achieving the overall development objective, though he notes that the environment for this financing is still under-developed.

1.2. Background of agriculture financing in Rwanda

The necessary efforts were made to lift up agriculture investment in Africa in order to address the continent's food security issues, globally as well as locally. As the engine of the economic development, agriculture is also a key factor to the growth of gross domestic product for countries. For several years, the agricultural export has occupied a large percentage in country's incomes. This has been pushed by the political will to support this sector to reimagining the economy and to achieve the pre-determined objectives. The government of Rwanda resorted to strong strategic objectives enshrined in its Vision 2020 with a single aim of making the country middle income economy. To achieve that, it was decided that government projects in that period 50% of the population will be employed in modernized agriculture sector (GoV, 2013). During the colonial time, the Rwandans had to export the crops such as coffee, tea, pyrethrum and quinquina as a main activity. There was very limited or no interaction between the producer and the consumer. In 1962-1980 the same procedure was adopted by the government and whoever refused to act accordingly would be punished. Along the way, different extensions were tried to develop this sector: the first one was "Integrated Rural Development Project". The republic of Rwanda with its partners have initiated several projects which are intended to increase agriculture production and economic growth through its Economy Development and poverty reduction Strategy (EDPRS III) which has the aim objective of accelerate the economic development growth to archive the middle income, rural development for poverty reduction, productivity and youth employment and participation of citizens in development process. To achieve those initiatives The International fund for Agriculture Development (IFAD) has used total amount of US\$239.4 million to finance the programmers and projects in Rwanda designed for 534,3000 rural households(Investing in Rural people in Rwanda".n.d"). Different projects with aim to develop the agriculture sector were financed by IFAD with focus of market access and agricultural production increase. In 2016 IFAD will support Strategic Plan for Agriculture Transformation (PSTAI) as well as innovation in the domain. Several projects support like Climate resilient Post Harvest and Agribusiness Support Project with aim of poverty alleviation and increase of income generated by the household, the project for rural income through Exports (price) which is benefited by the household farmers who involved in tea production, coffee and horticulture and Kirehe Community –based Watershed Management Project which aimed to transform the

agriculture from subsistence to market oriented production in Kirehe district and so many others projects under control of Ministry of agriculture and animal resources.

Also, the solution for agriculture development were given and prioritized by the government of Rwanda after the genocide tragedy. The vision 2020 was elaborated and different strategies like Economic Development and poverty reduction Strategy and Strategic Plan for transformation of agricultural was adopted which impacted significantly the national economic growth. With its innovative initiatives, Rwanda breached the barriers in Africa and in the region in particular by putting its priorities in small and medium businesses including agricultural businesses (GoV, 2013).

Reports have been describing the growth of Rwandan economically as stable compared with other countries in EAC as it specified. Rwanda retains its position as the most competitive economy in the East African Region and third in Africa after Mauritius and South Africa. Rwanda ranks 62nd (with 4.3 aggregates) out of the 144 countries surveyed worldwide, up from 66th previously, while Mauritius and South Africa came in 39th and South Africa 56th globally. In East Africa, Kenya came second with an overall aggregate of 3.9 and was ranked 90th worldwide. The other East African Community partner states Tanzania, Uganda and Burundi came in 121st, 122nd and 139th, respectively, on the global scale. Globally, Switzerland holds the number one spot, followed by Singapore and the United States. Finland and Germany both fell one notch, to the 4th and 5th. The 2014-2015 World Economic Forum annual report, released in Geneva, ranks Rwanda 18th as a country with the best structured institutions globally (KCB, 2014) In addition to that, the government intended to increase the agricultural investment from 8.3 billion in 2002 up to 14.7 billion in 2006 and believed that in 2006, the private sector would play a vital role in driving the economy growth and would greatly contribute to the agriculture investment (KANYARUKIGA, 2014) in despite to those figure that gives trend perspective of agriculture investment plan, the government of Rwanda increased its annual budget to Rwf170.3 billion meant for agricultural growth and poverty alleviation in 2014, the economic growth was related to the high growth of service sector (10%) and agriculture at the second rank with (+6%) followed by the industry sector (+4%), this good performance was attributed to the efforts made by the National Bank of Rwanda through financing economy by the banking sector (National Bank of Rwanda, February, 2015). Notwithstanding of this amazing plan, the disbursed loans in agriculture were around Rwf 20 billion which is 1.3% in 2014 of total loans (National Bank of Rwanda,

February,2015) the government faced the main challenge of not achieving its objectives and the decisions of the heads of stated declaration of Maputo which was to allocate 10% of total annual government's budget in agricultural in order to promote the agricultural production ,secure food availability and rural development policy implementation , the trend was good according to the African Development Bank Report(Adeleke K. A., 2010) . The resources allocated in agriculture sector development in 2002, 2003 and 2004 are respectively 6.95 billion, 7.42 billion and 9.91 billion Rwandan francs which represents 83.74%, 74.04% and 79.28% of required resources to achieve its goals of Poverty Reduction Strategy Paper(KANYARUKIGA, 2014)(NIS, 2002) In 2005, 8.59 billion Rwandan francs was expected for countrywide investment in agriculture that is to say 8.59% of total development budget. Despite of what has been done until 2004, in its budget of 2013, the government of Rwanda invested more than Rwf 163.2 billion in order to transform the agriculture sector in modern market oriented agriculture as well as develop rural areas. Compared the annual budget allocated in agricultural in 2004 and 2013 the big difference was remarked which makes the great improvement in agricultural development (Mulunda P. , 2013). Statistics from the government of Rwanda in regards to the private sector contribution on economic growth, financial institutions have had very little involvement in agricultural activity financing; according to the central Bank report 2003 , an amount of 2.25 billion was injected in agricultural activity which represents 1.92% of all credit granted by all banks. This marks a step made thus far. According to the Comprehensive Africa Agriculture Development Programme (CAADP) definition, which only considers expenditures on agriculture within the agriculture ministry, the proportion of Rwanda's budget allocated to agriculture rose steadily from 3.3 per cent in 2006 peaking at 6.4 per cent in 2009/10 and has slightly declined to five per cent in the current year (Mulunda P. , 2013).

Some banks will serve as proof feasibility of agricultural banks in Rwanda.Banque National de Development Agricole (BNDA) was established in 1981 as a joint stock corporation "development bank" in order to provide technical and financial assistance for the implementation of any viable project that promotes rural development in Mali. Until recent years, BNDA was primarily focused on cotton, financed through a structured arrangement with "Compagnie Malienne pour le developement des textiles" (CMDT). From its creation, the bank was entitled to mobilize deposits. Since the abolition of a special status for development banks, BNDA operates as an ordinary commercial bank.

BNDA's key partners are over 6,000 farmer groups and 36 partnerships with MFIs. The challenges in Mali's cotton sector have led to a profound change in BNDA's operations and business model, away from cotton towards a more diversified agriculture portfolio and increasing services in urban areas. Agricultural Financing Corporation is government owned financial institution which was established in 1963 with vision "To provide customer focused and sustainable financial services to the agricultural sector in Kenya" due to its performance in 1969 was reconstituted and mandated to take the functions of the Land and Agricultural Bank of Kenya. The possibility of agricultural finance corporate in Kenya and Agricultural bank in Mali, helped to interpret the possibility of agricultural bank in Rwanda and its implication on economy development.

1.3. Statement of the Problem

Agriculture financing has been problematic in Africa as a whole continent, in East Africa Community's countries and particularly in Rwanda and this significantly affects the economic growth. Just like any other occupation, agriculture has its own challenges. Limited market for the produce, dependence on climate, lack of technology and lack of financial support due to the high interest rate charged to the farmers or people who are in agriculture business may serve as typical examples of those challenges. The existing banks including micro finances have not fully invested in agriculture from over a period of time. Also the private sector involvement has remained minimal. However, the government of Rwanda has decided to work with private sector in order to increase the crops production as well as exports (MINAGRI, Strategic Plan for the transformation of agriculture in Rwanda., 2013). Agriculture plays a big role in Rwandan economy growth as it is employing 87% of population and contributes 46% to the GDP and 80% of total export income (KANYARUKIGA, 2014). The agriculture production growth had the positive impact on industry itself as well as poverty reduction. The growth rate of agricultural production between 2000 and 2010 was 5.8% per annum (MINAGRI, Strategic Plan for the transformation of agriculture in Rwanda., 2013) with the projection of reaching 8.5% of agricultural growth rate in 2020. This tremendous improvement attracted many investors to invest in agri-business. Furthermore, the government has prioritized the agricultural sector due to its importance in economy growth. Many initiatives to develop agriculture have been proposed on the subject matter and the mostly known is EDPRS and PSTA and many others like Maputo declaration which was required each head of state to allocate 10% of its annual budget to agriculture and 6%

annual agriculture growth (AU, 2013) Though significant efforts were made, there is a huge gap in agricultural financing (National Bank of Rwanda, February,2015). In spite of the government's efforts made to increase the level of production quantity and quality as well as infrastructure improvement compared to the challenges founded in the agricultural industry, a lot still needs to be done. This research will critically analyze if the agricultural bank in Rwanda will be financial solution provider for agriculture value chain finance .Besides, the government of Rwanda has so far not put in place any agricultural bank. The idea to have such banks established is still in the pipeline. However, authorities having banking in their remits are working closely with the existing banks by encouraging them to invest in agriculture and if this is not promising the government will decide to create brand new depending on resources and the priority. The government created BDF to support farmers in terms of guarantee and finance. During our research, we don't find any banks specifically for agriculture in EAC however; there are different kinds of agriculture fund that are supporting the farmers in terms of finance including BDF, IFC Women Guarantee fund etc. The opportunities and challenges will be identified as well as the root cause of the big gap in agricultural banking system in order to create new knowledge for future researchers.

1.4. Research Questions

- What opportunities exist for agricultural banking in sub-Saharan Africa especially in Rwanda?
- Is the agricultural bank in Rwanda an opportunity for farmers to improve agricultural productivity?
- What are the challenges to establishing agricultural banks in Rwanda?

1.5. Research Objectives

The objective of the study is classified into two categories:

1.5.1. General Objective

The general objective is to identify opportunities and challenges of agricultural banking system in Rwanda and its effect for economic growth.

1.5.2. Specific Objectives

1. To know the distribution of finance for agriculture in Rwanda

2. To identify the challenges to agricultural finance faced by private financial institutions and farmers regarding access to finance in Rwanda.
3. To identify opportunities and challenges for agricultural finance in Rwanda.

1.6. Significance of the study

For the Government of Rwanda this study is significant as it will serve as a guide document for further researchers and the inputs in it will be useful for its (government) continuous process improvement of its agricultural policy. For the researcher, the study will be added value to the academic knowledge as well as up skilled in the domain .It will be evaluated to attainment Master degree of Business Administration. The findings, will contribute to the University of Rwanda as major body of knowledge finally, it will be used as a reference for future researchers.

1.7. Organization of the Study

This study is organized into five chapters. In chapter 1, the whole research is introduced. Chapter two is a review of the relevant literature. In chapter three, the methodology that was used is detailed. The fourth chapter presents the findings while chapter five provides conclusion and the imminent recommendations.

1.8. Justification of the Study

Agricultural financing is among interesting area of research worldwide, particularly in Africa. The African population is depending on agriculture and the economy depends on it as well. In Africa, population growth rate is disproportional to the production, which may cause the food crisis in the future. The agricultural bank should contribute to national growth in different perspectives: economy, social, political and technology. Previous researches have shown that there is steady growth in Rwandan economy including the agricultural sector. However, there is a gap between the agriculture sector need and the financing from the banks which is the purpose of this study to have comprehensive analysis in order to provide suitable solution to the problem

1.9. Scope and Limitations from here was changed

The study focused on critically analyzing opportunities and challenges in agricultural banking in sub Saharan countries: Rwanda in perspective. The research was conducted in four months. Rwanda has been chosen as the case study due to time and resources, the survey was done in Eastern province in selected districts which is Rwamagana , Kayonza and Gatsibo and the research focused on four crops like rice, maize ,soy and soy beans

and seven cooperatives among 25 were selected based on productivity and the financial need for members . Depending on data availability, cooperatives representatives and members were surveyed. Seven cooperatives were selected as the sample size and 30 people from each cooperative responded to the questionnaire.

1.10 Research findings

After the research, strategies to establish the agricultural bank were recommended and the information needed to encourage the private sector to invest in agricultural business were provided based on the findings on different perspectives.

1.10.1 Summary, Conclusion and Recommendations

In this chapter, the researcher proposed some actions to be taken based on the findings. A summary of the entire work was also provided to help the reader to retain the most essential aspects in it.

CHAPTER 2: LITERATURE

2.1 Introduction

Africa is a continent rich in natural resource and the economy of many countries depend on agriculture. Different authors limited their researches to investigating opportunities to invest in agriculture and have also discussed the challenges that prevent small farmers from accessing financial support as well as those that hinder the agriculture sector in general. Agriculture in Rwanda before 1994 was mainly subsistence farming. It needed to be transformed and reforms from substance to market oriented production motivated by the specialized farmers had to made (Pritcard, 2012). A series of initiatives like Vision2020, Economic Development and Poverty Reduction Strategy (EDPRS) and Strategic Plan for Transformation of Agriculture (PSTA) have been launched as a long term strategy to transform the country economically. Those Initiatives have been highlighted as important strategies to uplift the economy, improve economic sustainability and reduce poverty. The agriculture has been the source of economic change and livelihoods of citizen globally and particularly in sub-Saharan Africa as well as Latin America.

Objectives:

This chapter intends to review all possible books, report and websites that are related to this topic in order to support the research's ideals and findings as well as to serve as references.

2.2 Theoretical Review

2.2.1. Agricultural credit financing.

The research carried out by Organization for Economic Co-operation and Development (OECD, 2001) revealed that each country which is recovering politically and from macroeconomic instability as well as transforming economies to the based market production faces the scarcity of finance for agriculture. Furthermore, they highlighted that there is no difference between the agriculture in terms of credit need. The agricultural sector as well as other sectors needs capital for their operations. The effective use of capital for the agricultural activity is evidenced by the qualitative change in system functioning as well as quantitative change in outcome of functioning (OECD, 2001). The financial institutions are paramount for agricultural finance. In most cases, the financial

sustainability and credit system are linked to macroeconomic stability which is attraction for the private investors including agricultural banks as well as the foreign direct investment (FDI) which is the important source of credit fund(OECD, 2001).

The link between theories of finance and economic growth confirmed a positive relationship with the above concept,(Mehrraaa, 2014) the theory asserts that the finance is the factor which is leading to the economic growth process however it is bi-directed in most cases according to findings. On the other side, the finance follows the economic growth (Mehrraaa, 2014)nevertheless; there is causality between the agricultural finance and economic growth and the link between the economic growth and agriculture growth. Furthermore, it is suggested that the productivity of investment shall be financed with Share capital, the foreign direct investment, foreign direct private loan and development stocks to this end, it will be helpful for the researcher to expand this theory in chapter four on how and who can establish the agricultural banks in Rwanda .In this context, it is very crucial to note that the agricultural surplus is important for transformation associated with economic growth definitely affects the other non-agriculture sector(OECD, 2001). The research conducted by King and Levine cited from(Mehrraaa, 2014) in 80 countries surveyed discovered that, those with high level of financial activities grew fast than those with less financial activities over 1960-1990 also found out that the development impacted productivity growth together with innovation in technology . Additionally, the research revealed that the developed financial system would speed up the economic growth as it provides the ability to experience the economic growth. This theory was referred to the context of Rwanda in financing agriculture where the steady growth was remarkable due to the economic development in all sectors of activity. In 2013/2014, 5.1% of economy growth was registered, the services, agriculture and industry sectors have greatly contributed real GDP grew to 7 per cent in 2014 exceeding the one that was planned of 6 percent, in short run and medium the public and private investments as well as agriculture and service will be driving the economic growth thus the Rwandan economy is expected to continue growing in 2015 and 2016 (NBR, 2015). Through Economic Development and Poverty Reduction strategy (EDPR 2), Rwanda is targeting to shift from subsistence to the market oriented agriculture in order to satisfy the high demand of agricultural products and to be competitive on regional and international market. The radical transformation in agriculture is expected across the country. More finances will be required and more agricultural banks should be established .According to

Schumpeter, for the sake of modernization and economic development the intermediary services are very important, he says that: for every real flow of goods and services there exists a financial flow which moves exactly in opposite direction. It shows that these two sectors are interconnected. Theoretical relationship between financial developments and economic growth is related to Schumpeter's studies 1934 (Mehrar, 2014). In his opinion, financial intermediation services through banking system are vital for economic development.

The value chain financing is a good model to explain the relationship between the agricultural financing and the banking system. Today's agriculture is developing to a modern especially competitive system driven by higher value for customer's demand as well as further processed products, high quality and required standards at national and international level. A result of globalization, improving the smallholder's productivity together with its competitiveness as well as its participation in global value should be priority for the countries. Hence, the agricultural value chain financing is the solution for high costs incurred and risks noted in agricultural finance. The value chain played the impressive role for the financial institutions because it allowed them to focus not on single borrower but the whole sector in order to design the products better fit to the individual needs involved in the chain. The understanding of value chain may improve the effectiveness of the provider and beneficiaries of the agricultural financing (Jones, 2008)

In the theory of competitive advantage of the Nation, Porter revealed that the companies or national success depend on the innovation, in other words, the way of doing things differently from others that includes the creation of new product, the new technology or new way of doing things (Michael P, 1990) the competitiveness of the Nation depends on the capacity of its industry to create new things and upgrade, the pressure and challenges are the basis to gain advantages over the best world's competitors. Porter's theory is related to the economic growth of a country as enlightened above, the researcher has contextualized the Rwandan economy to clarify the achievements in the line of economic growth especially in the context of agricultural finance. The Rwandan growth is justified by the innovations and creativity done in the sector of agriculture in Rwanda after the genocide. In its Economic Development and Poverty Reduction strategy, Rwanda has archived the steady growth from 2008-2012 due to the great increase in Agricultural output, robust exports which mainly made by the Coffee, Tea, horticulture and strong domestic demand (International Monetary fund, 2013). It is good to note the impressive

growth in agricultural sector where it contributed 32.7% of GDP and 28% of total growth. According to doing Business Report 2012, Rwanda is ranked 45th worldwide as a country which is business friendly and the second reformed economy in the world for the last five years and the first in Easter African Community (WB, 2012). This performance was a result of the capacity of Rwanda's industry to create and upgrade, for instance, agriculture is the most player in economic growth as it is shown above in this paragraph therefore, the innovations have been made to transform agriculture from subsistence to industry oriented where the irrigation system, crops intensification and land consolidation were the priority for the government of Rwanda(International Monetary fund, 2013).To this end, the research have related this important part of growth in agriculture in Rwanda to the theory of OBOSA which says that the finance follows the economic growth. Given the efforts made to develop agriculture, the banks have invested in agricultural financing though not good when compared to the need for whole industry.

Calvin Miller added that agricultural financing alone is not sufficient however, understanding the structure of the value chain is the risk mitigation and removal of hesitance for the financial institutions to finance agriculture sector (Jones, 2008). Agricultural financing cannot be separated from economic development once addressing the issue of economic transformation especially in developing countries. Calvin Miller discovered that the product financing theory includes the trade finance which is pre-finance sales when credits are given by the vendors to farmers and advanced payment given by the buyers .The role of agricultural Bank in Rwanda will not operate behind this theory as it is reducing risks and allow the progress quickly. As mentioned above, Rwanda's farmers are grouped into cooperatives according to their daily activities, therefore the operation for the agricultural bank will move faster because the ground was paved. As described by Michael Porter in competitive advantage theory ,the competition is the most tool used by either the existing or new entrants business entity ,at this end the low competitions is remarkable in banking sector in Rwanda depending on the statistics of loan portfolio for all banks in Rwanda.

Furthermore, authors believes that government is significant helper or supporter of industry, by establishing the policies to contribute directly to competitive performance of strategy or target industry in additional the government should play the supportive role for competitiveness of the nation like encourage change, promote domestic rivalry and

stimulate innovation(Michael P, 1990). The Porter's theory is linked to the agricultural financing system in the sense that the research will look at the role played by government to grow the agriculture sector and the financial sector involvement in financing. The main basic of competitiveness is the high productivity performance and capacity that economy has to transform productivity activities which should generate high levels of wages, at this end competitiveness is linked with people's lifespan and expanding employment opportunities.(Martin R. L., 2005)

In spite of the high productivity performance, Michael Porter added the concept of cost leadership and differentiation where he mentioned that the firm which is able to achieve both of them is simultaneously and the reward is great in terms of profit. In all cases, the differentiation tends to the premium price while the cost leadership involves the lower cost this is our concern while dealing with the agricultural financing and the creation of the agricultural bank (Michael P, 1990). Any commercial entity aimed at focusing on customer satisfaction and profit maximization .The Rwandan Banks have played key role towards the country's development in the span of 20years. According to Sudeep Liberal economy opens to global competition as well as encouraging Liberalization, Privatization & Globalization (LPG) so far witnessed changes in structure, strategies and foci in many industries (Salami K. &, 2010)that is related to the national policy whereby it facilitates the internal and external investors and the privatization is an opportunity for them to investor by buying the public banks.

Some researchers believe that the agriculture financing is linked to the development; it increases food supply, providing the employment and contribute to capital creation to other sectors (Salami K. &, 2010). Agricultural Credit financing is any of several credit vehicles used to finance agricultural transactions, including loans, notes, bills of exchange and bankers acceptances. These types of financing are adapted to the specific financial needs of farmers, which are determined by planting, harvesting and marketing cycles(Investopedia, 2015).The opportunity for smallholder farmers to invest in agriculture were limited by saving which was a requirement to access for credit and lack of guarantee was the main issue to access for credit in financial institutions. Accordingly, to that, farmers always seek the support of the informal source to finance their activity. Merely, agriculture is more unlikely to be financed than trade and other service sector, the high interest rate charged seems to be main factor for low productivity in four countries of

Easter Africa(Salami K. &, 2010)The financial institutions are important in economy since they facilitate the savings and services related to payment. They provide the necessary information for the investors while they want efficiently to allocate their funds, if they are functioning well, they provide opportunities for the market participants to take advantage of the best investments by channeling funds to their productive uses hence boosting growth ,improving income distribution and reducing poverty(O. Onoja & all, 2009)The broad access to finance is always the effect of the stability of financial institutions and good monetary policy however ,lack of finance is the key for the constant income inequality and slower growth(O. Onoja & all, 2009) which is the case for Rwandan agriculture sector. The governments initiated programs like PSTA and EDPRS which aimed to grow agriculture sector as well as the national economy as whole. Those initiatives have raised the issue of finance sacristy in agriculture finance on which the financial institutions are needed to give loans to the farmers.

2.2.2. Market oriented farming

This is farming driven by making profits through selling farm products in the market on a regular basis (Kahan, 2013) In the past, farmers used to be traditional in agriculture but as per today, the changes in global business and liberalization of the market as well as technology have impacted agri-business which requires to be competitive on the market and to make profit. Therefore farmers have to understand the today's market and to produce the right quality to the consumers due to the new challenge of trade liberalization and of agricultural commodities as well as the world supply and demand for the agriculture products (Kahan, 2013).These challenges will require more finance in agriculture which explains the relationship between the market oriented and agricultural financing. According to (Alvaro R. , 2012)the market oriented farmers need more capital for three main reasons: to invest in new technologies, to meet the requirements of international regulations on quality and to obtain scale and economy scope and these investments affect positively the productivity and efficiency of the company.

2.2.3. Agricultural banking in Select Countries

Bank National de Development Agricole (BNDA), was established in 1981 as a joint stock corporation “development bank’ by a special law in Mali. Operations started in 1982. Its original mandate has remained, until today, to provide technical and financial assistance for the implementation of any viable project that promotes rural development

in Mali. Until recent years (BNDA) was primarily focused on cotton, financed through a structured arrangement with “Compagnie Malienne pour le development des textiles” (CMDT). From its creation, BNDA was entitled to mobilize deposits for loan lending. Since the abolition of a special status for development banks, BNDA operates as an ordinary commercial bank. BNDA’s key partners are over 6,000 farmer groups and 36 partnerships with MFIs. The challenges in Mali’s cotton sector have led to a profound change in BNDA’s operations and business model, away from cotton towards a more diversified agriculture portfolio and increasing services in urban areas(Bank National de Development Agricole, 2015). The possibility of agriculture bank in Mali, will help to interpret the possibility of agricultural bank in Rwanda and its implication on economy development.

In despite of the with the poverty history of Vietnam which not differ from Rwanda, the Vietnamese government has established two banks which target the rural household involved in farming activities. This bank have covered the countrywide with 2,200 branches however, its credit required collateral which is obstacle for most clients. Another bank is Vietnam Bank for Social Policy (VBSP), non-government bank whose mission is to implement government social policy lending. The biggest advantage of VBSP in reaching the poor rural and provides loans without collateral with low interest rates. The specialty for this bank is 9,773 mobile transaction points and 190,000 savings and credit groups (CAS&CIMDA, 2012).

Vietnam is a county in which the agricultural banks have made tremendous progress. Different banks and funds for agriculture have been established by the government with the purpose of eradicating famine and poverty by proving loans to people who are limited by the collateral. The Bank for Agriculture and Rural Development (VBARD) and Vietnam Bank for Poor (VBP) have improved people’s lives in Vietnam; these banks have grown rapidly and contributed a lot to the national economic development.

Credit is essential for economic development. The research done in ten selected African countries shows that in all those countries, the agricultural credit increased from 1970-2010either in developed countries or developing, the banks are assigned a responsibility of providing credit (Salami K. &., 2010). Nigeria is a good example for the banks which is specialized in agricultural lending like Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB) South Africa also has good experience in this particular

sector. The Figures from central banks show that the commercial banks evolved in the agricultural lending however, its participation was low or declined. In his research, Salami illustrated that Nigerian's commercial banks participated at 17.95% lending agriculture sector , Kenya 48.8% while Rwanda had no credit allocated for agriculture from 1995-2008. Brazil is having the huge agricultural resources and its agriculture is makes a difference and it is adequately self-sufficient in food. Brazil has positive balance of payment; and this country is the largest exporter of food products. The reasons behind this success is the sustainable agriculture policies and export of agricultural products supported by the credit disbursed for agricultural businesses notwithstanding ,the government of Brazil has requested the banks to allocate 29% of their deposit into agricultural lending . The credit amount disbursed specifically for agricultural in Brazil was \$7billion in 2001 against \$73.4 in 2011/2012(CAS&CIMDA, 2012).

Brazil is having the huge agricultural resources and its agriculture is differentiated and it is adequately self-sufficient in food. Brazil have the positive balance of payment, also the country is largest exporter of food products. The reasons behind of this success is the sustainable agriculture policies and export of agricultural products supported by the credit disbursed for agricultural businesses notwithstanding ,the government of Brazil has requested the banks to allocate 29% of their deposit unto agricultural lending . The credit amount disbursed specifically for agricultural in Brazil was \$7billion in 2001 against \$73.4 in 2011/2012, the big part of the credit are granted to the farmers through the rural credit programme and the loans are used to buy inputs and paid at the harvest period. Due to the lower return however, the banks are being reworded through a government equalization program to give fund to the banks to recover the low return(Kamara, 2010).

Chile is the country in which agricultural finance is significant and increased from 2003-2007, the agricultural loan portfolio in million was respectively from that period (\$1745.5, 2538.7, 3078.6, 3331.9 and 5357.7); this shows the good trend in despite the challenges faced in agriculture financing the banks also were developed. The experience of Chile is a good example for the developing countries which depend on agriculture (Kamara, 2010).

The success of agricultural banks is our reference to enhance the agricultural lending system in Rwanda and support the feasibility of establishing the agriculture bank. Many authors, not all, have highlighted the agriculture sector as opportunities for the investor

either private or public to grow their productivity and to increase the livelihood of the farmers others considering this sector as not impressive one. All these attempt to respond to this question: Is the agricultural bank in Rwanda an opportunity to the farmers to grow their agriculture productivity and uplifting the national economy?

2.4 A brief historical analysis

2.4.1. Agriculture financing globally

This section reviews literature on North America, India, South America and Africa. As it was shown above, for thousands of years people in the world practiced the traditional agriculture. Therefore, the introduction of green revolution was the key driver of the agricultural growth and change in Asia and Latin America. For example some researcher have argued that selection of crop varieties in fertility and irrigated land could create high production and further research confirmed that whether it is in low fertility or dry land they surprisingly did well which means that the wide strategy doesn't necessarily apply in those specific areas (Mr. Baranski, 2015). Green revolution was a result of the success of agricultural transformation in most cases in Mexico and India. The good results from those countries paved the way for financing agribusiness in the developing countries, and Rwanda has borrowed a leaf from this, thus its quick agricultural transformation. The success of the agricultural financing was remarkable in North and South Asia as well as Latin America.

(Sjoerd Bazuin et, 2011) In this research the researcher shall identify and analyze the opportunities and challenges that are in agriculture financing and the role of the agriculture bank to uplift national economy. So far the Sub-Saharan Africa population is growing not proportionally with food production in order to meet the high demand of food in the world in other words the import is bigger than export which makes the balance of payment to be negative.

Despite the challenges, there are potential opportunities for SSA to feed its population and be key player on global food market. The African Union agenda 2063 prioritizes the agriculture to speed up its objectives and reduce the imports of food and raise intra-Africa trade in agriculture and food to 50% of total formal food and agricultural trade. The initiative to finance the agriculture was made by the financial institutions in Africa; among them is Standard Bank in South Africa which has signed a USD 100 million deal

with Alliance for a Green Revolution in Africa (AGRA) in March 2009. The objective of the deal is to finance small-scale farmers and agricultural businesses in East and South Africa (Kamara, 2010). Also Equity bank in Kenya was successful in financing small-scale farmers where it reached big number of the farmers in rural area by using mobile banking. Agricultural contract finance was been a key to push the financial institutions to invest in agricultural. The efforts were made in SSA to finance agriculture in order to meet the global and regional requirements of the foodstuff, industry and fuel resulted by the high increase in population which is expected to rise at 9 billion in 2050 and bio-fuel which needs more investment in agriculture in developing countries and rapid food prices (Alliance for a Green Revolution in Africa (AGRA), 2013) The agriculture finance started under micro finance but it was not profitable because of little understanding of the agriculture sector for the farmers and the banks as well. In 1990s microfinance institutions emerged and NGOs started to provide both financial and technical support to the farmers. The production in the world is expected to grow up to 70% in 2050 and an annual net investment of \$83 billion will be needed to support 50 million farmers in developing countries representing 80% of the farmers in the region involved in crop production, livestock and downstream service. \$450 billion will be required to support smallholder farmers who lined with market oriented (Food and Agriculture Organization of the United States et al, 2009) In 2009, foreign investors were not interested to finance agriculture in Africa.

2.4.2. Description of contemporary agricultural banking globally

education and training; increase savings and investment, and improve social well-being with special emphasis on gender equality, housing, education, health care and community development (Damien, 2015). In spite of this, agricultural banking finance is still low in Rwanda. Only 4 per cent of the total loan portfolios Agriculture can be described as the key driver of sustainable economic development in Africa. However, the way this sector is financed leaves some gaps and lots to be desired. The high interest rate charged is termed as a key barrier on the side of the smallholder farmers and the nature of the sector on the other side. The word bank expects the retail banking growth of 15% between 2013 and 2020 which will contribute 19% to continent GDP from 11% in 2009 (KPMG, 2015) The total banking assets in Africa is USD 1280 distributed as follow: Western Africa USD 168 billion, Northern Africa USD 571 billion, Eastern Africa 62 billion, central USD 20 billion and Southern Africa USD 459. This illustration gives a room for

the researcher to make comparative study with the other continents (European Investment Bank, 2013). Again, African countries have had steady growth in the banking sector and rapid credit expansion. These would include Angola, where real credit growth to the private sector has exceeded an annualized 32.8% in the past 10 years and 15.6% in the past three years; Mozambique (12.4% and 9.9%); and Tanzania (18.1% over 10 years but more recently this has slowed to under 10% in the past three years). Lesotho has also shown strong growth over the past three years (20.2% real), coming off a low base and helped by a firmer economy. The more established sectors of Botswana and Mauritius have seen steady real growth of just under 10% over both periods cited (European Investment Bank, 2013). From a global perspective, the banking system is looking for ways to finance the value chain in agriculture and the business oriented production especially rice, maize and soy beans.

It is cooperative responsibility to collect the production of all members and sell them to third parties. The main focus in agricultural banking in global perspective is to finance farmers who are driven by knowledge in field, science and technology (McIntyre & al, 2009). These have had resulted in the financial need in selected seeds that can respond to the world need in terms of food security, irrigation to solve water problem in most cases of SSA, and climate change as well as setting up the infrastructure that may connect farmers to the financial institutions. As per today, agricultural finance is focusing on the value chain finance especially in crops and cereal. The reasons behind is the benefit of co-management of the whole system until the end which makes easy monitoring and risk evaluation. Cooperatives also are the key to focusing on agriculture banking mostly in Sub-Saharan countries especially East African Community including Rwanda, Kenya, Tanzania, and Uganda.

Indeed, the Government of Rwanda views Cooperatives as a potential vehicle through which the Cooperatives members could create employment and expand access to income-generating activities, develop their potential businesses, including entrepreneurial and managerial capacities through from commercial banks went to the agriculture sector. However, the discussions between the government of Rwanda and financial institutions have been conducted in order to sustain the steady current economic development (NSANGANIRA T. , 2015)

2.5. Agricultural banking in developing countries

The innovation of proper credit systems in the last decade was encouraged by the idea that widespread shortages in short run and long run finance constituted a barrier to agricultural growth and development. The banks' from those countries emphasis on the rain-fed, smallholder agriculture, irrigation, and agro-industrial projects. Due to the globalization and modernization, the new focus is knowledge, science, technology in order to produce market oriented product that can highly compete with others on the international market as well as to make the sector sustainable. The research and development linked to knowledge system, funds and financing mechanism in agriculture would help to achieve sustainable and development goals in developing countries. However, productivity remains low in developing countries and this has been problematic for financial institutions (International Finance Corporation, 2011). In a study conducted in Uganda, Ethiopia, Kenya and Tanzania, the research unveiled that their economy depends on agriculture. This sector contributes on GDP growth of 47% and 43% respectively in Tanzania and Ethiopia, In Uganda and Kenya there was a rapid growth of 9 percent for service sector whereas GDP growth was 45% and 60% respectively whereby agriculture contributed 30 and 34% percent respectively. The research revealed that agriculture contributed 75% in labor force (Salami K. &., 2010)

2.6. Agricultural banking in Rwanda.

Rwanda is a country that is attractive for investors. The access to finance is easy because above 90% of adult people live within 5km from financial institution and no more barriers related to eligibility to access for finance as well as minimum deposit and balance. The findings by the Finiscope Rwanda (2012) survey revealed that 72% of Rwandan adults were financially included – 42% were formally served (23% served by commercial banks and 33% served by non-bank formal institutions) and 58% used informal financial mechanisms cited (Access to Finance Rwanda, 2013). This steady growth of Rwandan to access for banking service serves to highlight the big opportunity to design the separate agricultural financing to that market niche due to its steady growth 5.8% GDP between 2000-2012. Furthermore, there are a lot of grants for this particular sector that have to be well channeled. Despite a significant growth in the Rwanda banking sector, there is no bank specialized in agriculture financing except the agriculture guarantees and other guarantee fund helping access to bank and microfinance credits for entrepreneurs including farmers.

Subsistence agriculture was a major challenge in Sub-Saharan Africa, but the Government of Rwanda has made robust efforts and initiatives to reduce poverty and to enhance access to finance hence transforming subsistence farming into market-oriented agriculture(MINAGRI., 2013). The level of subsistence agriculture was reduced from 90% to 72% between 2008 and 2012. This has been demonstrated in its EDPR and PSTR strategies to achieve vision 2020 whereby, agriculture will be contributing up to 8.5% of annual growth of GDP and 25% of agriculture as percentage of GDP. Steady increase in plantation has been revealed and gives opportunity to the investors. Agricultural growth has been largely behind service and industry, the agriculture sector growing at average 5.8% of GDP per annum, industry 8.8% and service sector 10.5% between 2000 and 2010 (Access to Finance Rwanda, 2013) However that was due to the following challenges that agriculture sector is facing (MINAGRI., 2013):

- Soil erosion;
- Water conservation;
- Lack of environmental sustainability;
- Issues related to the quality and quantity of raw materials and inputs;
- Lack of working capital and long term credit, low human capacity, limited innovation and small agro processing factories as well as technology and;
- High interest rate charged to the farmers.

2.6 1. Private Sector involvement and effort of establishing Agricultural Bank in Rwanda

Rwanda is a country in which the investors are protected legally and facilitated in their business. The investors are classified as foreign direct investment and the public or local private investment. In Rwanda there is no either foreign bank or local which is specifically in charge of the agriculture in despite of the potential and efforts made to transform the agricultural sector and the involvement of the existing banks and microfinance is low. The government of Rwanda had ideal to establish the agricultural bank, it is not the priority for the government due to the resource required and its goal of privatization of the government institutions however, the private investors are encouraged to invest in the agriculture.

Even though there are challenges, the researcher found out that there are many opportunities that need to be critically analyzed. However, it needs to be noted that there

is still negligible role of private sector involvement in agriculture compared to industry and service sector though the government always shows strong political willingness to increase investment in agriculture (G.Kanyarukiga, 2004). In that same context, access to service including agriculture financing and proximity service has been increased (MINAGRI., 2013): The largest amount of investment in agriculture is done by government, the NGOs and international funds. The private sector is engaged in agriculture as well. The foreign direct investment also is considerable in country's economic growth. The researcher distinguished the big contribution of FDI in generating income in agricultural but not real good as manufacturing sector dominated by activities such as manufacturing of food products and beverages which has 65% of the total income, followed by finance and insurance with 22% and agriculture, dominated by support activities to agriculture, growing of coffee and tea with 8%(National Bank of Rwanda., 2012)

Given that pay off promised by the sector, in terms of the internal and external investment, (internal: referring to manufacturing companies; external: high quality and quantity to satisfy the international market) increase competitiveness and meet requirements of World Food Program and Millennium Development Goal, the Ministry of Agriculture is encouraging the private investors to establish the Agricultural Bank in future in order to help achieving all of those objectives as the way have been already paved.

2.6 2. Reasons for establishing Agriculture Bank in Rwanda

a. Introduction

Rwanda is a county which is developing quickly economically .The financial services are more likely to grow in future based on the trend of economic growth as well as the projection of the government in its vision 2020 and the role the banks played in that trend. However, the agricultural finance is still low yet it creates potential opportunities for the investors.

b. Opportunities in agri-business financing in Rwanda

As it was clearly explained in the literature that theory finance is linked to the economic growth and therefore there is causality between the agricultural finance and economic growth and the link between the economic growths with agricultural growth. Rwanda is

shifting from the subsistence agriculture to the market oriented agriculture where the production is no longer done with a purpose of consumption. The mind has been changed where they see agriculture as business opportunity .Besides, the economic growth, the agri-processing plants have been established which need more raw materials to produce final products. So far, Kinazi Cassava Plant in Southern province was established to transform final products all cassava produced across the country (hope magasin, 2015) With that, it creates the opportunity for farmers to make more production and to look for finance .Runazi Robert the Director General said that, “they are thinking of rolling out other initiatives like contract farming for cassava growers in this region. This will facilitate farmer’s access to financial support to acquire inputs such as seeds, fertilizers and farm machinery, which are believed will transform the current subsistence to commercial farming in line with the fifth pillar of the government’s vision 2020”(Mathieu, 2012)This is a great opportunity to create the agricultural banks that is going to be involved in whole value chain financing which is not seen as good opportunity for the commercial banks.

Brasserie et Limonaderies du Rwanda known as Bralirwa is also a great opportunity for the agricultural bank because it uses the agricultural products as raw material and financial support is essential, indeed it has got \$25million finance to support maize production and improve livelihoods of smallholders farmers training them in modern farming methods and helping cooperatives become more professional (Bralirwa., 2015). During this research, the findings show that for some countries in which agricultural banks have already been ushered, all the agricultural fund and grants were passed in Agricultural banks especially in Mali, Vietnam and Brazil. The scatted resource for agriculture in Rwanda causes a low performance and inadequate monitoring, thus making it hard to achieve the fixed objectives.

Again, Mount Merusoyco plant in Eastern province is a tangible evidence of opportunity for the banks to invest their money in agriculture .This plant is looking for buying all harvests in Rwanda in order to produce oil ,that means that more finance will be needed to produce sufficient soy beans to allow the plant to run. Nyirangarama is the most popular passion fruits production which has reached the level of exporting its products to some parts of the region. Apart from those local agro processing, there are more funds for agricultural activities and grants from NGOs as well as foreign direct investment which

are impressive. International Finance corporation (IFC) has funded several big projects in agricultural including guarantees for reliable cooperative (Fund for KABOKU and the reference is the KCB) the World Bank and ADB. They funded agricultural activities including infrastructure for rural access.

Insurance companies have been developed in Rwanda after the tragedy of genocide in 1994. Like other sectors rejected the agriculture; the insurance companies have also not been interested in investing in agriculture. However due to the opportunities found in this sector, those companies created suitable products to secure agriculture and more companies got established. The main challenge for agriculture finance was climate change resulted to heavy rain or drought however, the insurance are covering this risk support with irrigation technology.

The region integration is also opportunities for the agriculture bank where it can expand its services abroad. The government support in terms of registration of company's favorite rules and regulations for the investors as well as good policy for agriculture. In addition farmers in Rwanda are grouped under cooperatives and associations which is the most powerful tool to use while creating the agricultural bank. Furthermore, the SACCOs are not well positioned to finance agricultural activities and the agricultural bank can take advantages from this(BNR, 2014).

c. Youth as reason to establish the agricultural bank

Youth is the future for Rwanda. Many youth in the world find their future in agriculture. Youth in rural areas are suffering to earn income; the issue of arable land remains a problem in many parts of the world and is a stumbling block for starting business. They often lack access to credit and other necessary resources for agricultural business. The youth are in most cases quick to adapt on the new technology necessary to sustain and increase agricultural productivity when compared to older farmers. Global population is expected to reach 9 billion by 2050. The number of young people (aged 15 to 24) is also expected to increase to 1.3 billion by 2050, accounting for almost 14 percent of the projected global population (Food and Agriculture Organization for the United Nations, 2014). The Rwandan population is youthful. Inaccessibility to financial services was identified as the challenges for the youth. The financial services are reluctant to offer their services like credit, savings and insurance. To start any business such as agriculture, access to financial services is essential to cover the costs of planting and harvesting as

well as improving investments by acquiring capital .Even though the financial services have been improved in Rwanda, there is need for it in order to increase its availability for youth that are involved in agriculture as banking services are concerned again ,only few micro-finance and SACCOs in Rwanda have allocated few financial products specifically for youth. Indeed, they are not considered as their specific clients. For that reasons, the agricultural bank is a better solution for the Rwandan youth. As earlier on explained, the financial sector's portfolio for agriculture is minor yet there are a lot of guarantees fund and government support. This was due to the issue of understanding agriculture sector and the lack accurate information.

d. ICT as an opportunity to agricultural bank

Nowadays , the world is increasingly using technology.ICT is offering the opportunities to access to the information and financial services like e-banking ,e-business ,e-trade through mobile banking. Rwanda is the best country in East Africa that is using internet and mobile phones. According to the statistics, 7.8mln of Rwandan population are using mobile phones that to say the penetration rate is 70.6%(RURA, 2015).In 2014, Olleh Rwanda network LTD was introduced in Rwanda mainly to offer high speed broadband internet by using 4G technology. M-PESA is a small-value (all transactions are capped at \$500) electronic payment and store of value system accessible from ordinary mobile phones (World Bank., 2013). Taking into account the success of M-PESA in Kenya where you can transact through M-PESA users or non-users and also, its capacity to enlarge financial services to the big part of unbanked poor people, while talking about the establishment of agricultural bank in Rwanda these are the opportunities for the investors. Few banks in Rwanda , if not, are using the e-banking system .The use of the mobile banking and e-business is not yet common among Rwandan citizens which can be taken as competitive advantage for agricultural bank as it is going to serve a large number of population who are in rural area.

Agricultural Bank is necessary in Rwanda for different reasons as mentioned earlier in this research paper. Banks are key players in development of the economy and income generating, therefore, having a bank specialized in agriculture will be an added value to what the government is doing mostly to the farmer households. It is important to attract more investors and to be more effective by consolidating the scattered resources across the projects. The Agriculture Bank will help to fill the gap in agriculture financing. A college of Agriculture and Veterinary Medicine in Rwanda which will produce highly

qualified human resource in the domain that will also help in creating more jobs to reduce high rate of unemployment in Rwanda. The bank will improve market-oriented agriculture and will also help the country to achieve requirements of world food and Millennium Development Goal as well as vision 2020 in its EDPR and PSTAR strategy.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter aims to explain the research methods used when the researcher was conducting this study. It includes research design, study population, sample and sample size, methods of data collection, methods of data analysis and anticipation of the study.

Research methods refer to a philosophy of the research process. It includes the assumptions and values that serve a rationale for research and the standards or criteria the researcher uses for collecting and interpreting data and reaching at conclusions (Martin E. , 2005)

In other words, methodology is a study of how to systematically solve problems by determining the level of analysis necessary to make a decision; whether to reject or accept a hypothesis.

3.2 Research design

Research design is the way by which a researcher organizes the work and particularly plans how study will be done. It combines the type of data needed and the way used to collect them (Nieswiadomy, 1993) Research design refers to overall research plan to be followed while answering research questions. The type of research questions to be used should be determined as well as the answers to them and the better way to put together the data required for the research.

This research is the case study. This method entails in-depth investigation of a single individual, group, or phenomenon (Robert, 2009). The researcher also used triangulation of both quantitative and qualitative research methods for collecting and analyzing data to describe and interpret it into information. (Pasillas, 2015)

3.3. Population

Population is known as the focus group for researcher or the group to which the research wants to generalize. The population is the number of persons or objects covered by the study. It is also the person or object under consideration in the study. In this research, one province (1) three district (3) which is Rwamagana ,Kayonza and Gatsibo and seven cooperatives (7) specialized in the farming of rice, maize and soy beans are the population out of which the sample was drawn. The sample size was 30 members of each cooperative of 210 populations drawn from 25 cooperatives. The eastern province was selected due to it is where you find at the same time cooperatives which are involved in

the agriculture of rice, maize, beans ,soy and soy beans. The three districts were chosen due to financial means which was not allowed to cover all district and the sample size of 30 members per each cooperative was considered as sufficient to represent the population due to the limited time cover reach all cooperative members.

3.4. Sampling techniques and sample size

A sample is a small group of cases drawn from and used to represent the large group or whole population under investigation. However, sample size is the number of people or objects in the selected sample (Manheim J, 1995). That is all list within population of which can be sampled, it include individuals, household or institutions.

It is a list of all those within a population who can be sampled, and may include individuals, households or institutions. In several practical cases, the frame is a matter of choice to the research and it is not easy to be determined. Some very useful researches have produced undesired result or doubted could not be productively carried due to the lack of a clear sample size; others, because of sampling error (Jessen, 1978). Therefore, in research the sample should be a representation of the total population such that as much as possible, most characteristics of the population should be represented in the sample selected (Martin E. , 2005). During this study, two different sample sizes were used in accordance with to pre-determined objectives. One of them is purposive sampling where the districts were selected in eastern province and cooperatives to respond to the questionnaire as well as MINAGRI and the institutions that have expertise in agricultural financing were interviewed in order to provide accurate information related to the opportunities and challenges that face the banking system in agricultural finance. Any top leader that would be available especially in the Ministry of Agriculture and Animal Resources and Business Development Fund were considered also, the researcher made another sample drawn from the beneficiaries of banking services from whom he got information related to the research topic.

This information was obtained by the use of a questionnaire distributed to that sample and the formula below was used to determine the sample:

Validity

The validity is giving more confidence due to the real information provided by using triangulation technique which is interviews, questionnaire as well as secondary data

analysis. The data collection instruments were designed in a way that they can measure attitudes and opinions of respondents in regard to the opportunities and challenges in agricultural banking system in Rwanda.

Reliability

Any meaningful study should be based on the data reliability and this principle has been adhered to. To collect reliable data, the designed interviews and questionnaire were used in a procedure that involved the revisions under guidance given by the supervisor in order to ensure high quality of data collection instruments.

3.5. Data collection tools

The following data collection tools were used during the study: questionnaire, interview and observation approaches.

3.5.1. Questionnaire:

This includes all methods of data collection by which the respondents will answer pre-determined written questions. In most of the cases, the respondents are required to answer the same set of questions. The questionnaire is a combination of both open and closed-ended questions thus this technique helped the researcher to collect data during the research process.

Observation: This technique mainly encompasses watching people do what you are interested in researching (Martin E. , 2005) This technique helped the researcher during field work when collecting data on opportunities and challenges in agricultural banking where the researcher observed how farmers use their plots, how irrigation is done and the physical appearance of the cultivation.

3.5.2. Interview:

The interview implies the interviewer and interviewee conversation on the subject matter in order to get appropriate information. In this particular study, the researcher interviewed the Minister of Agriculture and Animal Resources (MINAGRI), the CEO of Business Development Fund (BDF) as well as the Director of Banking Supervision in National Bank of Rwanda (BNR) in order to get the information related to the opportunities and challenges in agricultural banking in Rwanda.

3.5.3. Instruments

During this research, the data collections methods used are: a combination of in-depth interviews and questionnaires as well as analysis of secondary data. The interview and questionnaires helped the researcher to measure the respondents' attitudes towards opportunities and challenges in agricultural banking .The researcher collected empirical data that are free from any form of subjectivity. Reliability and validity of findings has also been maintained high. The questionnaire comprised closed and open-ended questions to allow for a deeper understanding of respondents' real attitudes for all questions to which they will respond to.

3.5.4. Data analysis

To interpret and analyze data, the qualitative analysis by grouping interviews responses according to the objective of research and the tables was used to allow the researcher to analyze quantitative data obtained from questionnaire results.

The researcher used three units of analysis. The first unit was the members of cooperatives and cooperatives themselves involved in agriculture and which benefited a loan from the banks or micro finances. The second unit was the agriculture policy and the government involvement in agriculture and finally the third was private sector investments in agriculture.

CHAPTER4: RESEARCH FINDINGS

4.1. Introduction

In this chapter, an overview of the challenges faced by the farmers for credit access from financial institutions and their perception toward the existing financial service providers is given. According to the findings from the field conducted from 1st June to 5th June 2015, all the farmers investigated do not access to finance easily due to lack of collateral and high interest rate. Some of them did not apply for loan and because of one or more reasons. Access to finance was not the barrier in terms of proximity as most of them live in 5km from the nearest financial institution (Finscope., 2013) Nonetheless, 96.2% of people surveyed were unhappy with services provided by financial institutions in general. Thus, in this section, we will reveal all opportunities that are in agricultural sector that will attract attention of the investors. It has been questioned if the agricultural bank in Rwanda can be an opportunity to the farmers to grow their agriculture productivity and uplifting the national economy. The idea to have an Agricultural Bank seems to be one of the solutions as all respondents unanimously said that such has to be established. However, the interview made with the Director in charge of the Banks Supervision in National Bank of Rwanda as well as CEO of BDF revealed that there are many opportunities in agriculture sector to be tapped into. All in all, the following is the objective of this chapter: Enlightening to the read the thoughts and findings of different stakeholders about the establishment of agricultural bank as well as the critics of the opportunities vis a vis to the challenges in agricultural finance in Rwanda.

4.2. Finding from Cooperatives surveyed

The investigation was conducted on the cooperatives that are involved in the farming of rice, maize, soy beans and beans located in Rwamagana, Kayanza and Gatsibo district in the Eastern Province namely COCORICYI, KOHUNYA ,COCORIVAMU,DUFATE IYAMBERE MU HIGO,COPRORI INTAMBWE and CORIMAK which are described as follow:

Table 4.1 DESCRIPTION OF AGRICULTURE COOPERATIVES SURVIED

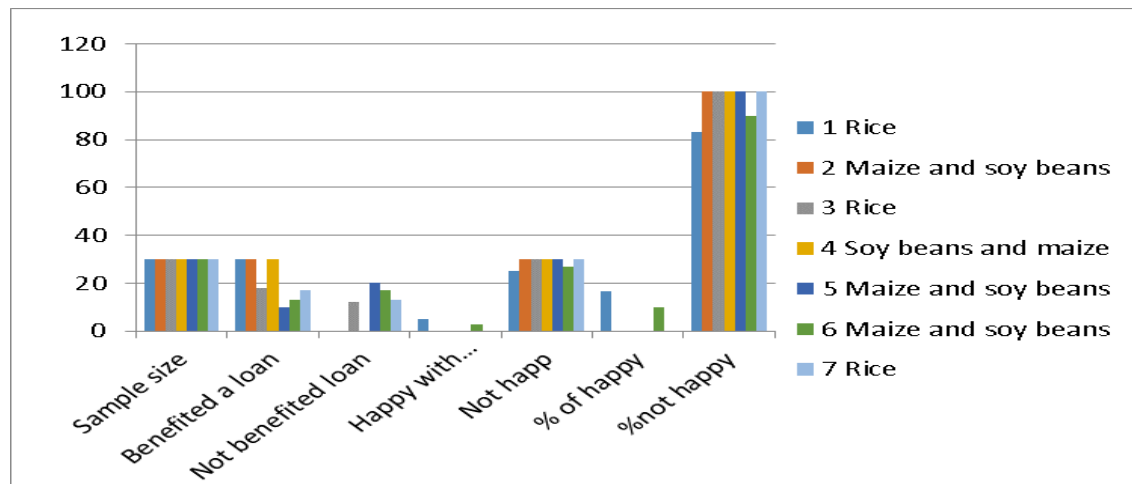
No	Cop name	Cop. Members	Respondents	Type of agriculture	Location
1	COCORICYI	859	30	Rice	Rwamagana
2	KOHUNYA	63	30	Maize beans and soy beans	Rwamagana
3	COCORIVAMU	182	30	Rice	Kayonza
4	KARAMBO I	53	30	Maize, beans and soybeans	Kayonza
5	DUFATE IYAMBERE MU MIHIGO	55	30	Maize beans and soy beans	Kayonza
6	COPRORE INTAMBWE	379	30	Maize beans and soy beans	Gatsibo
7	CORIMAK	1500	30	Rice	Gatsibo

Source: The primary data

Among these cooperatives, the largest is COCORICYI have 859 members who practice agricultural activity of rice and the smallest is KARAMBII with 53 members who practices agriculture of Maize, beans and soybeans. All these cooperatives have been chosen due to the experience they have in borrowing.

The chart below presents the degree of the appreciation of the banking system.

Figure 4.1 the degree of the appreciation of the banking system



Source: Questionnaire responses

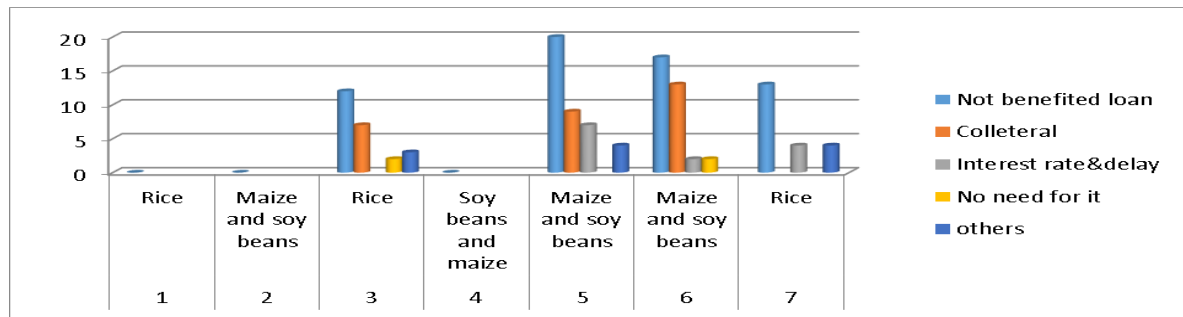
In the sample size of 30 individuals surveyed in cooperative No 1 COCORICYI Cooperative, respondents said that they have experience of 16 years in the business of growing and selling rice. Though they have benefited a loan before, they expressed that only 16% were satisfied with the services they got from banking institutions they were working with. They further explained that financial institutions can only finance a small portion of the entire project, while sometimes loans delay, which affects the production. In addition to that, banking institutions impose very strong conditions that are hard to meet. For example, banking institutions require that loan seekers have to tangible guarantees. High interest rates coupled with the commission's fees make it hard for farmers to get any profit at all.

The second group comprised of respondents from Cooperatives No2, 4, and 5 respectively COHUNNYA, KARAMBO and DUFATIYAMBERE which are specialized in maize, soy beans and beans crops. Respondents in this group have benefited loans in different financial institutions in their location but they have a very negative impression about banking institutions due to very poor services they receive from them. All the members of those cooperatives surveyed, that are 100%, were not satisfied with the services they received from banking institutions they worked with in the past. In cooperative No3 COCORIVAMU, among 30 people interviewed, 7 have not benefited a loan because of lack of guarantee, 2 did not need it and 1 did not have capacity to apply for loan. It was found out that also 1 person among 30 surveyed in the cooperative did not have land and 1 person could get the loan he wanted due to other reasons. In cooperative

No6 COPRORI INTAMBWE, some members borrowed but 13 of them could not borrow because they did not have the collateral and 2 of them for because did not wish to. The last cooperative No7 KORIMAK is specialized in rice farming, whereby 30 people have been given a questionnaire and 5 respondents have not benefited any loan from the banks, 4 refused to take loans due to the high interest rate, 1 person has not yet started to be involved in cultivation, 1 person does not have any need for loan 2 were not clear in their responses.

An interview with the cooperatives representatives in Rwamagana district on the land property ownership, they answered that each member has his/her own plot. It was also noted that individual borrowers have higher value of the assets like buildings than group based borrower.

Figure4.2 the degree of the appreciation of the banking system



Source: Primary data

Referring to the graphic, the collateral is given high rates among others followed by high interest rates. One of the challenges they face in their daily activities is: The change in weather which affects the production. Price fluctuation was also identified as another major factor of poor performance of those farmers. Poor irrigation systems which cannot fully water crops in the dry season, diseases in the crops as well as lack of financial support on time are also other concerns expressed by the farmers.

4.3. Opportunity and challenges in agriculture financing

4.3.1. Findings from Business Development Fund in Rwanda (BDF)

The government of Rwanda has seen the agriculture as opportunity to boost the economy. Rwanda has prioritized this sector in order to achieve its future objectives outlined in its programs like PSTAR III, EDPRS as well as MDG objectives. Business Development

Fund in Rwanda (BDF) is independent company that was created in collaboration of government of Rwanda and Development Bank of Rwanda (BRD). Its main objective is to promote the SME by providing the financial services to enhance the lending mechanism of financial institutions. According to the interview made on 1st June with the CEO of BDF Innocent Burundi said that there are opportunities and challenges in agriculture. The findings confirmed that there are a lot of potential agriculture financing investments i.e.; 80% of Rwandans have their own land, agriculture employs 80% of population and a lot of grants and funds are available for agriculture.(BDF, 2001)

According to him, the farmers have been practicing subsistence farming but have now resorted to market oriented farming.

BDF has a mandate to promoting SME development through the provision of financial services to enhance the lending mechanism of financial institutions. The agriculture is one component among of which is supporting indeed 70% of its funds and guarantees goes to the agricultural projects. BDF also manages the Agriculture Guarantee Fund and provides support to both for individuals and companies with insufficient collateral in order to access finance up to 75% of approved loan with a maximum amount of Rwf 500 million. Apart from that, it is supporting up 20% and 50% respectively of costs occur to the agriculture investment projects and horticulture export. All those kind of facilities are opportunities for agriculture dealers and investors in which banks are included

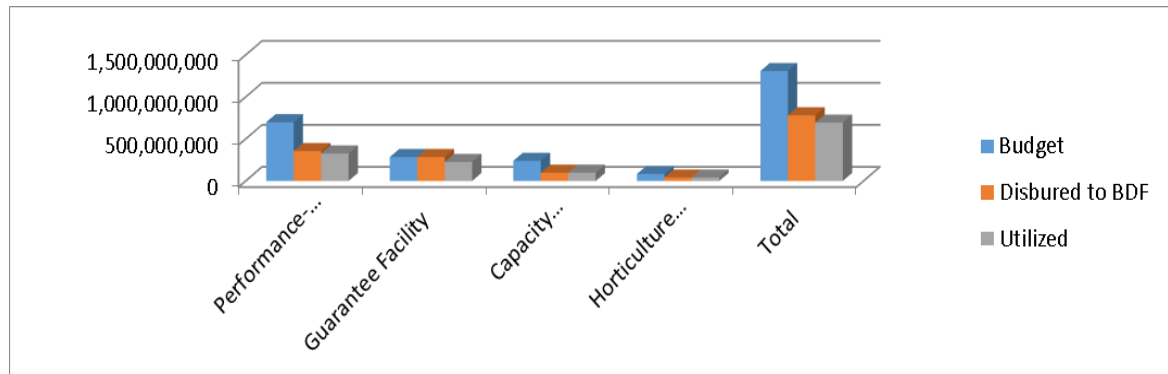
4.3.2. The funds disbursed through PRICE from 2013-2015

Price is meant for Project for Promotion of Income through Export. It is a grant for the investors who insolvent in horticulture value chain investment especially for coffee and tea. The following data shows the total grant through Price:

- 101 projects in horticulture and coffee among 167 have benefited from PRICE grant support worth Rwf 327,067,940, and Rwf 859,504,871 loans in 25 Financial Institutions, including SACCOs, MFIs and Banks.
- 6 projects out of 10 have benefited from the PRICE Guarantee funds worth Rwf 226,666,665 and loans totaling Frw 513,355,550.
- 53% of the budget planned was used by PRICE which shows that they are sometimes behind the plan. This is to show that government is involved in agriculture but the horticulture is still on low level(MINAGRI, 2015)

Figure 4.3 horticulture value chain investment

Price is meant for projects rural investment through export .This the grant for the investors especially who insolvent in horticulture value chain investment.



Source: MINAGRI

According to the report from MINAGRI, 25 financial institutions have disbursed Rwf 1.4 million from 2013-2015 for PRICE(MINAGRI, 2015) . The researcher noted that of all commercial banks in Rwanda, only BPR disbursed loans to PRICE beneficiaries at a 2% and COGEBANK 1% of total loans. This was considered as low level of the involvement of commercial banks in agriculture financial support.

4.3.3. Findings from National Bank of Rwanda

On 8th, June 2015 the researcher had an interview with Director of Banking Supervision at the National Bank of Rwanda. She responded that there are more opportunities in agriculture financing due to the contribution of this sector in economy growth. The opportunities have been identified in different perspectives where by the Rwandan is shift from substantial agriculture to business oriented, the land husbandry where the cultivation is regulated by MINAGRI in order to produce more. Cooperatives also contribute in access to finance and project analysis. Agro- processing factories have been increased though with some challenges. According to the question of having agricultural bank in Rwanda, the director of banking supervisor in BNR responded that they have never receive any request about that either from the government or provide investors.

However, the National Bank of Rwanda doesn't have problem to have banks which are involved in agriculture, it is indeed added value to the country's economy as long as they respect the BNR and other regulations.

Limited investment in agriculture is illustrated by table No 4 below.

Table 4.2 new cash loans distributed by economic sector (%)

Activity branch	2010	2011	2012	2013	2014
Commercial and hotel	45.14	37.53	40.71	46.04	41.62
Agri. fisheries and livestock	1.9	3.49	2.12	1.86	1.35
Public works and buildings industry	17.97	25.71	22.43	19.78	21.09
Personal Loans	11.17	14.53	16.64	11.96	9.64
Manufacturing activities	9.1	5.61	7.42	9.42	11.12
Transport and where housing	8.9	6.86	6.09	6.24	6.45
Service sector	2.38	2.29	2.89	2.2	4.01
OFI and insurance	2.93	3.51	0.92	1.27	0.73
Water energy activities	0.52	0.47	0.78	1.18	3.96
Mining activities	0	0	0	0.04	0.03
Total	100	100	100	100	100

Source: Monetary policy and financial stability statement February 2015 of BNR

With regard to the sector of distribution for the new loans by economic activity, commerce, restaurants and hotels were the most financed taking 41.6% of the total loans, followed by public works and construction (21.1%) and manufacturing sector (11.1%)(National Bank of Rwanda, 2015) The agriculture loans disbursed represent 1.3% 2014 with a decline from 1.86% in 2013. The small portion was confirmed by the MINAGRI in its responses. This table was helped to compare the agriculture loans with other sectors and to prove how the financial institutions are not engaged in agriculture finance.

4.3.4. The findings from Ministry of Agriculture and Animal Resources

Apart from the above institutions, the response from MINAGRI on the questionnaire confirmed that there are potential opportunities in agriculture sector and support ideal of establishment of an Agricultural Bank. In Rwanda nevertheless “most of investors focus on quick returns on investment; and normally the investment required in the agricultural sector is huge and the investment for a small area is not well profitable unless there is a certain value addition that is involved” rural finance specialist from MINAGRI said. During the investigation, they highlighted that farming loans system in Rwanda cannot

fulfill the demand gap due to the fact that small holder farmers have small lands and get small returns which makes them unable to repay loans as expected.

In addition, many Rwandans are still practicing the agriculture for subsistence and projects presented to the bank do not reflect the reality. There is also a problem of lack of information within value chain actors. On the date of 12th, Jun 2015, the researcher had an interview with the State Minister of Agriculture and Animal Resources. While explaining the opportunities, he started by the background of agriculture in 15 years ago where the system was totally subsistence farming and almost destroyed by the genocide to an existent that no investor could think of it. However, the government has tried to sustain this sector not only to maintain the food security but also to make it more commercial.

The sector was depend on the government support financially, where they invested quite heavily in irrigation, infrastructure development and helped the farmers to access to financial services as well as mechanization in terms of cultivation, plantation, production and harvest. Till 2005, farmers did not understand the importance of working with banks on one hand and the banks did not also understand the importance of working with farmers. Due to the effort made in agricultural system, financial institutions started to invest in agriculture where 8% of their portfolio was put in agriculture and the aim is to increase up to 18% in next three years. The critical point according to him is that financial institutions don't have expertise in this domain and this has been highlighted by the director of banks supervision in BNR as well as CEO of BDF during the interview conducted. That is interpreted as unawareness of agriculture industry or it is not the priority at all.

The Ministry has worked together with the financial institutions to handle some challenges considered as the high risk for them, so far there is insurance companies which cover agriculture risks. Considering the opportunities which are in agriculture, Rwanda has up to now more than 200 projects owned by private investors which are being financed with their own capital compared to 3 only projects in 2000. From 2005 the financial sector starts to invest in other value chains apart from coffee and tea which are maize, rice, Irish potatoes, soy beans, cassava, banana and wheat through Crops Intensification Program (CIP) mostly Bank populaire, Development bank of Rwanda and KCB Bank as well. It is believed that if financial institutions continue to provide their support, they will achieve the target of 8.5% of GDP growth every year in agriculture

compared to the growth of 5-6% for the last years however, the big gap in agriculture banking is still challenge. Nonetheless, this will require more financial resources in order to increase productivity.

It is important to note that the Ministry has selected seven crops as mentioned above that will be the focus in 8 years to come which will contribute to food security as well as generation income for the household. Secondly, the focus will be on extension that and use of inputs, to know how to plant, to prepare the land and the post-harvest services as well as training. Thirdly, the government is investing in infrastructure across the country especially for those areas that experienced drought so that their production may not be affected. The government also decided to mechanize the agriculture. Since the foundation was made, the Ministry believes that private sector can take over and drive economy through agriculture financing.

Land has been consolidated and cooperatives have been formed across the country which was also mentioned by the Director of Banking Supervision. Talking about the challenges, the State Minister of -MINAGRI mentioned land scarcity is one of the biggest challenges however, the government is doing the best in terms of land consolidation in order to use efficiently and effectively what is existing. The Minister also believes that the Agricultural Bank would be a solution for agriculture financing if is doing differently from other by taking into account the needs of the farmers.

Going concern to the establishment of Agricultural bank, the ministry of agriculture and Animal resource has welcomed the idea and would like to support any bank that is investing in agriculture; they added that it is added value to what government is doing; this is the shared ideal with the director of banking and insurance supervisor in BNR. The government has been discussing about creation of agricultural bank but it remains as good idea which is still underway, this interview is in relationship with the theory of King and Levine cited from(Mehrraaa, 2014) in 80 countries surveyed discovered that, those with high level of financial activities grew fast than those with less financial activities. The honorable was added that more finance is need to support farmers especially youth who are engaged in agriculture because for them is difficult to access the finance.

The minister has mentioned that the government is encouraging the private sector to drive the economy. That is the reason why they are reluctant to establish the agricultural bank however; they are convinced that if necessary it will be created in future depending on the

priority and resources available. To deal with the existing challenges in agricultural finance, they are working closely with the existing banks by encouraging them to invest in agriculture. Indeed, BRD which is a great partner with government and the key shareholder is in the process of creating a separate department which is in charge of agricultural finance. Notwithstanding, that bank should have diversified products that are easy to access and that respond to the needs of farmers(NSANGANIRA T. , 2015)

4.4. Critical analysis of findings

The findings reflect the objectives that were outlined in the research proposal and serve as assumptions while answering to the research questions. The findings indicate that there is a tendency for borrowers to improve their living as well as to increase the credit limit due the financial inclusion services as the eligibility conditions, proximity as well affordability is favorable for them. There is 416 SACCOs across the country, 10 commercial banks, 1 development bank, 1 cooperative bank and 4 microfinance banks which are considered as significant for their projects. However, the loans disbursed from financial institutions are limited regardless the potentials the sector holds.

This revealed to the researcher that the distribution channels exist but the usage is a core issue. Therefore, financial institutions need to restructure their agricultural products to match with the agriculture borrowers needs as well as to consider their characteristics (CAS&CIMDA., 2012) if not the agriculture sector will remain unproductive not contribute to the gross domestic product. Thus potential opportunities are much more than the challenges considering the updated information.

During the research, the researcher noted that the banks are not taking advantages of these opportunities even the farmers. Only, it is very important to note that the MINAGRI has paved the way for the investors, the main challenges were mitigated i.e. the challenges associated infrastructure even though it is not completely done, MINAGRI is still dealing with the infrastructure system across the country including irrigation system.

The researcher noted that the farmers have experience in agriculture according to the responses they provided. It is such an opportunity for the investors to enter immediately with limited training. MINAGRI together with BDF have already offered technical support through agriculture extension program. Additional to that, farmers are in cooperatives across the country which gives an opportunity for analysis of their projects. MINAGRI, BNR and BDF mentioned that there are more opportunities for those who

want to invest in agricultural bank in Rwanda. That is also supported by the economy growth and contribution of agriculture sector on that growth(Igihe, 2014)

As explained by the interviewed people, agriculture is all about value chain and the finances are required for direct investment. Agriculture is supposed to grow from 5.8% to 8.5% p.a by 2018, people living under primarily agriculture sector to reduce from 34% to 25% with focus on agro processing, exports to increase in average from 19.2% to 28% p.a and imports to be maintained at 17% average growth.(RDB., 2015). Depending on high demand in agricultural financing which is diversified, the very low portfolio in agriculture requires more specialized banks in domain.

As mentioned in this research through different point of view of interviewed, the agriculture sector offers the opportunities to the investors to open agricultural bank. The critics were made to answer if the agricultural bank in Rwanda can be an opportunity to the farmers to grow their agriculture productivity and uplift the national economy. The findings proved that the Agriculture Bank is the solution for the farmers as the access to finance is a key factor to boost the sector and the increase of the production will depend on how well the agriculture is financed.

CONCLUSION

The researcher found out that the Agricultural Bank can be a good solution and offer opportunities to the farmers as well as to the Rwandan citizens only if it offers more and better services than those being offered by the commercial banks. The different respondents have confirmed that there are more opportunities in agriculture than challenges also the farmers are more interested to bank in their own bank than commercial banks or other financial institutions reason why they don't understand their needs. It is also important to note that the political, economic, social, technology, environmental and legal environments. PESTEL (Johnson, 2009) analysis offers also opportunities to the new investors in Rwanda. Politically, the government is fully involved and provides needed support for investors which are supported by the programs and policies putted in place. Also security is not an issue in Rwanda and that is a prerequisite for internal and external investors to come to start investing in a country. Though the mind set of Rwandese towards agriculture is changing year by year and people's livelihoods have greatly improved (GoV, 2013), technology seems to be taking over and Rwanda is being led by innovations in agriculture. With this regards, the issues

of high risk occurred in agricultural is minimized by the insurance companies which are interspersed to invest in agriculture again; necessary regulations and rules have been put in place to facilitative business registration. As mentioned earlier in this research, the agriculture sector is improving and we can conclude that the investments made at both macro and micro levels are promising good production which will attract the investors.

CHAPTER5: CONCLUSION AND RECOMMENDATIONS

This research investigated the opportunities and challenges in agricultural banking in Sub-Saharan countries: Rwanda perspective. Agriculture financing in Rwanda improved over the last decade. Farmers were financed through existing financial institutions. The findings showed that the opportunities to invest in agriculture are so many compared to the challenges in this sector. From the descriptive, it is clear that the government has invested significantly in agriculture with an intension to pave a way for the investors as well as to change the perception of agriculture in Rwanda which was mainly practiced as subsistence farming.

The data from BNR shows low level of involvement of financial institutions in agriculture financing in terms of loans, consequently, agriculture portfolio is still low compared to other sectors. However, the sector seems to be on high demand in agriculture in terms of finance as growth is expected in three years to come (if the trend remains positive) otherwise agriculture will drive the national economy. In comparison with present challenges in agriculture, the research findings shown that agriculture was the most unsafe sector from decades ago but recent studies revealed that agriculture is no longer the same due to different government policies that were putted in place to promote the sector.

Though, the challenges discussed in this paper were mitigated up to some level, e.i; the insurance are more interested to cover the risks faced by the farmers, the irrigation system are made in place for some parts in the country and the farmers are shifting from substance agriculture to market oriented and the banks are slightly start to finance agricultural projects. Based on the information gathered from the involved people as well as the reviewed literature while doing investigation, the research concluded that the ideal to establish agricultural bank is supported by all people involved. In addition, this bank will also help in tackling the problem of unemployment as it will provide jobs to graduates from Universities also; it will create capital for the farmers and to reduce poverty as well as contribution to the economy growth.

The bank will also add to what has been done through the existing banks and the portfolio for agricultural will increased, corporate social responsibility will be key for this bank again, it will be a channel for all scuttled resource destined for the agriculture as it will be

consolidated and monitored through one bank and, finally the government will easily achieve the fixed objectives in its vision 2020.

The researcher recommends the government to reduce taxes for investment made in this particular sector because they result high investment costs. Even though this bank is not limited to either the private investors or government , it is recommended to the government to own that bank at the beginning as the agriculture is not yet attract the investors yet the government is involved and spend a lot in this sector. Another recommendation to the Government of Rwanda is that it should have a memorandum of understanding with different insurance companies to cover the risks. While the bank is not yet established ,it is recommended to the government of Rwanda to negotiate with existing financial institutions to have a department of agriculture with employees who have expertise in that domain. This department will be in charge of evaluation and assessing loan requests made by farmers.

The researcher finds that many financial institutions are reluctant to invest in agriculture because there is little information on the opportunities in agriculture. The researcher urges future researchers to propose ways by which information about agriculture can be collected, disseminated, stored, and accessed also to investigate the other part of the country costs

It is necessary for the government to have sustainable irrigation systems, extension programs and mechanization of agriculture that will continue to attract the investors not only financial institutions but also other actors in economy spectrum. On the other hand, many farmers who borrowed from formal credit system lack necessary skills and training in addition to limited access to the markets and technology. Consequently, when these farmers have access to credit to invest in their existing businesses or to start-up new businesses or small enterprises, if also they are trained and have the sufficient market for their production, the sustainability of these businesses will no longer be a problem. The researcher noted that it is crucial for financial institutions to offer “credit plus services” to the borrowers. These are services additional to credit such as trainings, business facilities in marketing and business plan preparation. This helps the borrowers to sustain income generating activities supported loans received from banking institutions. The research has concluded that the there are opportunities to invest in agriculture and therefore, the establishment of agricultural bank is supported

Finally, this research did not cover the whole country as well as the entire sector even though the data collected may be said to be representative. It is therefore recommended that subsequent researches be carried to cover others parts of the country that were not covered.

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APPENDICES

APPENDIX QUESTIONNAIRES