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## The Contribution of Development Banks to Agricultural Sector Investment Promotion in Rwanda A Case Study of Rwanda Development Bank (2009-2014)

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### **Abstract:**

*This study aimed at examining the contribution of Rwanda Development Bank (BRD) investment loans to primary sector investment promotion in Rwanda. The specific objectives were to examine the effects of BRD investment loans on investments in agriculture. Literature on the impact of investment loans in promoting primary sector projects was reviewed. The study population comprised of BRD farmers located all around the country and staff. The famers considered for the interest of this study were those enrolled in the year 2009 and were still active clients of BRD in the year 2014. . The researchers examined the effects of BRD investment loans on famer's agriculture, fisheries and livestock projects for a period of 6 years (2009 to 2014). A population of 120 people consisting of BRD clients (farmers) and staff was considered and sample of 75 respondents was chosen for the purpose of study. To collect adequate data for this study, a questionnaire was used as a tool to collect primary data and documentary review was employed to collect secondary data. Special program for social scientist (SPSS) was used to analyze data collected and to establish a correlation between the independent and the dependent variables. Findings of the study revealed a significant correlation between BRD investment loans to agriculture, fisheries and livestock sectors demonstrated by; increased cash crop production in the agriculture sector thus increased farmers' income and standard of living accordingly. Increased fishing production, which translated to improved fishers' income and economic welfare and promotion of modern technical skills, which created more employment opportunities to the fishermen. It was further revealed that BRD loans helped the fishing sector to acquire more fishing equipments like fishing boats and nets, establish fishing ponds at their respective fishing sites, all of which increase on fishing productivity and in turn boosting the social and economic welfare as demonstrated by the mean of 4.8133 of the respondents views. In livestock sector, BRD investment loans have helped them to acquire more and better breads of livestock, modern technical skills of farming through training received, develop and improve land use for livestock farming contributing to increased milk production as well as boosting farmer' social and economic welfare. These contributions illustrate the significant contribution of BRD investment loans to the promotion of agriculture, livestock and fishing sectors which are the biggest and key drivers of Rwanda's economic growth and development. However, the study revealed some outstanding challenges that BRD and its farmers are facing in helping the government to achieve its 2020 private investment target of which among others are high loan interest rates that make it hard for farmers to afford, natural disasters that include prolonged droughts, short loan payment schedules and collaterals that farmers require to secure loans.*

**Keywords:** Investment promotion, Development banks, Agriculture, Agricultural investment, Development Bank of Rwanda (BRD)

### **1. Introduction**

The need to stimulate and manage economic growth is a global topic of up most importance in advanced, emerging, and less-developed countries. While the subject is not new, given the continued population growth in many less developed countries and the changing demographic and widening income disparities in many of the most advanced economies, the issue of economic growth has taken on increased importance. Economic historians, such as Patrick (1966) and Richard (2003), find that the most successful economies tend to be ones that developed sophisticated financial systems at an early stage. Financial sector development (FSD) through their intermediation process plays a leading role in economic growth of both developed and developing country.

Financial intermediation is the process through which financial institutions transfer financial resources from surplus units of the economy to deficit ones. However, for financial institutions to discharge this role effectively, they have to be developed in terms of liquidity, variety of financial assets and efficiency in credit allocation. Rajan and Zingales (2002) concisely reasoned that a developed financial sector should reflect the ease with which entrepreneurs with sound projects can obtain financial resources, and the confidence with which investors anticipate adequate returns. The system should also be able to gauge, subdivide, and spread difficult risks, letting them rest where they can best be borne and should be able to do all these at low cost. With this, more savings, investment and high productivity will be ensured and hence economic growth.

However, despite these potentials of financial development in influencing economic growth, economists and policy makers seemed to have neglected it, until when Schumpeter (1952) observed that financial markets (banks in particular) play a significant role in the growth of the real economy by channeling funds from savers to borrowers in an efficient way to facilitate investment in physical capital, spur innovation and the 'creative destruction process'. He contends that entrepreneurs require credit in order to finance the adoption of new production techniques and banks are viewed as key agents in facilitating these financial intermediating activities and promoting economic development especially developing countries like Rwanda rebuilding the economy after the war. Therefore, the creation of credit through the banking system was an essential source of entrepreneurs' capability to drive real growth by finding and employing new combinations of factor use in Rwanda (Allen and Ndikumana, 1998).

Rwanda is a small land locked country in the East African region with a population of over 11 million, (DHS 2010). Its major economic potential is agriculture and service industry. Its major exports are tea and coffee. Rwanda's service industry is one of the most growing sector in the country since the 1994 genocide. Its service sector contributed to 44.5% of GDP in 2012, (National bank annual report, 2013). Rwanda's 1994 genocide was one of the most devastating moments the country has ever experienced. Not only did it lead to the death of over one million people in less than 100 days but also destroyed the country's infrastructural set up that was already less developed. Despite the genocide, post Genocide Rwanda is impressively different to pre-genocide, the country is one of the most favorable and safest places to do business in Africa, its economy has grown by over 6% in the last 10 years, GDP/Capita has increased from 200USD to 540USD from 1994 to 2010 (IPAR, 2012). More than 60% of its annual budget is self-financed, the country is on impressive track to achieve all MDGs and the current vision of the country is to become a middle income country by 2020 becoming Singapore of Africa. According to the National Institute of Statistics of Rwanda (2014), Rwanda's economy is growing very fast where it has grown by 7.4 percent in the first quarter of 2014 compared to 4.7 percent registered in the same period in 2013. The main contributors include the service sector which contributed 48 percent of GDP while agriculture contributed 32%. The Industry sector 15 percent of GDP and 5 percent was attributed to tax adjustment and subsidies.

One significant factor that leads to the increase in the service sector was because the government has embarked upon an ambitious program to modernize the investment framework to promote investment in the country where by banks intermediaries in one of them. Banks plays a big role in promoting investment in Rwanda, more especially those that were put to harness investment in the country for example Rwanda Development Bank (BRD) which is our case study. Development Bank of Rwanda commonly knowingly referred to its French name Banque Rwandaise de Development, is one of the banks in Rwanda which is a development bank and a commercial bank which was licensed by the National Bank of Rwanda and it began its operations 1967 as a long term financial services provider, with the financing geared towards national development projects. As the Government of Rwanda's investment arm, BRD's financial development objectives is focus on the priority sectors of the economy and it aims at becoming the first stop for all long term investments into Rwanda's key sectors and to be the prime driver of viable primary sector investments. According to BRD's 2011-2015 strategic plan (2010), agriculture and agro industry among other sectors, has been the main concern of Rwanda development Bank in promoting Rwanda's development, during the period of 2005 to 2009, agriculture and agro industry accounted for over 45% of BRD's lending and investment in agriculture sector increased annually by RWF 398 million from 2005 to 2011.

The major focus of this research is to assess the contribution of Rwanda development bank as an institution that was put to further/harness investment in Rwanda to the national primary investment performance more especially in the agriculture sector, which is a major source of income to more than 70% of Rwandans. It can now be concluded that BRD credit and advice on primary investment has improved productivity of crop production, fishing and livestock sector to higher extent, but still a lot needs to be done in order to bridge the remaining gap, especially if the spelt out recommendation is put into considerations.

## 2. Statement of the Problem

Rwanda's vision 2020 projects that by the year 2020, the country will be transformed into a middle income Country with 20% primary investment and 8% secondary investment over GDP (Vision 2020, 2000). In 2014 after 14 years down the road, the private and public investments over GDP are at 8.5% and 6.4% respectively. Despite secondary investment being on a good track, the primary investment is still lagging significantly behind the target of the year 2020. For Rwanda to achieve its target of 20% primary investment over GDP in the year 2020, banks most, especially, development banks are one of the major institutions that the country is counting on, in helping it achieve this target. Development banks are key players in providing loans to the Rwandan entrepreneurs to boost investment that will later create a significant number of jobs to unemployed nationals and thus generating incomes that will enable them to boost their saving and then be the next investors.

Rwanda development Bank (BRD) staff and its clients in the primary sector field are taken as a case study in this research project. BRD is the only single and leading development bank that was commissioned by the government of Rwanda to serve as its investment arm aimed at financing the nation's development objectives with a focus on priority sectors of the economy. Despite current initiatives in financing agriculture sector, there is dearth of information on how much BRD has/is contributing to investment in the agriculture sector in Rwanda.

This study is thus intended to assess how BRD investment loans have contributed to promoting primary investments in different sectors of the economy including: Agriculture (Crop production), Livestock & Fisheries, in the last six years since 2009.

### 3. Research Objectives

#### 3.1. General Objective

The general objective of this research project is to examine the contribution of Development banks to primary investment promotion in Rwanda

#### 3.2. Specific Objectives

The specific objectives underlying this study were;

- i. To identify services offered by BRD in promoting investment in agriculture
- ii. To assess effects of BRD Credit and training in promoting investment in agriculture
- iii. To analyze effects of BRD training investments in promoting agriculture investments
- iv. To assess effects of BRD Credit to promoting investment in fisheries sector of agriculture

### 4. Research Questions

The study was set to answer the following research questions;

- i. What are the services offered by BRD in promoting investment in Rwanda?
- ii. What are the effects of BRD Credit and investment training on growth of crop production in Rwanda?
- iii. What are the effects of BRD Credit and investment training on growth of animal husbandry in Rwanda?
- iv. What are the effects of BRD Credit and investment training on fisheries sector in Rwanda?

### 5. Methods and Materials

#### 5.1. Research Design

This study used a descriptive survey basing on quantitative and qualitative approaches to analyze the contribution of Rwanda development bank to primary investment promotion in Rwanda. Grinnell (1990) defines descriptive research as a research that describes phenomena, as they exist, it is used to identify and obtain information on the characteristics of a particular problem. For this case the researcher analyzed primary sector investments financed by BRD in the country in order to ascertain the effect of development bank in the growth of primary sector. The relationship was established using Pearson correlation.

#### 5.2. Target Population

The study population was 120 BRD stakeholders comprising of 106 farmers, 11 loan officers and 3 investment advisors in order to get the benefits BRD's investment promotion has contributed in the economic growth of the country.

Department	Population	Sample size	Sampling Technique
Agricultural	47	32	Random
Livestock	35	20	Random
Fisheries	20	10	Random
Loan Officers	15	10	Random
Investment advisors	3	3	Census
<b>Total</b>	<b>120</b>	<b>75</b>	

Table1: Target population and Sample design  
Source: BRD (2015)

#### 5.3. Sample Design

Slovin's formula was used to select a sample from the population with a desired degree of accuracy. A confidence interval of 95% was used based on the assumption that there are 95 chances in 100 (or .95 in 1) that the sample results represent the true condition of the population within a specified precision range against 5 chances in 100 (or .05 in 1) that it doesn't. The population size of this research was 120 employees and staff of BRD. We took a sampling error of 5%, and we ended up with a sample size of 75 respondents.

#### 5.4. Sampling Techniques

The selection of the respondents was based on purposive sampling where data was collected from respondents who have suitable information.

## 5.5. Data Collection

### 5.5.1. Data Collection Instruments

The primary data was collected using questionnaire tool. The questionnaire was developed in a language the respondents understood very well. Respondents were assured of confidentiality of their opinions and thus felt comfortable responding to all questions in the questionnaire tool. Secondary data that included: bank financial statement, annual reports and other relevant reports were collected from BRD. Both primary and secondary data provided the needed information to answer research questions and objectives of the study and generated findings were used to make inferences to the entire population.

### 5.6. Data analysis

All collected data was analyzed using SPSS. This involved data coding, editing and tabulation especially quantitative data. The purpose of all these was to make the information clear and understandable for other people. Qualitative analysis techniques were used. The qualitative analysis techniques were complemented by some statistics that were mainly obtained from the secondary data (descriptive) that was obtained through documentary analysis performed on secondary data collected from the case study organization. The researcher used Pearson correlation test to establish the relationship between the variables.

## 6. Research Findings and Discussion

### 6.1. BRD's Agricultural Loan Services in Rwanda

Assessing whether BRD provides loan services to agricultural sector in Rwanda

#### 6.1.1. Services Provided by BRD to Agricultural Sector in Rwanda

The table 2 shows respondents' views on the services provided by BRD to agricultural sector in Rwanda.

Services Provided to Agricultural Sector	Mean	Std. Deviation	Comments
BRD provides Equity services	4.9600	.19728	Very strong homogeneity
BRD provides Advisory services & capacity building services	4.9600	.19728	Very strong homogeneity
Valid sample	75		

Table 2: Services provided by BRD to agricultural sector in Rwanda  
Source: Primary data, 2015

Table 2 shows various services provided by BRD to agricultural sector in Rwanda and the findings were analyzed in details as follows;

BRD provides loan services: The finding was reflected by mean of (4.9600) and standard deviation of (.19728). This implies that BRD's investment loan is one of the major objectives of the bank in order to develop agriculture, which employs over 70% of Rwanda's total population and it is major economic activity in the country.

BRD provides Advisory services & capacity building services: It was reflected by mean of (4.9600) and standard deviation of (.19728). This implies that advisory services are compulsory before the loan is provided to the client in order to ensure that the loan is utilized effectively. There is also capacity building in form of training and monitoring of the loan to ensure that the business or project is moving in the right direction as per the plan.

#### 6.1.2. Terms of Loans Offered by BRD

Table 3 below shows the respondents' view on terms of loans offered by BRD

Terms of Loan	Frequency	Percent	Valid Percent	Cumulative Percent
Short term	37	49.3	49.3	49.3
Medium and long term	38	50.7	50.7	100.0
Total	75	100.0	100.0	

Table 3: Terms of loans offered by BRD  
Source: Primary data, 2015

Table 3 shows that 51.7% of the respondents agreed that BRD offers medium and long term loan while 49.3% short term loans to its clients. This implies that BRD offers loan in all terms for example short, medium and long terms depending on the client's development plan and capacity of payment.

### 6.1.3. BRD's Loan Services Promotes Primary Investment in Rwanda

Table 4 below shows the respondents view on whether BRD's loan services promotes primary investment in Rwanda.

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	10	13.3	13.3	13.3
Not sure	5	6.7	6.7	20.0
Agree	39	52.0	52.0	72.0
Strongly agree	21	28.0	28.0	100.0

Table 4: BRD's loan services promotes agriculture investment in Rwanda

Source: Primary data, 2015

Table 4 shows that, 80% of the respondents agreed that BRD's loan services promote investment in Rwanda, 6.7% were not sure whether BRD's loan services promote investment in Rwanda, and 13.3% disagreed. This implies that BRD's loan services promote investment in Rwanda.

## 6.2. Effects of BRD Loans on Crops Production in Rwanda

### 6.2.1. Assessing the Effects of BRD Loans on Crops Production in Rwanda

Table 5 shows the respondents view on the effects of BRD loans on crop production in Rwanda

Effects of BRD Loans on Agricultural Sector in Rwanda	Mean	Std. Deviation	Comments
BRD services has helped improved on crop production technical skills through training	4.4133	.85572	Strong heterogeneity
BRD services has helped to acquire different farming equipments like green house	4.5467	.75861	Very Strong heterogeneity
BRD services has helped acquire more land for farming	4.4267	.98877	Strong heterogeneity
BRD services has helped to increase crop productivity	4.6933	.78797	Very Strong heterogeneity
BRD services has improved on agricultural income by promoting crops trade	4.4800	.81141	Very Strong heterogeneity
BRD services has created more employment opportunity in crop production	4.5067	.87570	Very Strong heterogeneity
Valid sample	75		

Table 5: Effects of BRD loans on Crops production in Rwanda

Source: Primary data, 2015.

Table 5 shows various Effects of BRD loans on Crops production in Rwanda and the findings were analyzed in details as follows: BRD services have helped to improve on crops production technical skills through training: respondents view is reflected by a mean of 4.4133(strong) and standard deviation of .85572(heterogeneity). This implies that BRD loans equip farmers with opportunity to acquire agricultural skills either through short term training or long crops production training, although some respondents disagreed that BRD loans has not maximumly equipped farmers with opportunity to acquire agricultural skills as expected as observed by mean above which was not very strong as expected. BRD services have helped to acquire different farming equipments. Respondents view is reflected by a mean of 4.5467 (very strong) and standard deviation of .75861(heterogeneity). This implies that to some extent BRD loan services have helped farmers to acquire different farming equipments to expand and grow their crops since productivity depends on land fertility.

BRD services have helped to acquire more land for farming: The respondents view is reflected by a mean of 4.4267 (strong) and standard deviation of .98877 (heterogeneity). This implies that BRD has helped the farmers acquire more land in spite of the land policy in the country which limits the size of land ownership. BRD services have helped to increase Crops productivity: The respondents view is reflected by a mean of 4.6933 (very strong) and standard deviation of .78797(heterogeneity). This implies that BRD training and advisory services through their agricultural technical experts as well provision of equipments and firm fertilizers increases productivity of crops in Rwanda to some extent as seen by mean above which is not very strong. BRD services have improved on agricultural income by promoting cash crop trade: The respondents view is reflected by a mean of 4.4800 (strong) and standard deviation of .811417(heterogeneity). This implies that since BRD provides training and advisory services through their

technical team, provides money to support the activities inform of long term training, buying of more firm land and saving accounts depending in the types of farming or crops your involved in.

BRD services have created more employment opportunity in crops production: The respondents view is reflected by a mean of 4.5067 (very strong) and standard deviation of .87570 (heterogeneity). This implies that since the loan leads to expansion and growth of agricultural firm, it is most likely that the loan increases employment opportunity in crops production because it builds capacity.

### 6.2.2. Relationship between BRD Services and Crops Production in Rwanda

Table 6 below assesses the Relationship between BRD services and crops production in Rwanda using spearman's correlation

			BRD loan	Agriculture
Spearman's rho	BRD loan	Correlation Coefficient	1.000	.947**
		Sig. (2-tailed)	.	.000
		N	75	75
	Agriculture	Correlation Coefficient	.947**	1.000
		Sig. (2-tailed)	.000	.
		N	75	75

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

Table 6: Relationship between BRD services and Crops production using spearman's Correlation

According to the results, sample size N is 75 and the significant level is 0.01, the results indicate that BRD loan has positive strong correlation on crop production equal to .947\*\* and the sig is .000 which is less than 0.01. When sig. is less than significant level, researchers conclude that variables are correlated. It is therefore concluded by the researcher that there is a statistically significant correlation between BRD loan and crop production in Rwanda because it improves on crops productivity, improves on agricultural technical skills through training in Rwanda, promotes more job opportunities among the farmers, it improves on agricultural income by promoting agricultural trade.

### 6.3. Effects of BRD Loan Services on Fisheries Investment in Rwanda

#### 6.3.1. Assessing the Effects of BRD Loan Services on Fisheries Investment in Rwanda

Table 7 below assesses the respondents view on the effects of BRD loan services on fisheries investment in Rwanda.

Effects of BRD Loans on Fisheries Investment in Rwanda	Mean	Std. Deviation	Comments
BRD services has helped improved on fisheries technical skills through training	4.5200	.85992	Very Strong heterogeneity
BRD services has helped to acquire different fishing equipments like boats and nets	4.8133	.56217	Very Strong heterogeneity
BRD services has helped establish fishing pond	4.4267	.64038	Strong heterogeneity
BRD services has helped to increase fishing productivity	4.5467	.72211	Very Strong heterogeneity
BRD services has increase on the income by expanding on fishing trade.	4.4533	.90484	Very Strong heterogeneity
BRD services has created more employment opportunity in fishing sector	4.4400	.85803	Strong heterogeneity
Valid sample	75		

Table 7: Effects of BRD loans on fisheries investment in Rwanda

Source: Primary data, 2015

Table 7 shows effects of BRD loans on fisheries investment in Rwanda and the findings were analyzed in details as follows;

BRD services have helped to improve on fisheries technical skills through training: The respondents view is reflected by a mean of 4.5200 (very strong) and standard deviation of .85992 (heterogeneity). This implies that BRD improve on fisheries technical skills through training and advises offered through their fisheries technical skills, though it does not apply on all fisheries in Rwanda

BRD services have helped to acquire more fishing equipments like boats and nets: The respondents view is reflected by a mean of 4.8133 (very strong) and standard deviation of .56217 (heterogeneity). This implies that to a large BRD services have helped them in acquiring more fishing equipments like boats and nets to its clients, which is a one of the major objective of the development loan in developing countries. BRD services have helped to establish fishing ponds: The respondents view is reflected by a mean of 4.4267 (strong) and standard deviation of .64038 (heterogeneity). This implies that BRD provides loan services to its clients helped them establishes fishing ponds in order to increase fishing productivity.

BRD services have helped to increase fishing productivity: The respondents view is reflected by a mean of 4.5467 (very strong) and standard deviation of .72211 (heterogeneity). This implies that BRD loan services helped fish farmers to increase on their productivity

through establishment of fishing ponds, technical services and advices got on fishing techniques. BRD services have improved on fisheries income by promoting fishing trade: The respondents view is reflected by a mean of 4.4533 (strong) and standard deviation of .90484 (heterogeneity). This implies that BRD services improve on fisheries income by promoting fishing trade in Rwanda through establishment of fishing ponds and providing money to expand on the business.

BRD services have created more employment opportunity in the fishing sector: The respondents view is reflected by a mean of 4.4400 (strong) and standard deviation of .85803 (heterogeneity). This implies that BRD services created more employment opportunities in the fishing sector in Rwanda. We can therefore conclude that BRD services have positively contributed to the growth of the fishing sector in Rwanda as the findings have suggested above.

#### 6.3.2. Relationship between BRD Services and Fishing Sector in Rwanda Using Spearman's Correlation

Table 8 below assesses the relationship between BRD services and fishing sector in Rwanda using spearman's correlation

		BRD Investment	Fisheries
Spearman's rho	BRD Investment	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	75
	Fisheries	Correlation Coefficient	.956**
		Sig. (2-tailed)	.000
		N	75
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 8: Relationship between BRD services and fishing sector in Rwanda using Spearman's correlation

According to the results, sample size N is 75 and the significant level is 0.01, the results indicate that BRD loan has positive strong correlation on fishing equal to .956\*\* and the sig is .000 which is less than 0.01. When sig. is less than significant level, researchers conclude that variables are correlated. It is therefore concluded by the researcher that there is a statistically significant correlation between BRD loan and fishing in Rwanda because it improves on fishing productivity, improves on fishing technical skills through training in Rwanda, promotes more job opportunities among the fishermen, it improves on fisheries income by promoting fishing trade and also help in acquiring more fishing equipments like fishing boats and nets hence implying a positive relationship basing on the strong positive correlation above. However due to some challenges observed BRD services have failed to fully meet their target as it was expect.

#### 6.4. Effects of BRD Loan Services on Livestock Investment in Rwanda

Analysis below shows effects of BRD loan services on livestock production in Rwanda.

##### 6.4.1. Assessing the Effects of BRD Loan Services on the Livestock Investment in Rwanda

Table 9 below assesses the effect of BRD loan services on the livestock investment in Rwanda

Effects of BRD Loans on Livestock Investment in Rwanda	Mean	Std. Deviation	Comments
BRD services has helped improved on livestock modern technical skills through training	4.8267	.41503	Very strong homogeneity
BRD services has helped to acquire different modern breed of livestock	4.8000	.40269	Very strong homogeneity
BRD services has helped establish more land for livestock farming	4.8000	.40269	Very strong homogeneity
BRD services has helped to increase number of livestock	4.8133	.39227	Very strong homogeneity
BRD services has increase on the income by trading in livestock	4.6533	.47911	Very strong homogeneity
Valid	75		

Table 9: Effects of BRD loan services on the livestock investment in Rwanda

Source: Primary data, 2015

Table 9 shows effects of BRD loans on livestock investment in Rwanda and the findings were analyzed in details as follows;

BRD services have helped to improve on livestock modern technical skills through training. The respondents view is reflected by a mean of 4.8267 (very strong) and standard deviation of .41503 (homogeneity). This implies that BRD loan services is effective in to livestock sector especially through the training and advices from BRD livestock technical team.

BRD services have helped to acquire livestock modern breeds: The respondents view is reflected by a mean of 4.8000 (very strong) and standard deviation of .40269 (homogeneity). This implies that BRD services have helped in acquiring modern breeds of livestock hence promoting livestock sector in Rwanda.

BRD services have helped to establish more land for livestock farming in Rwanda: The respondents view is reflected by with a mean of 4.8000 (very strong) and standard deviation of .40269 (homogeneity). This implies that BRD loan has helped livestock farmers in acquiring more land for livestock farming in Rwanda, this is a great contribution towards promotion of livestock investment in Rwanda. BRD services have helped to increase milk supply: The respondents view is reflected by a mean of 4.8133 (very strong) and standard deviation of .39227 (homogeneity). This agreed that since more numbers of high breed cows increased then this is likely to increase milk production hence increase in milk supply. BRD services have improved on income of the livestock by promoting livestock trade: The respondents view is reflected by a mean of 4.6533 (very strong) and standard deviation of .47911 (homogeneity). This implies that BRD services have improved on livestock income, which makes livestock traders to trade in livestock favorably since the productivity has been increased.

We can therefore conclude that BRD services have contributed positively towards the growth of livestock as the findings above have suggested.

#### 6.4.2. Relationship between BRD Services and Livestock Sector in Rwanda Using Spearman's Correlation

Table 10 below assesses the relationship between BRD services and livestock sector in Rwanda using spearman's correlation.

			BRD credit services	Livestock
Spearman's rho	BRD credit services	Correlation Coefficient	1.000	.964**
		Sig. (2-tailed)	.	.000
		N	75	75
	Livestock	Correlation Coefficient	.964**	1.000
		Sig. (2-tailed)	.000	.
		N	75	75

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

Table 10: Relationship between BRD services and livestock sector in Rwanda using spearman's correlation

According to the results, sample size N is 75 and the significant level is 0.01, the results indicate that BRD loan has positive strong correlation on livestock farming equal to .964\*\* and the sig is .000 which is less than 0.01. When sig. is less than significant level, researchers conclude that variables are correlated. It is therefore concluded by the researcher that there is a statistically significant correlation between BRD loan and livestock farming in Rwanda because it improves on productivity, improves on livestock modern technical skills through training in Rwanda, it improves on livestock income by promoting livestock trade and also help in acquiring more land for livestock farming hence a positive relationship basing on the strong positive correlation above.

#### 6.5. Summary of Relationship between BRD loan Services and Primary Investment

The table 11 indicates the summary of relationship between BRD loan services and primary investment.

Independent Variable	Dependent variable				
		Crop production	Fishing	Livestock	
BRD LOAN SERVICES	PRIMARY INVESTMENT				
	Effects of credit and Training on investment	Pearson Correlation	.947**	.956**	.964**
		Sig. (2-tailed)	.000	.000	.000
		N	75	75	75

\*\* . Correlation is significant at the 1% (2-tailed).

Table 11: Summary of Relationship between BRD loan services and primary investment

The table 11 gives the statistical evidences concerning the relationship between loan services and increase in crop production. According to the results, sample size N is 75 and the significant level is 0.01, the results indicate that BRD loan has positive strong correlation on crop production equal to .947\*\* and the sig is .000 which is less than 0.01. When sig. is less than significant level, researchers conclude that variables are correlated. It is therefore concluded by the researcher that there is a statistically significant correlation between BRD credit services and crop production in Rwanda because it improves on crops productivity, improves on agricultural technical skills through training in Rwanda, promotes more job opportunities among the farmers, it improves on agricultural income by promoting agricultural trade.

The evidences also indicated that BRD credit has a strong positive correlation to increase productivity of fishing. According to the results, sample size N is 75 and the significant level is 0.01, the results indicate that BRD loan has positive strong correlation on fishing equal to .956\*\* and the sig is .000 which is less than 0.01. When sig. is less than significant level, researchers conclude that variables are correlated. It is therefore concluded by the researcher that there is a statistically significant correlation between BRD loan and fishing in Rwanda because it improves on fishing productivity, improves on fishing technical skills through training in Rwanda,



promotes more job opportunities among the fishermen, it improves on fisheries income by promoting fishing trade and also help in acquiring more fishing equipments like fishing boats and nets hence implying a positive relationship basing on the strong positive correlation above. The evidences also indicated that BRD credit has a strong positive correlation to increase productivity of livestock. According to the results, sample size N is 75 and the significant level is 0.01, the results indicate that BRD loan has positive strong correlation on livestock farming equal to .964\*\* and the sig is .000 which is less than 0.01. When sig. is less than significant level, researchers conclude that variables are correlated. It is therefore concluded by the researcher that there is a statistically significant correlation between BRD loan and livestock farming in Rwanda because it improves on productivity, improves on livestock modern technical skills through training in Rwanda, it improves on livestock income by promoting livestock trade and also help in acquiring more land for livestock farming hence a positive relationship basing on the strong positive correlation above.

## 7. Conclusions and Recommendations

### 7.1. Conclusion

This study aim at examining the contribution of Development banks to primary investment promotion in Rwanda using BRD as a case study and the findings reveals that BRD investment loans affect the growth of agricultural, fishing and livestock sectors. From the findings it was observed that BRD investment has a significant contribution on the growth of agricultural sector in that it helped to improve on agricultural technical skills through training, acquire different farming equipments like green house, acquire more land for farming, increase agricultural productivity, it improved on agricultural income by promoting agricultural trade and it created more job opportunities. In fishing sector it has helped to improve on fisheries modern technical skills which created for the more employment opportunities to the fishermen in the country, it helped, it also helped the fishing sector to acquire more fishing equipments like fishing boats and nets, it also made them to establish fishing ponds in the sector which increase on fishing productivity and in turn their income hence improving their social welfare. In livestock sector it has helped them to acquire more livestock, it improve on their livestock breed, it made hem acquire modern technical skills through training, it helped to establish more land for livestock in the sector, it made them to improve on their milk production which improved their income as well as their social economic. Thus BRD investment promotion in Rwanda plays a positive role in the growth of agricultural sector, which is a key driver to economic growth and development of the country.

### 7.2. Recommendations

The following are recommendations of the study based on its findings:

- BRD investment loans should charge the affordable loan interest rates that can be afforded by farmers, fishermen and the livestock farmers. This will encourage them to apply for more loans to expand their projects and will benefit BRD as well as it will be increasing its uptake of clients.
- BRD investment loans should provide a reasonable payback period that will encourage both farmers and fishermen to acquire more loans for their projects and this will promote growth and development of these sectors and the country at large.
- The government should come up with a policy to support farmers without land titles that are normally required to secure loans.
- Government should come up with irrigation schemes and dams in order to support farmers during prolonged dry season and this will help promote their agricultural production accordingly throughout the year.

## 8. References

- i. Ades A, Di Tella R. (1997). National champions and corruption: some unpleasant interventionist arithmetic. *The Economic Journal* 107(443): 1023-1042.
- ii. Almeida M. (2009) *Desafios da real política industrial brasileira no século XXI*, Texto paradiscussão 1452, IPEA
- iii. African Development Bank/African Development Fund (2007) "Progress Report on Institutional Reforms (Update as of 31 May 1997)" African Development Bank/Africa Development Fund, Abidjan, Côte d'Ivoire.
- iv. African Development Bank/African Development Fund. (2010). "Review of 1994-1995 Post-Evaluation Results". African Development Bank/Africa Development Fund, Abidjan, Côte d'Ivoire.
- v. Allen, F., Gale, D. (1998) Financial Markets, Intermediaries, and Intertemporal Smoothing, *Journal of Political Economy*, 105, 523-546
- vii. Amsden AH. (1989). *Asia's next giant: South Korea and late industrialization*. Oxford University Press: New York.
- viii. Amsden AH (2001) *the rise of 'the rest': challenges to the West from lateindustrializing economies*. Oxford University Press: Oxford.
- ix. Armendáriz de Aghion B. (1999). *Development banking* *Journal of Development Economics* 58: 83 100
- x. Aronovich S, Fernandes AG. (2006). An atuação do governo no mercado de capitais: experiências de IFDs em países desenvolvidos. *Revista do BNDES* 13(25): 3-34.
- xi. Bailey Kenneth d. (1978). *Methods of Social Research*. Macmillan, New York.
- xii. Bhattacharya, S., Thakor, A. (1993) *Contemporary banking theory*, *Journal of Financial*
- xiii. *Intermediation*, (3) *Brazilian National Development Bank Working Paper*, Insuper Institute of Education and Research
- xiv. Bruck N. (1998). The role of development banks in the Twenty-First Century. *Journal of Emerging Markets* 3: 39-67.
- xv. Cameron R. (1961). *France and the economic development of Europe, 1800-1914* Princeton University Press: Princeton.

- xvi. Casu, B., Girardone, C., Molyneux, P. (2006) – Introduction to Banking, Financial Times Press.
- xvii. Claessens S, Feijen E, Laeven L. (2008). Political connections and preferential access to finance: the role of campaign contributions. *Journal of Financial Economics* 88: 554-580.
- xviii. De Han, O., Steinfield, H. and Blackburn H. (1997) Livestock and the environment: finding a balance. Report of a study coordinated by FAO, USAID and the World Bank FAO publishers, Rome Diamond, D. W. (1984) - Financial intermediation and delegated monitoring, *Review of Economic Studies*, 1984, 51 (3): 393–414.
- xix. Dinç S (2005). Politicians and banks: Political influences on government-owned banks in emerging markets. *Journal of Financial Economics* 77: 453-479.
- xx. Donovan, W.G. (1997). “Investing in Rural Development”. A Presentation to the Workshop on Agricultural Intensification in Sub-Saharan Africa: Securing the Production Base held in Addis Ababa, Ethiopia, August 23-27, 1997.
- xxi. Economic Commission for Africa. (1996). “Reviving Primary Investment in Africa: Partnerships for Growth and Development -- Report of an International Conference held in Accra, Ghana 24-27 June 1996”. Economic Commission for Africa, Addis Ababa, Ethiopia.
- xxii. Faccio M. (2006). Politically connected firms *American Economic Review* 96(1): 369-386.
- xxiii. Freixas, X., Rochet, J.C. (2008) - *Microeconomics of banking*, 2nd Ed the MIT Press
- xxiv. Freixas, X., Parigi, B., Rochet, J. (2000)- *Systemic Risk, Interbank Relations and Liquidity Provision by the Central Bank*, *Journal of Money, Credit and Banking*, 2000, (32),611-38
- xxv. Gerschenkron A. (1962). *Economic backwardness in historical perspective*, Harvard University Press: Cambridge.
- xxvi. Grinnell. (1990). *Researcher in Social Work. A primer*. Itasca, Illinois, f.e, peacock publishers.
- xxvii. Heffernan, S. (2005) - *Modern Banking*, John Wiley & Sons Ltd Furtado C. 1959 *Formação econômica do Brasil*. Ed. Fundo de Cultura: Rio de Janeiro.
- xxviii. Hainz C, Hakenes H. 2008. The politician and the banker working paper, Max Planck Institute for Research on Collective Goods
- xxix. Hirschman AO. (1958). *The strategy of economic development*. Yale Economic Press: New Haven.
- xxx. International Fund for Agricultural Development (IFAD) (2009a) *Livestock and land Livestock thematic papers: Tools for project design*. IFAD publishers, Rome, Italy
- xxxi. International Fund for Agricultural Development (2009b) *Livestock and climate change. Livestock thematic papers: Tools for project design*. IFAD publishers, Rome, Italy
- xxxii. International Fund for Agricultural Development (IFAD) (2013) *Smallholders, food Institute of Policy Analysis and Research Rwanda (IPAR) (2012), Report for the African Centre for Economic Transformation (ACET)*,
- xxxiii. Inoue CFKV, Lazzarini SG, Musacchio A. 2011. Can the government, as a minority shareholder, improve firm performance? A study of equity purchases by the La Porta R, Lopez de Silanes
- xxxiv. Kornai J. (1979). Resource-constrained versus demand-constrained systems, *Econometrica* 47(4): 801-819.
- xxxv. Leff,H. (1968). *Economic policy-making and development in Brazil, 1947-1964*. John Wiley & Sons: New York.
- xxxvi. Musacchio A. (2009). *Experiments in financial democracy: corporate governance and financial development in Brazil, 1882-1950*. Cambridge University Press: Cambridge.
- xxxvii. Prebisch R. (1950). *The economic development of Latin America and its principal problems* United Nations: New York.
- xxxviii. Rajan RG, Zingales L. 2004 *Saving capitalism from capitalists: unleashing the power of financial markets to create wealth and spread opportunity*. Princeton University Press: Princeton.
- xxxix. Rodrik D. 2004 *Industrial policy for the twenty-first century*, CEPR Discussion Paper
- xl. Rochet, J. C, Tirole J. (1996)- *Interbank lending and systemic risk*, *Journal of Money, Credit and Banking* , 1996, 28 (4): 733–762.
- xli. *Rwanda Vision 2020*, Ministry of Finance and Economic Planning, 2000.
- xlii. Shleifer A. 2002. Ownership of banks; *Journal of Finance* 57(1): 265- 302.
- xliii. Torres Filho ET. (2009). Mecanismos de direcionamento do crédito, bancos de desenvolvimento e a experiência recente do BNDES. In *Ensaio sobre Economia Financeira Ferreira FMR, Meirelles BB (eds.)*, BNDES: Rio de Janeiro.
- xliv. Turliuc, V., Cocris, V. s.a. (2007) – *Monedă si credit*, Ed. UniversităŃii “Al. I. Cuza”
- xlv. Yeyati EL, Micco A, Panizza U. 2004. Should the government be in the banking business? The role of state-owned and development banks; RES Working Papers 4379, Inter-American Development Bank, Research Department