# THE ROLE OF AGRICULTURE LOAN SCHEMES AND AGRICULTURE PRODUCTION BY THE BENEFECIARIES IN UGANDA

# CASE STUDY: NYAKABIRIZI DIVISION BUSHENYI MUNICIPARITY

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# A DISSERTATION SUBMITTED TO THE FACULTY OF BUSINESS ADMINISTRATION AND MANAGEMENT IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF BUSINESS ADMINISTRATION AND MANAGEMENT UGANDA MARTYRS UNIVERSITY

# **DEDICATION**

I dedicate this work to Mr. Kamwezi Patrick and Busingye Medias for the contribution and inspiration they have shown to me during my course of education. Thank you for everything.

I LOVE YOU ALL.

May God bless you abundantly.

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# TABLE OF CONTENTS

DECLARATIONi
APPROVALii
DEDICATIONiii
ACKNOWLEDMENTiv
LIST OF TABLESix
ABSTRACTxi
CHAPTER ONE
GENERAL INTRODUCTION
1.0 Introduction
1.1 Background to the Study
1.2 Statement of the Problem
1.3 Broad Objective
1.4 Specific Objectives
1.5 Research Questions
1.6 Research Hypothesis
1.7 Significance of the Study
1.8 Justification of the Study
1.9 Scope of the Study6
1.9.1 Geographical scope 6
1.9.2 Time scope
1.9.3 Content scope
1.10 Definitions of Key terms
1.11 Conceptual Frame Work
CHAPTER TWO
LITERATURE REVIEW 10
2.0 Introduction
2.1 Agriculture Credit Facility
2.2 Rural Farmers Loan Scheme
2.3 Group Loan
2.4 Individual Loans

2.4 Dimensions of Agriculture Production	27
2.4 .1 Mechanization	27
2.4.2 Output	29
2.4.3 Sales	29
2.5 The Relationship between agricultural loan schemes and agriculture production	31
2.6 Conclusion	32
CHAPTER THREE	34
RESEARCH METHODOLOGY	34
3.0 Introduction	34
3.1 Research design	34
3.2 Study area	35
3.3 Study population	35
3.4 Sample size	36
3.5 Sampling techniques	36
3.6 Data sources	37
3.6.1 Primary sources	37
3.6.2 Secondary sources	37
3.6.3 Tertiary sources	37
3.7 Data collection instruments	37
3.7.1 Questionnaires	37
3.7.2 Interview	38
3.7.3 Observation	38
3.8 Quality assurance	38
3.8.1 Data validity	39
3.8.2 Data reliability	39
3.9 Measurement of variables	39
3.10 Data analysis and presentation	40
3.11 Ethical issues	40
3.12 Study limitations	41

CHAPTER FOUR	42
PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS	42
4.0 Introduction	42
4.1 Back ground information of respondents	42
4.2 Agriculture Credit and agriculture production	47
4.2.2 Farming assets acquired by loan	48
4.2.3 Sufficient loan amount	49
4.2.4 Loan extension	49
4.2.5 Loan payment	49
4.2.6 Expected period	50
4.3 Group loan and Individual loan and Agriculture Production	50
4.3.2 Group loan provision	51
4.3.2 Individual loan provision	52
4.3.3 Group loan requirement	52
4.3.4 Individual and group loan difference	52
4.3.5 Paying back group loan	53
4.3.6 Individual loan requirements	53
4.4 Rural farmers loan scheme and agriculture production	53
4.4.1 Mean and Standard Deviation of Rural farmers scheme	54
4.4.2 Understanding the scheme	54
4.4.3 Procedures involved	55
4.4.4 Loan accessibility	55
4.4.5 Loan repayment	55
4.4.6 Understanding loan requirement	56
4.5 Agriculture Production by the Beneficiaries	56
4.5.1 Output	56
4.5.3 Stable output	57
4.5.4 Loan to increase out put	57
4.5.5 Price fluctuation and output	58
4.5.6 Expected out put	58
4.5.7 Reduced output and losses	58

4.6 Sales	59
4.6.2 Profits from sales	59
4.6.3 Overtime sales	60
4.6.4 Prices and profitability	60
4.6.5 Payment of pending loans	60
4.6.6 Operating costs	61
4.6.7 Over time profits	61
4.7 Mechanization	62
4.7.2 Loan for tools acquisition	62
4.7.3 Machines than human labor	63
4.7.4 Seasonal changes	63
4.7.5 Scale production	63
4.7.6 High yield products	64
CHAPTER FIVE	65
SUMMARY, CONCLUSIONS AND RECOMMENDATION	65
5.0 Introduction	65
5.1 Summary of findings	65
5.1.1 Agriculture credit facility and agriculture production	65
5.1.2 Group and individual loan and agriculture production	66
5.1.3 Rural farmers loan scheme.	66
5.2 Conclusions	67
5.3 Recommendations	68
5.4 Areas for Further Research	71
REFERENCES	72
Appendix I: QUESTIONNAIRE ONE :( BORROWERS/MEMBERS)	i

# LIST OF TABLES

Table 2.2.1 Farmers who accessed credit in the past five years (%)	21
Table 4.1.1 Frequency for Gender of respondents	42
Table 4.1.2 Frequency distribution for Age group of respondents	43
Table 4.1.3 Frequency Distribution of family size of respondents	44
Table 4.1.4 Frequency Distribution of educational status of respondents	45
Table 4.1.5 frequency Distribution of farming experience of respondents	46
Table 4.2.1: Mean and standard deviation for Agricultural credit facility	48
Table 4.3.1: Mean and standard deviation of group and individual loan	51
Table 4.4.1 Mean and Standard Deviation of Rural farmers scheme	54
Table 4.5.2: Mean and Standard Deviation of out put	57
Table 4.6.1: Mean and Standard deviation of sales	59
Table 4.7.1: Mean and Standard Deviation of Mechanization	62
LIST OF FIGURERS	
Figure: Conceptual Frame Work	9

# LIST OF ABBREVIATIONS

ACF: Agricultural Credit Facility

BOU: Bank of Uganda

MDIS: Microfinance Deposit Taking Institutions

EAC: East African community

USDA: U.S .Department of Agriculture

# List of appendices

# i. Questionnaires

# **ABSTRACT**

The purpose of the study was to establish the relationship between Agriculture loan schemes and Agriculture production by the beneficiaries in Nyakabirizi Division Bushenyi–Ishaka Municipality Uganda. The research was based on three objectives; to examine the role of agricultural credit facility towards agricultural production, to examine the role of group and individual loan towards agricultural production, to evaluate the role of rural farmers loan scheme and agricultural production.

The researcher used; case study, quantitative, qualitative and cross sectional designs. The quantitative approach was used to describe operations, processes, and characteristics of agriculture loan schemes so as to know social aspects that prevailed in the area which had influence on the study. The quantitative approach was used to determine the relationship between variables by testing their hypothesis. The study was carried out on the cross sectional design by use of respondents from which data of the study was generated with in planned few days by the guide of research questions that were answered. Literature was reviewed to supplement and support the research findings. Mainly Text books, Academic journals, Academic articles and Internet were used as the major sources of the literature. The findings of the study were compared to the literature to see if they occur or not. A total of 41 questionnaires were distributed to the potential farmers in Nyakabirizi Division, this was followed by data analysis to determine the role of agriculture loan schemes and agricultural production.

The findings of the study indicated that the schemes greatly lead to agriculture production through improving loan accessibility, loan extension services, offering of subsidized loans, favorable loan period payments that lead to agriculture productivity in the area. The study findings guided the recommendations to be made for government and PFIs which include; improving of agriculture value chain, development of new credit products, revision of loan interest rates, and provision of uncollateralized loans. It finally ended with the suggestions to future researchers on agricultural loan schemes and conclusions.

#### **CHAPTER ONE**

### **GENERAL INTRODUCTION**

# 1.0 Introduction

The understanding of the relationship between agriculture loan schemes and agriculture production by the beneficiaries is the main aspect of the study. Therefore, the study points out agriculture loan scheme in relation to group and individual loan, rural farmers loan scheme and agriculture credit facility. For the case of agriculture production, world development report (2008), found out that the growth originating in the agricultural sector is two to four times as effective as growth originating in the non agricultural sector therefore, agricultural production has been the main instrument of rural poverty reduction in the most developing countries in the recent past thus has much more direct impact on hunger than general economic growth does (Binswanger et al, 2009). The study therefore, seeks to determine the extent to which the agricultural loan schemes contribute to the agriculture production by the beneficiaries.

### 1.1 Background to the Study

Internationally, the emergence of rural institution to take up much needed functions left unattended by the state has been slow to occur and where it has occurred has not necessary benefited agriculture production. Therefore, New Zealand's main farm organization argues that the nation's experience is debunked by the myth that the farming sector cannot prosper without the government subsidies. According to Shahidur (2003), as the farm credit schemes are subsidized, policy makers must know if these schemes are worthy supporting.

As part of the production, agriculture loan schemes are introduced to enable farmers exploit the untapped potentials in the agriculture sector, reduce inflation, lower the cost of agricultural

production, generate surplus for export, increase on the foreign earnings as well as diversifying the revenue base.

According to World Bank (2000), lending groups and credit cooperatives have the potential to provide affordable credit to small scale farmers because they reduce the transaction costs and lower the risk of default and as such, agriculture loan schemes are meant to play that role.

Therefore, as modern communities grow more complex, people make more demands upon their governments in need to provide services and agencies in order to deal with their problems of everyday living. It should be noted that, the agricultural loan scheme is among the best ways how people can effectively improve on the production of agriculture since it is always difficult to reduce poverty without economic growth. Therefore, establishment of the agricultural loan schemes is one of the most valuable things the government can do to give poor in the rural areas better opportunities to start up projects for better income earning as world bank (2000), points out that, there has been advancement in the loan lending strategies through support of the agricultural loan schemes that are considered to be essentially an investment in more productive future.

Regionally, according to Adel (2012), small holder farming accounts for about 75% of the employment however, the contributions of small holder farming and agriculture in the general to the region's recent rapid production was driven by services in the particular trade since at the national level, weak institutions restricted access to the markets, credit facilities and thus constraining productivity of small holder farming.

According to Derek (2000), there is much evidence from Africa that small and medium scale farming can be highly efficiently and compete successfully in national and international markets

in order to create more employment and much value for the economy. Therefore, this creates major challenge for all participates throughout the agriculture sector to ensure that new entrants into the sector have access to the productive resources and services needed for the success. In support of the argument, Christopher (2001), points out that, small holder agriculture is simply too important to employment, human welfare and political stability in the sub Saharan Africa.

In Uganda, according to Robert (2006), good agriculture performance was the key determinant of direct pro-poor production in the 1990's while lower agriculture is the root cause of the recent increase in the poverty, for that case, the Bank Of Uganda (2012), stated that the agricultural loan schemes were set up to facilitate provision of medium and long term loans to projects engaged in the agriculture and agro-processing because loans under the schemes are disbursed to the farmers and agro-processors through the participating financial institutions at a subsidized interest rates. In support to the argument, Ntunga (2006) adds that, the agricultural loan schemes give farmers greater economic power, boost the agriculture sector as well as improving commercial viability of small scale farming.

### 1.2 Statement of the Problem

Currently in Uganda with her great extent of rich soil, a sizable number of her citizens suffer from hunger and starvation as a result of neglect of agriculture, where by Small existing Agroindustries around depend highly on the importation of the necessary raw materials in their production. It is of note that, various policies have been made to solve these problems in which banks through the government intervention have been targeted to provide the pivotal roles in the area of funding of agriculture through provision of credits. However, according to agriculture year book (2012), the banks mainly the commercial banks have not fought well to solve the problem as much has not been felt in the area of credits to agriculture sector. The accusation is

that, commercial banks prefer granting credit to trading or commerce than to agriculture and also where credit is usually allowed, the interest payable seems extravagant with tight collateral security and also the need to be having already established projects so as to obtain the loan, thus this has still led to stagnant production of agriculture since over the past 10 years, agriculture has lagged behind industry and service sector. For instance, according to Uganda Bureau of Statistics (2011), in the period 2002-2009 production in the agriculture sector averaged 1.7% while that of industry and services averaged 7.9% and 12.6% respectively., Kizza (2013) adds that, the annual output of coffee Uganda's leading cash crop has stagnated at 3 million bags whereas cotton production has failed to reach its potential of 300,000 bales per annum.

Therefore, the agricultural loan schemes are meant to lift up the agriculture production other than making profits for the banks since they will help the poor to have access to the agricultural loans with limited restrictions which has been the case to most commercial banks.

The study therefore, is meant to examine the measures that are put forward by the government in conjunction with the participating financial institutions on agricultural loans schemes in Uganda and farmer's relationship to the agricultural production.

### 1.3 Broad Objective

The study is mainly concerned with examining the relationship between agricultural loan schemes and agriculture production by the beneficiaries in Uganda.

# 1.4 Specific Objectives

a) To examine the role of agricultural credit facility towards agriculture production by beneficiaries in Uganda

- b) To examine the role of group and individual loan towards agriculture production by beneficiaries in Uganda
- c) To evaluate the role of rural farmers scheme and agriculture production by beneficiaries in Uganda.

# 1.5 Research Questions

- a) What is the relationship between agriculture credit facility and agriculture production by beneficiaries in Uganda?
- b) What is the relationship between rural farmers scheme and agriculture production by the beneficiaries in Uganda?
- c) What is the relationship between individual and group loan and agricultural production by the beneficiaries in Uganda?

# 1.6 Research Hypothesis

There is a relationship between agricultural loan schemes and agriculture production by the beneficiaries.

# 1.7 Significance of the Study

The solutions and recommendations of the study will help policy makers more especially in the ministry of agriculture, by providing them with updated information on how to develop proper strategies in relation to agriculture loan schemes for proper practice and implementation with in Uganda.

The results of the study will benefit me as the researcher, by acquiring various skills and abilities

in carrying out research studies for proper and acquisition of knowledge and application of theoretical concepts studied in class to the frame work throughout in the field.

The solutions of the study will provide the basis for other researchers and ministries to appreciate the value of agricultural loan schemes in relationship to improving agriculture production.

# 1.8 Justification of the Study

The high existence of agricultural loan schemes in America, Europe, Asia and sub Saharan Africa, necessitated the study to find out how the agricultural loan schemes by the use of dimensions such as agricultural credit facility, rural farmers loan scheme, individual and group loans are related to agriculture production.

The need to produce high value agriculture, improved mechanized agriculture and growing agriculture sales both locally and internationally necessitates the study on the agricultural loan scheme measures and techniques to find out which one will best suit agriculture production.

# 1.9 Scope of the Study

# 1.9.1 Geographical scope

The study will be conducted in Bushenyi District in general whereby the case study will be based in Nyakabirizi Division 10 km along Mbarara-Kasese main road.

# 1.9.2 Time scope

Since the research is mainly based on cross sectional study, it will be conducted in the academic period from 2014-2015, where by that time, it will be fully ready for more study purposes.

## 1.9.3 Content scope

The study mainly empathizes on the agricultural credit facility, individual and group loan scheme, rural farmer loan scheme and how they affect the agriculture production.

The moderating variables mainly considers aspects such as infrastructural development that can promote agriculture production ,low interest rates that acts as market niche for more borrowers to obtain loans, extension services to bring awareness to the beneficiaries and loan accessibility to enable all farmers to be able to obtain the agriculture loan scheme products with ease.

### 1.10 Definitions of Key terms

**1.10.1 Agriculture** is the science and practice of producing crops and livestock from the natural resources of the earth .the primary aim of agriculture is to cause the land to produce e more abundantly and at eh same time to protect it from deterioration and misuse .the diverse branches of modern agriculture include agronomy, horticulture, economic entomology, animal husbandry, dairying, agriculture engineering, soil chemistry and agriculture economics.

**1.10.2 Agriculture activity**; it refers to a condition which occurs on farm with the commercial production of farm products and includes farm markets, noise, odors, dust fumes, operation of machinery and irrigation pumps, ground and aerial application of seeds and fertilizers, and plant protection products.

**1.10.3 Farm**; it means the land, buildings, fresh water ponds, fresh water culturing and growing facilities, an machinery used in the commercial production of farm products.

**1.10.4 Farm farmland**; refers to land of fresh water ponds devoted primarily to the production, for commercial purposes, of livestock, fresh water aqua cultural, or other farm products.

# 1.11 Conceptual Frame Work

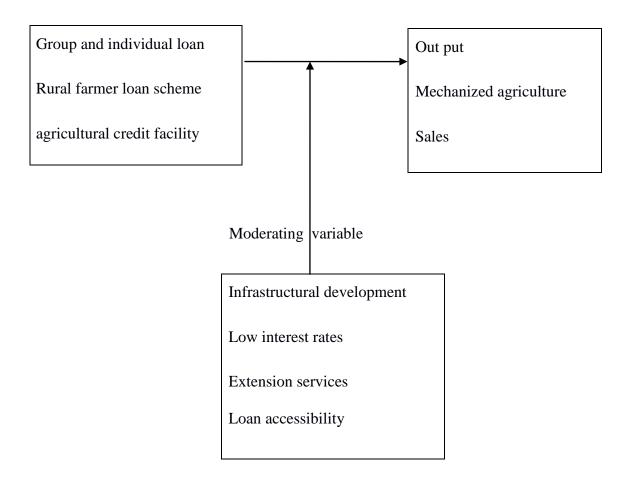
According to Akello (2012), the conceptual framework will help to give directions to the researcher in achieving the formulated objectives of the study. It helps in summarizing the relationship between the independent variable (agricultural loan schemes) and dependent variable (agriculture production) with their dimensions.

Although the relationship between agriculture loan schemes and agriculture production has been in existence for long time, it has not been productive. Despite government programs and policies aimed at channeling credit, their credit problems have persisted as farmers still cite credit as one of the major barriers to high agricultural productivity (Nwachukwa et al., 2010). Inadequate credit has been seen as one of the main reasons why many people in the developing countries remain poor .Usually limited accessibility to loans from the banking system by difficulties in putting up acceptable collaterals, high administrative charges among other factors (Awoke, 2004).

**Figure: Conceptual Frame Work** 

# **Agricultural loan schemes**

# **Agriculture production**



**Source**: Agriculture Finance year Book (2012)

The conceptual frame work of the independent variable that includes agricultural credit facility, individual and group loan, and rural farmer loan scheme, all highlight both negative and positive solutions from the independent variable that are mainly meant to increase on the efficiency, profitability and growth in the economy.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.0 Introduction

This section summaries the works of the past researchers and ideas relevant to the study will. As such, areas in line with objectives of the study will be obtained. The study comprises of the relationship between agriculture loan schemes and agriculture production by beneficiaries.

# 2.1 Agriculture Credit Facility

The agriculture credit facility initially started in October 2009 and disbursements commenced in march 2010. The ACF was set up by the government in partnership with the commercial banks, Uganda development bank, Micro finance deposit taking (MDIS) and credit institutions. The financial institutions involved are refereed to as participating financial institutions (PFIS).

According to BOU (2011), The ACF is to promote commercialization of agriculture through provision of medium and long term financing of the capital investments in agriculture and agroprocessing. The ACF enables loans to be extended to the farmers and agroprocessors on more favorable terms for example lower interest rates than are available through normal market channels since the government subsidizes the scheme through provision of interest free loans to the participating financial institutions.

Projects which are eligible for ACF loans include acquisition of agricultural machinery, post harvest handling equipment, storage facilities, agro processing and any other machinery and equipment used for agriculture and agro processing. A Maximum of 20 percent of each loan can be used to finance the purchase of material inputs used in the production. Although the ACF is

operated by the Bank of Uganda, all applications from the borrowers are made directly to the PFIS which are responsible for selecting and appraising the projects for both viability and eligibility.

The scheme operates on a refinance basis where the PFI disburses to the final borrower 100 percent of the approved loan and then sends acclaim to BOU for a reimbursement of the 50 percentage which is GOU contribution under the ACF. (Agriculture finance year book, 2010). With the agricultural sector contributing over 50 percent to the GDP and providing a source of income for over three-quarters of the population, sustainable agricultural development is imperative in Uganda's quest for economic development. Furthermore, with a majority of the poor residing in rural areas and depending on the agricultural sector for their livelihood, a comprehensive agricultural strategy is called for to address the problem of food security and poverty alleviation. (John, 2000).

Abedulallah, (2009) further articulates, that Agriculture as a sector depends more on credit than any other sector of the economy because of the seasonal variations in the farmer's returns and a changing trend from subsistence to commercial farming. In agreement with the argument (Sidhu, 2000) pointed out that the demand for capital increases with transformation of agriculture sector from traditionalism towards commercialization.

According to agriculture year report, (2012), in East African community (EAC) food security exists when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and health life. Therefore, food security covers availability, access utilization and stability issues and in its focus on individuals also embraces their energy, protein and nutrient needs for life, activity, pregnancy, growth and long term capabilities (world food summit, 2000). In agreement with the

report,(Borlaug, 2010) stated that by 2050, the global demand for the agricultural production is expected to double and thus, half of the global population will live in cities and will need to be fed through market channels.

Therefore, throughout this study, (Gidding ,2011) pointed out that meeting these demands will require significant increase in agricultural productivity. This is because enhanced productivity is more important since the future is likely to bring additional pressures on food supply from climate change and environmental limits on cultivated land. Therefore, to ensure food security under these circumstances, there is a need for a significant shift towards flexible, robust and sustainable production systems that are better able to adapt to anticipated and unanticipated climate risks (Parry, 2012).

Basing on these highlights above, John (2000) pointed out that more financial investment needs to be made available for the agricultural industries, thus this necessitates the engagement of both private as well as the government to intervene. Throughout the initiation of the government, the agricultural credit facility was set up by the government of the Uganda in the partnership with the commercial banks, Uganda development bank limited and micro deposit taking institutions. Although the agricultural credit Facility is operated by the bank of Uganda, all applications from the borrowers are made directly to the participating financial institutions. Thus to ensure productivity the projects must have the potential to assist Uganda's economic development such as create employment ,earn and or save foreign exchange, develop competitive enterprises serving the domestic market and enhance better utilization of the available local raw materials. (Agricultural Finance year book ,2011). However, (Naigaga,2012) stated that during the year 2012, there were uncomfortable disbursing Agricultural Credit facility scheme funds at 10%, arguing that the costs associated with the loan appraisal , recovery and monitoring are not

commensurate with the pricing.

This coupled with the prevailing market interest rates and the risk associated with the agricultural lending prompted numerous requests for the review of the interest rate regime, which negatively affected the volume of the loan applications forwarded to the Bank Of Uganda for the approval and general performance of the scheme whereby some Participating Financial Institutions (PFIs), preferred to lend their own funds at the interest rates determined by their management, rather than lending out Agricultural Credit Facility funds. After thorough consultations with the stakeholders, it was agreed that the interest rate to the investing farmer or processor be increased from 10% to 12% per annum.

Today, however, only 45 % of the financial institutions are participating under the Agricultural Credit Facility scheme (Agricultural Finance Year book, 2012), therefore, the main objective of the agricultural credit facility is to commercialize agriculture through provision of the medium and long term loans to projects engaged in the agriculture processing, modernization and mechanization, to support agricultural expansion, and value addition since external financing of the previous period had not led to the structural transformations required for the self sustaining growth.

According to Abedullah et al., (2009) agricultural credit is an integral part of the process of modernization of agriculture and commercialization of rural economy, thus (Sidhi, 2008) supports the argument by stating that credit plays a significant role in promoting modern production technologies and private investments on the farms by making available adequate funds for agriculture sector of developing countries, where inflow of funds is seasonal, income and savings of the farmers are low. However, (Divvuri, 2012) in disagreement with the argument, states that provision of credit is necessary, but not sufficient to improve agricultural production

in the country as credit needs to be supplemented by research and knowledge dissemination.

According to Arthur,(2001) credit is included among the accelerators of agricultural development rather than among the essential condition for the change and there can be and will be some growth in agricultural productivity whenever all of the essentials are present but without them there will be none, it is different case with the accelerator where effective and profitable production supplies and equipment are available nearby and where farmers have facilities for learning how to use them, production credit can accelerate the adoption of the improved practices. Therefore, (Duvvuri, 2012) supports the argument by stating that credit is an important determinant of value added in agriculture since it contributes positively to the adoption of modern production inputs and private investments in irrigation and other farm machinery that assists towards the growth of the agriculture sector.

According to Adhiman et al. ,(2006) most developing countries where agriculture still remains a risky activity ,better credit facilities can help farmers smooth out consumption and therefore, increase the willingness of risk averse farmers to take risks and make agricultural investments. But usually it is difficult to establish the relationship between agriculture credit and production due to the existence of critical problems. However,(Sreeram,2007) points out that, increased supply and administrated pricing of credit helps in the increase of agricultural productivity and the well being of agriculturists since credit is a sub component of the total investments made in agriculture, hence agricultural credit appears to be an essential in put along with modern technology for higher productivity.

According to (Balakrishnama, 2013) an important aspect that has emerged in the last three decades, is that the credit is not only obtained by small and marginal farmers for survival but also by the larger farmers for enhancing their income ,therefore, throughout his argument

(Shivamaggi ,2000) states that the diversification of the agriculture over the years, has further emphasized need for the rapid development of the rural infrastructures and larger flow of the credit to farming community since farmers often lack capital for the investment in the agriculture yet it is very important for improving their agricultural production.

According to (Rice, 2008) one reason for the importance apparently attached to small farm credit as a vehicle for rural development in Africa, is the belief that lack of small farmer access to credit constitutes a critical constraint to the adoption of improved inputs and technologies which can lead to increased incomes and enhanced rural welfare, (Manukwe,2007) further articulates that, restricted access to the finance, lack of agricultural inputs, inefficient market systems and continued use of the traditional techniques being the factors responsible for the low agricultural production ,therefore, adequacy and timely availability of the credit have always played crucial role in enabling farmers to shift over to technologically superior production and consequently realizing higher productivity. In agreement with the argument, (Balakrishnama et al., 2013) states that many factors like timely availability of quality seeds, fertilizers and irrigation facilities may be influencing the agricultural production and productivity, but for all these, timely availability of credit is the most essential for small and marginal farmers.

According to (Prafulla, 2007) timely and adequate agricultural credit is important for increase in fixed and working capital for farmers, (Sidhu, 2008) further articulates that agricultural credit has played a significant role in the fast and wide spread adoption of modern production technologies and promotion of private investments on farms through its increasing as well as cheap supply. However, Vyas, (2004) criticizes the argument by stating that various farm level studies have shown that the access to institutional finance of small holders is limited and inadequate, (Sidhu, 2008) further pointed out that, the recent crises has proved policy makers to

argue that the formal banking sector has focused more on the consumer and services sectors, as they were experiencing high growth, whereas agriculture sector was ignored, which created credit supply constraints.

According to the Development plan, (2000) credit programs invariably involve only a relatively small number of farmers in contrast, education, extension and research could presumably benefit a relatively large number of farmers within the budgets projected and should have the potential for contributing to the welfare of every practical farmer in the country, through sufficient resources devoted to these activities thus, according to (Mahariyanaarachichi, 2006) the reason for the popularity of the credit programs in the developing countries is that, they are largely dependent on the small holder agriculture whose farmers have little capital for their own due to the fact that the technological innovations and commercialization of the agriculture have not increased capital requirements of the farmers.

These attributes are seen responsible for necessitating and increasing the demand for the superior inputs. Therefore, in this case, a large segment of the cultivators, particularly small and marginal farmer are not able to make additional capital investments in agriculture to reap the benefits due to low surplus income accruing to them.

Institutional credit provided to small farmers comprises a significant aspect of finance for the rural development in many African countries frequently. However, the magnitude of small farm credit is small relative to the flows since their clientele is usually small in proportion to the size of the rural population (Agriculture Finance Year Book, 2012).

According to Bruce and John, (2001), there are compelling considerations however ,which suggest that the most practical and economical approach to achieving sizable increase in agricultural productivity and output lies in enhancing the efficiency of the existing agricultural

economy, through the introduction of the modern technology on broad front of particular un conventional in puts such as agricultural research, education and extension that can broaden the range of alternative production possibilities available to farm operators through strengthening their capacity to make and execute decisions on the basis of more adequate knowledge of agricultural technology.

According to Bruce and John, (2001) the considerations emphasize the need for special approach in determining the level of resource allocation to Agriculture production and for establishing priorities within an agricultural development program first, since it is virtually impossible to quantify the schedule of increase in output or reduction costs that can be expected as a result of expenditures for developmental services such as agricultural extension or research.

A much larger number of small holders have access to short term credit for the purchase of inputs from cooperative societies (Agricultural Finance Year Book, 2010). However, for present purposes this type of credit can be largely disregarded. But in spite of the relatively small holders have access to short term credit for the purchase of inputs from cooperative societies. This type of the credit can be largely disregarded due to the relatively small volume of small farm credit generally available from institutional lenders in Africa countries, the select nature of their clientele and a significant portion of public sector resources including administrative effort which is frequently devoted to farm credit programs.

According Martin, (2004) investment volume is negatively related to the farm size, as the government policy which aims to promote productive investment, should emphasize lending in the larger amounts without discriminating against small farmers. Developing country's relative to their narrow range of tax and other revenue sources, should provide subsidies sufficient to spread credit and other financial services widely with the result that subsidized agricultural

lenders will generally serve small and elite portion of the rural population .(kaburi ,2008) criticizes the suggestions by stating that both investment finance and working capital are the main bottlenecks for small holder agriculture production, basing on the fact that the shortage of working capital or seasonal credit is a serious hindrance to the adaption of new technologies and farming practices that require either purchased inputs or hired labor, the three types of cases in which such shortage is mostly likely to be restricting agricultural development are; Cases in which the farmer lacking purchased inputs is unable to generate domestic savings, Cases in which the purchased input or development item is available only in a relatively large indivisible quantity and Cases in which there is a long period between investment and the beginning of cash flow from the investment. Temu, (2001) pointed out that, administered credit schemes offer credit to the farmers accompanied with the necessary additional inputs to make farmer enterprises economically as these elements include; access to the necessary skills, input markets, output markets and social services. Small farmers without access to the credit for the inputs or farm development, have in many instances spontaneously grouped together thus overcoming the problems of indivisibility through joint action.

The extent to which credit is essential and efficient for analyzing a critical group of the farmers for encouraging production of specific crops that have an importance to the economy have not been fully reflected in the market prices for contributing to the welfare of some, otherwise disadvantaged groups, may of course justify its claim to a large portion of the public sector agricultural development funds. However, the development plan makes no such claims for the credit as a developmental tool and experience suggest that credit farmers are frequently among the most progressive in their area, (Michael et al., 2001) pointed out that access to finance is the key to unleashing Africa's agricultural potential and funding the productivity of the sector.

In disagreement, (Ayisisk, 2004), argues that access to credit requires collateral mostly in form of land rights, which some holder farmers do not posses. (Alsiyez, 2012) further articulates that there has also been credit rationing because of the transaction costs as lenders face high costs to get information about that borrower, lack of confidence in the farmers, the low profitability of the farms and undeveloped property markets. Due to the multitude of change to be introduced and induced by the credit schemes, the farmers remain with insufficient cash to meet the financial requirements on the changes. Therefore, basing on this assumption, according to (Agriculture Finance Year Book 2011) schemes and institutions are established which for the variety of reasons, to provide credit at less than its accounting cost and at least than its opportunity cost to the economy. In spite of their poor performance, credit operations of this type frequently display a tenacity and momentum for survival equal to that of look heed, both of which like many farm credit suppliers, depend on the governments for their continued existence.

According to Abhiman et al., (2006), even though there are several gaps in the present credit delivery system like inadequate provision of the credit to small and marginal farmers, paucity of medium, long term lending and limited deposit mobilization and heavy dependency on borrowed funds by major agricultural credit purvors.

Agriculture credit is still playing a critical role in supporting agriculture production as suggested by (Mohan, 2006), that the agriculture credit role can be further enhanced by much greater financial inclusion through involving of region specific market participants and of private sector suppliers in all these activities with credit suppliers ranging from public sector banks, cooperative banks, the new private sector banks and micro credit suppliers.

### 2.2 Rural Farmers Loan Scheme

There is no farming without money every farmer that wants to expand or even maintain his /her business invariably needs cash. The need for cash implies a need for credit, and as most small scale farmers need relatively small amounts of credit, rural farmers scheme and its potential for helping famers grow have become the point of interest.

According to Lolita, (2006) Credit plays an important role in agriculture development thus, the expansion of the credit programs have beneficial effects on agricultural production and incomes of small farmers. (Nagarajan, 2000), further articulates that agriculture credit is one of the important interventions to solve rural poverty and therefore, plays an important role in the agricultural development. Thus, throughout this study, (World Bank, 2000) suggested that many efforts have been made and continuous search for sustainable interventions through appropriate credit schemes to improve the living conditions and quality of life of small farmers in the rural areas.

According to Biruma et al., (2006), Uganda government in recognition of the credit needs of small holder farmers therefore, instituted a number of different types of credit programs like the rural farmers scheme via the Uganda commercial bank, specifically designed for small scale famers since small holders form majority of primary producers of all but a few plantation crops like sugarcane and to some extent tea, such farmers need financial services as (Rooijalkers, 2010) pointed out that money for farming not only means access to credit, but also access to other financial products and services. Therefore, farmers invest their own labor and part of their income to improve land, access improved seeds and other inputs, thus they often need loans to acquire new equipment, expand livestock and other post harvest handling facilities.

According to Agriculture finance year book (2012), the majorities of the 3.8 million households in Uganda are rural based and depend on the agriculture for their live hood, and as such (Yoron et al., 1999), suggested that Several formal credit programs are not accessible to small farmers because they are poor and cannot afford to travel to far distant centers due to the reason having no or little regular incomes.

Analysis of the Uganda census of agriculture survey data show that at national level, only 11.3 percent of the total 3.9 million agricultural households accessed credit through informal, 29 percent through semi –informal and 10 percent through formal financial institutions.

Due to the existing higher risk to agriculture informal sources, have limited source of funding and have not satisfied the growing demand for the farmers . This result is consistent with the 2005/06 and 2009/10 panel data which show that about 10 percent of the house hold accessed credit.

Table 2.2.1 Farmers who accessed credit in the past five years (%)

National	All	Formal	Semi-formal	Informal
Uganda	11.3	9.6	29.4	61
Central	9.4	10.4	34.1	55.5
Eastern	10.6	10.9	21.9	67.1
Northern	7.3	10.6	29.4	59.9
Western	15.9	8.1	32.7	59.1
South Western	14.8	7.1	32.8	60.3

Source: MFSC, (2010)

Among the factors that limit access and use of the credit by small holder farmers include lack of collateral being demanded from both formal and informal financial institutions form 90 percent and of the farmers as well as loan repayment period of less than one year reported by about 78 percent of the farmer.

Philip et al.,(2009) added that high interest rates and the short term nature of the loans with fixed repayment periods do not suit annual cropping, (Agnet,2004) further explained that complex mechanism of commercial banking is the least understood by the small scale farmers, and thus limits their access. Therefore, (Ogunleye, 2000) pointed out that Credit would be the only way to change how small holder farmers see agriculture and the strategies they follow, which would enable them select better varieties, plant early and stick to sustainable practices since agriculture growth is a significant determinant of industrial and overall economic growth.

To achieve this, considerable investment is needed for Uganda's agriculture sector to become more commercial and for its agricultural activities to grow therefore, rural farmers not only need access to finance for investment but rather, they need it in timely fashion to take advantage of market and investment opportunities.

The government of Uganda has already done a good job of demarcating agricultural loans zones within the country based on agro climatic conditions and local knowledge of people, consistent and well managed public funding for infrastructure like irrigation channels, pre- processing facilities, storage and effective extension services that will boost the productivity and incomes of primary producers and other actors in agricultural value chains.

According to Jacob (2001), the targeted financial interventions include rural credit programs directed at small scale farmers and fishers and micro finance programs directed at nonfarm rural

households particularly rural farmers since rural financial programs are seen as cost effective means of reducing poverty thus the interventions are designed to minimize problems with information and incentives.

Due to high weather risks inherit in agricultural investments, financial institutions need to be able to transfer part of that risk to profitably lend to the segment however, (Adams,2003) pointed out that substitution and diversion are often used to clarify the problems for evaluating the impact of credit projects. Thus, (Agriculture year book,2012) stated that to avoid this diversion which can back fire on borrowers by leaving them in debt with little hope of repayment ,Caritas Uganda has introduced a mechanism for establishing partnerships with financial institutions that offer agriculture related financial packages. Example is HOFOKAM in Mbarara and Promotion of Micro Credit together with these institutions Caritas carries out capacity building in areas of entrepreneurship, record keeping, business planning, planning and financial management to instill a culture of financial discipline among farmers.

According to World Bank, (2003), most of the agriculture production in the rural areas is demonstrated by the small scale resource poor farmers, who lack skills in modern agriculture practices by only depending on the rudimentary farming methods. Therefore, liberation of rural farmers from this type of farming calls strong research services to substantially provide improved and appropriate technology interventions for the production and value addition, since poverty is more persuasive in the rural areas particularly in the farmer homelands. There is a need for resource flows to the rural sector more to agriculture than to any other sectors. For that case, therefore, the schemes are established to address the credit needs of commercial farmers.

According to (Hedhues, 2001), credit maintains the productivity capacity of the poor rural

households, in agreement with the statement, (Michael ,2000) pointed out that the purpose of the productive agricultural credit is to assist in generating adequate growth and thus more sense is to start by asking what is and what should be demand for the agricultural credit. World Bank, (2003) argued that increasing access to rural a finance is often the last frontier for the financial sector development in the developing countries and as such financial institutions aiming to operate in rural areas usually have to deal with high transaction costs, low population densities, remote areas, and a heavy focus on agriculture with related weather and commodity risks.

According to Paul (2004), rural small holder farmers rely on informal institutions as their major source of the credit, he then noted that the small proportion of the total number of the rural households receive credit from the formal sector and this has been the major problem facing targeted credit schemes trying to improve agriculture. Thus, (Kiwedo,2003) stated that the operating rural finance and agricultural credit systems are extremely important considering the redesign of the rural finance and finance systems, as Ray (2002), further points out that many agriculture activities are spread over time but their level of output has not been considered.

According to Tazul, (2007), diffusion of new agricultural technology especially for small farmers with the provision of access to uncollateralized credit, has been considered by many as the most important means for improving agriculture and thereby raising the welfare of the people dependant on the agriculture. Therefore, large scale adoption of new technology among small farmers seems to run counter to the interest of the dominate groups in rural areas as well as the import lobby within the ruling elite.

The government policies in the past which favored large and medium farmers resulted in low productivity in the agriculture sector. (Murdoch, 1999) argued that credit savings and insurance

markets in the rural areas are generally nonexistent and of those that do, may work imperfectly. Thus this brings in the argument by (Tazul ,2007) who stated that despite the operations of the financial institutions expanding over the years both in total amount of credit disbursed and in number of borrowers served even this production has not been sufficient enough to keep up with the growth in credit demand in the rural sector, since Credit schemes aimed at reducing poverty have been a popular response to the perceived lack of credit for poor people and to be perceived inadequacies of indigenous village level credit and insurance arrangements.

Similarly (Shurtz, 2000) pointed out that, small holder agriculture on which the bulk of the agriculture output is hindered has not provided a base for the improved live hoods because of the fact that its potential is not fully exploited, (Jacob, 1998) further stated that, the farmers that most agricultural credit schemes are self selected usually they are more participate in entrepreneurs ,less risk averse and more receptive to new technologies other than their non participating counter parts who have strong links with financing therefore, throughout those arguments (Agricultural Finance Year book, 2012) pointed out, that the experience of the farmer is a key requirement for good results in agricultural lending whereby persons who are starting to grow certain crops or rear certain animals for the first time are only doing experiments while those borrowing to expand production using what they already know are building on their experience. Accordingly, prudent lending decisions need to be based on an assessment of the enterprise management and financial capacity of the farmer around the proposed agricultural capacity. Therefore, the extension of the credit to the rural farmers has great positive impact in the agriculture production ranging from the production, marketing, processing, and selling produces.

According to Private sector development (2001), agricultural loans support activities to the

agricultural groups and farmers ranging from farm demonstration, seed provision and post harvest support programs which have greatly helped in the reduction of the harvest losses and improved storages have been provided.

# 2.3 Group Loan

Many people in Uganda who would other wise have the ability to do better in the agriculture production don't have access to the financial services like the loans (Nsubuga, 2002), he adds that the agricultural loans are very essential in helping and boosting of the agricultural production.

However, Naggoli, (2002), criticizes that the borrowers, usually view a loan as an automatic right or see it as the withdrawal. Therefore, matching the supply and the demand for the credit among the group members becomes more and more challenging throughout time and may result in the default as one or more members are not satisfied. (Waenner,2000) argues that the data collected from the Fica group credit program in the Costa Rica were used to study the availability and the and cost effectiveness of the groups since group lending enable the farmers to quickly obtain finance at relatively low interest rates. (Fender,2002) adds that lending groups and credit cooperatives have the potential to provide affordable loan to the small farmers for their growth because they can reduce transaction costs and lower the risk of default as with group lending the costs are relatively lower than in the individual lending.

Raymond, (2000), pointed out that, agricultural group lending is to provide credit to the farmers who would otherwise not have received the loans because of transaction costs of the individual loans therefore, for the success of the group lending, group lending schemes work well with the groups that are homogenous and which are jointly liable for their defaults since there is always

wide fact of the default by the borrowers reflected in the delinquency in the loan repayment and in the bad debt losses.

#### 2.4 Individual Loans

According to Hoff (2003), individual loan is pointed out as one of the agriculture loan extended for the growth of improved loan accessibility. The individual provides collateral to guarantee the loan whose sizes are generally small for the initial capital requirements therefore, the individual loans mainly help out the farmers to start up their farm productive activities and projects such as piggery, poultry and horticulture since the loans are involved with long term payment period as compared to other loans. As (Waswa, 2002) in agreement with the statement says that the individual loan payment period depends on the farmer's capacity to pay.

### 2.4 Dimensions of Agriculture Production

#### 2.4 .1 Mechanization

Small farmers, large farmers all are faced with the challenge of lacking capital. After technological changes in the agriculture sector, the requirement of credit has increased to obtain modern agriculture inputs, yet the small farmers are faced by the procedure and collateral problems in availing credit. Despite this problem, the role of agriculture credit is noted to be important in the wake of technological changes in the agriculture sector, thus according to Gabriel (2014), agriculture mechanization is the art of using machineries to hasten production, accomplish task and reduce fatigue and human labor in order to produce better quality goods and services. Credit is considered as the back bone for any business and so for agriculture which has traditionally been a non–monetary activity for the rural population. Agriculture credit is an integral part of the process of modernization of agriculture and commercialization of rural

economy.

The introduction of quick easy and cheap credit is to be considered as the simple way for boosting agricultural production. Therefore, to meet the credit requirement of the farming community, the government through intervention of agricultural loan schemes should help farmers by providing them with subsidized agriculture loans as (Abdullah at el, 2009), states that agriculture depends more on credit than any other sector because of seasonal variations in farmer's returns and high rate of changing trend from the subsistence o commercial farming. Therefore, as Ahmad, (2011) suggests that transformation of traditional agriculture sector to modern commercialization, farming needs credit facility.

Adeyomo, (2008) pointed out that the reason for the decline in the contribution of agriculture to economy is lack of a formal national credit policy of credit institutions that should assist farmers. Therefore, improvement of the economic condition of the farmers to be self sufficient and self reliant in the food production is necessary through provision of support to them in the procurement of inputs and machineries.

Newaz, (2011) supports the suggestion by stating that credit is like a capital input which is used indirectly in the agriculture sector therefore, it is suggestion to always increase its supply when land, water, labor is increased so as rise demand for the use of machinery, seeds and fertilizers that can only be bought by credit to enhance and improve productivity.

Ekwere (2004) pointed out that ,agriculture credit enhances productivity and thus promotes standard of living by breaking viscous cycle of poverty of small scale farmers ,thus modernization of agriculture by the use of improved technologies require some considerable amount of capital investment since small scale farmers especially in the developing countries

like Uganda cannot generate enough savings, thus this necessitates that agriculture credit has long term potential to boost agriculture production

### **2.4.2 Output**

According to Abrima, (2001), agricultural credit has been rising in the recent years as a share of both the value of inputs and the value of out put therefore, direct agriculture credit has a positive impact on the agriculture production and statistically significant impact on agriculture output and its effect is immediate.

According to Seeram, (2007), increased supply and administered pricing of agriculture credit helps in the increase of agriculture productivity and well being of agriculturists since credit is a sub-component of the total investments made in the agriculture. Therefore as stated by Sidhu (2008), the demand for agricultural credit should be assessed, depending on the crop patterns, current inputs and capital requirements in relation to targeted output growth rate.

### **2.4.3 Sales**

The analysis of the production systems within Agric-food value chains constitutes the basis of the agricultural credit offer BOU report, (2002). Indeed, only an in-depth knowledge of how the different links in the value chain work will make it possible to adapt the credit products to the needs of agriculture sector and, in this way, they need to be rendered operationally and financially.

Designing credit products adjusted to the needs of farmers should combine the satisfaction of needs, market development, profitability and risk management. The main types of products that meet the different needs of entrepreneurs in the rural environment are operating loans, marketing loans such as warehouse receipt financing or storage loan and investment loans. Each of these

types of agriculture credit seeks to meet a specific need of farmers which in turn lead to increase sale of the agriculture outputs both national and international basing on quality storage standards.

With an appropriate loan, farmers are able defer part of the sales and obtain a higher average price, as this can contribute to raise their welfare. With the provision of subsidized loans, farmers are also able to combine appropriate operating loan with a storage loan as the way to avoid being the victim of swindlers who finance inputs and exchange for production at harvest time at valueless prices. And also the farmers are able to overcome the problem of price flu action which is usually as the result of unfavorable weather, domestic and global supply and demand changes, and macro changes in political or economic policy.

According to agriculture finance book (2014), Some Agriculture products are marketed locally, such as vegetables, while other products are primarily marketed on a national basis due to tariffs, growing conditions, or other influences. Rapid rises in interest rates can cause increased capitalization rates, resulting in reduced farmland values thus, all these factors can present risk to farmers to obtain loan. Therefore, farmers can mitigate market risk by using a variety of strategies such as diversifying crop and livestock products, hedging commodities under production, pre- selling production, and Accurate budgeting and use of subsidized loans so as to over come the problems of increased interest rates that can negatively affect the agriculture profitability of the farmers.

### 2.5 The Relationship between agricultural loan schemes and agriculture production

According to Alfred (2005) acquisition and utilization of credit from the schemes for agricultural acquisition and utilization promote productivity and consequently improved food security status of community. (Obwama, 2002) added that increase in productivity depends on adoption and technical efficiency of improved farming technologies, therefore, (Adebayo and Adeola, 2008) observed that the agricultural credit through the agricultural loan schemes enhances productivity and promotes standard of living by breaking viscous cycle of poverty of the resource poor farmers.

In support of the argument (Ajaga, 2004) highlighted a model of viscous cycle of the poverty in which peasant farmers constitute a group with limited resources for agricultural production and another group whose annual revenue is equal to or slightly greater than subsistence needs and thus, these groups of farmers live and survive in a viscous circle of the poverty, in which low production leads to low income generation which in turn implies low savings and investments and eventually low production because of lack of capital.

Generally, according to Awoke (2004), inadequate credit has been seen as one of the main reasons why many people in the developing countries remain poor .Usually limited accessibility to loans from the banking system by difficulties in putting up acceptable collaterals ,high administrative charges among other factors and thus, large proportion of the farmers don't have access to credit facilities and thus, they highly depend on family and friends to finance their agriculture production which results into low capacity in output (Ramaus and Joseph, 2013).

According to Nwachukwa et al.,(2010), despite government programs and policies aimed at channeling credit, their credit problems have persisted as farmers still cite credit as one of the

major barriers to high agricultural productivity thus as stated by (Nwaru, 2004) many reasons have been advanced for the declining agricultural productivity. One of the factors attributed to the declining of the agricultural productivity is that farmers have limited access to the credit facilities. In support to the argument, (Omeh, 2006) stated that small scale farmers are known to be economically weak with little or no capital investments. Consequently, they use low technology tools and methods in their production activities which in turn lead to reduced output and productivity.

Okeranta (2005) added by stating that insufficient extension or delivery of credit to the poor farmers is considered to be the most critical factor responsible for the declining trend in agriculture production. Therefore, Ruben and Nienka (2009) suggested that the great potential of agricultural finance in issues of food security, poverty reduction and preservation of natural resources must be emphasized in order to overcome the perpetual underinvestment in public agriculture production in the developing countries thus, (Masaka,2009) states that the role of credit and loan schemes in the agricultural production are the crucial because inputs such as seeds and fertilizers are usually purchased at the beginning of the production season ,but returns are realized only at the end of the production season. Therefore, in conclusion any marginal in put in terms of finance to the farmers is most likely to have a substantial effect on their out put since the role of institutional credit is more important as it is acted as the source for providing different agricultural in puts which have strong impact on the agricultural productivity

#### 2.6 Conclusion

All in all agriculture loan scheme is very essential tool given that it has proved to be one of the useful tools in the productivity of agriculture activities by making farmers being able to finance purchase farm inputs as certificated seeds, fertilizers, chemicals machinery hiring, labor and

harvesting costs.

Throughout this study therefore, (Lolita, 2006) suggested that Credit restrictions such as commodity specific credit programs, credit that requires collateral, lengthy and complicated procedures restricted the farmers from accessing formal credit thus accessibility to credit by small farmers could be improved by providing innovative financing schemes that address problems of farmers who lack collateral and minimize long processing of documents and other requirements.

#### CHAPTER THREE

#### RESEARCH METHODOLOGY

#### 3.0 Introduction

This section contains the basic methods and approaches that basically focus on how the study was carried out in the field by the use of different approaches such as the research design, study area that is the area where the study was conducted ,study population, sample size, sampling techniques of data collection, data collection instruments together with their measure of reliability and variability, data sources ,quality insurance, measurement of the variables, data analysis and presentation , ethical issues and study limitations. These approaches were used for the purposes of making the study more productive and successful.

Therefore, this section guides by showing information why different approaches are considered more than the others and explanations why they are considered to others.

## 3.1 Research design

This study was conducted using the case study, which involves empirical findings of particular phenomenon in its real state form by using various sources of evidence. Therefore, for the purposes of determining the objectives of the study, there was application of both qualitative and quantitative approaches to enable researcher obtain reliable information.

The qualitative approach enabled the researcher to know the social aspects that prevail in the area which have great influence on the agriculture loans schemes and the beneficiaries while the quantitative approach is used to look at the relationships between agriculture loan schemes and agriculture production so as to establish cause and effect in highly controlled circumstances by

testing the hypothesis.

This study was conducted under the cross sectional time dimension since it is an academic study that is carried out for the short period of time considering choosing the respondents from where the data was gathered within few days and research questions were answered.

### 3.2 Study area

The study was conducted in greater Bushenyi District, a distance of approximately 300km from the capital city Kampala, in western part of Uganda, boarded by Ntungamo in the south, Mbarara in the north and Kasese in the west.

Specifically this area is chosen because of existence of many agricultural opportunities and being surrounded by many districts which are also practitioners of farming. Therefore this helped to act as an illustration to determine agriculture loan schemes and agriculture production by loan beneficiaries through determining the relation of the agricultural loan schemes to farmers in the region.

## 3.3 Study population

The study population constituted all members of the agriculture loan schemes in Nyakabirizi Division Bushenyi District.

The projected population constituted relative population such as prominent farmers and small holder farmers. Therefore the population with in the area of the study is considered to be heterogeneous whereby it is be based on the different levels of achievements by farmers through the agricultural loan schemes.

### 3.4 Sample size

The sample size was determined in relation to Kreijcie and Morgan (1970) for the beneficiaries of agriculture loan schemes where a sample of 41 respondents were chosen using a random sampling techniques, sampled from the farmers 'association that composed of potential farmers.

The sample was obtained from Krejcie and Morgan's table, basing on the formula S=X NP (1-P)/d (N-1) + XP (1-P), where by S is the sample population, X is the table value of Chi-square for 1 degree of freedom at the desired confidence level, N is the population size P is the population proportion, d is the degree of accuracy expressed as a proportion.

This formula was considered because it provided appropriate and reliable sample for the study

## 3.5 Sampling techniques

The researcher used both probability sampling technique and non probability sampling techniques whereby, non probability so called judgmental sampling technique was employed it the situations that necessitated the researcher to make opinion on certain decisions in form of exploratory research to obtain original ideas that are to be tested upon later. Therefore, by the use of this technique, the researcher was able to obtain the required sample size for the study by judgmental decisions.

The probability sampling technique, was used throughout the study mainly by the simple random selection was meant to determine the population. Therefore, the researcher, got clear list of all the potential farmers with in the area of the study from which that sample was drawn.

This method was used since the research was meant to determine the agricultural loan schemes and production by the beneficiaries, where by all these farmers who were the beneficiaries of the agricultural loan schemes were considered.

#### 3.6 Data sources

The data for the study was obtained as follows;

**3.6.1 Primary sources**; where the data was obtained from the reports ,dissertations, emails, conferences proceedings, government publications as they provided first occurrence data that is needed by the study.

**3.6.2 Secondary sources**; which include the use of books, journals, news papers and government documents as these publications aimed at the wider audience since it can be easily accessed to obtain information on the study.

**3.6.3 Tertiary sources** ; the researcher under this source used tools such as indexes ,abstracts, cover logs, dictionaries as these helped in locating the above mentioned primary and secondary sources as well as helping in introducing of the study topic .

## 3.7 Data collection instruments

The study involved the use of data collection methods such as questioners, observations and interviews to enable obtaining proper data from the study;

## 3.7.1 Questionnaires

This was the main collection tool where by the respondents were given questionnaires as means of eliciting the feelings, beliefs, experience ,perceptions of sample individuals. A 5 likert scale of range (1-Strongly Disagree, 2-Disagree, 3-Not Sure ,4-Agree and 5-Strongly Agree), was used to

determine and measure the respondents based on the independent variables ,where by the dependent variable was measured based on the current year's annual reports .

This tool is preferable because it involves less expenses and it intends to yield much information.

Tools such as pens, pencils, papers, are used throughout during the process..

#### 3.7.2 Interview

This method involves the use of verbal questioning which are used in the response to the respondents who don't understand the language that is used in the questioner since it allows much of the explanations among the respondent and the interviewers. This method also allowed the interviewer to spend some time with the respondents which resulted into proper understanding of the respondents' feelings and attitudes more clearly and allows seeking of additional information where necessary thus making information more meaningful for the successful of the study ,tools such as papers ,pens, pencils will be used.

### 3.7.3 Observation

Under this, the data of study was gathered by watching behavior, events and noting physical characteristics in their nature setting, this method was used to find out the visible indicators of agriculture loan schemes and agriculture production by loan beneficiaries, since it is cheap method in terms of costs and it involves obtaining of accurate information.

The tools used in this method include; camera, idea coverage, and other recording gadgets.

## 3.8 Quality assurance

The researcher ensured quality so that the results of the research satisfy the study objectives and answer the study questions. This was done through taking measures to ensure that the research

tools are credible through validity and reliability, where by;

**3.8.1 Data validity** refers to how well a test, measures what it is purported to measure (Wren, 2005), thus for the case of measure of the research tools such as questionnaires, interviews guide them exactly what they are required to measure and this can be assured by subjecting the draft tools for the review by the experts.

**3.8.2 Data reliability** refers to the degree by which an assessment tool produce stable and consistent results(Colin ,2005). As the measure tool, it is concerned with the ability of same research tool to collect data from the same respondents, and being able to collect the same set of the data in the same successive period, although problems of reliability and validity have been explored thoroughly by the experiments and other quantitative researchers, their treatment by ethnographers has been sporadic and haphazard (Margaret et al., 1999)

### 3.9 Measurement of variables

The researcher used likert 5-scale for measuring the relationships between the variables studied, where by the respondents were asked to give responses varying from strongly disagree, disagree, not sure, agree and strongly agree ,thus this scale was being based on the closed questions that were put forward to the respondents.

The research variables were measured using questionnaires that were handled to the beneficiaries of the agricultural loan scheme.

In addition to that, other conclusions and findings were measured by physical observation by the

researcher.

## 3.10 Data analysis and presentation

Data collected was carefully edited, sorted and coded to eliminate the inconsistence and errors that were made during data collection.

After processing of the data, it was then put through descriptive analysis to generate meaning of what was collected from the field and to find out the relationship that gave approval or contradict new hypothesis through using statistical package for Social Scientists (SPSS) and Micro Soft excel programs.

Information was presented in form of percentages, frequencies, and tables

#### 3.11 Ethical issues

The researcher sought approval and permission from the authorities with in the area of the study which was done through the use of introduction letters, where by the letters were issued to the respective officials for permission to conduct the research before the study was being carried out. Therefore, through the use of the introduction letters, it enabled the researcher to have the right access to data of the request.

Before conducting the study, the researcher widely explained to the respondents of the study about the benefits of study to the area of study area, through recommendations on the outcomes which would improve the agricultural production in the area.

The researcher also took into account consideration the due date so as to complete the study in the rightful time.

The aspect of confidentiality was maintained by the researcher where by the respondents and all

the study participants were assured and guaranteed of their information to remain confidential throughout and after the study.

## 3.12 Study limitations

With all considerations, the study had a number of the limitations such as sample size whereby it could increase the number of the errors in the study thus this lead to wrong conclusions and recommendations. The researcher therefore, carried out the study with a wide sample size for wider explanations and comparisons.

The use of wrong design such as use of active research in the academic research, this was minimized through proper consultation when choosing the research design to use in the study.

The study will also be limited by the time dimension, since the study will be cross -sectional, the researcher will not be able to obtain sufficient and most accurate information because the time will not be enough to gather the required information, therefore, in attempt to minimize this, the researcher will intend to use multiple data collection tools to enable gathering of wide data in shortest period of time.

#### **CHAPTER FOUR**

### PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

#### 4.0 Introduction

In the previous chapter, we established the ideas and views of different authors on the subject matter of the study. Basing on the findings from the literature review, we learnt that agriculture loan schemes are very important as they contribute to the agriculture production. The agriculture loan schemes therefore, strive to meet their objectives as the way to improve agriculture production for the benefit of households in Uganda.

In this chapter, the researcher shall present and analyze research findings in relation to the case study. The selected sample for this study was 41 beneficiaries of which all responded.

## **4.1 Back ground information of respondents**

In the section, the research majorly aimed at examining the personal characteristics of the respondents of the study. The characteristics that were mainly considered are; Gender, age group, education status, family size, farming experience.

**Table 4.1.1 Frequency for Gender of respondents** 

Gender	Frequency	Percentage
Male	21	51.2
Female	20	48.8
Total	41	100.0

Source; Primary data 2015

Findings of the study as presented in table 4.2.1 show that 51.2 percent of respondents are males and females constituted the remaining 48.8 percent.

Males are the majority beneficiaries mainly because they have taken big step in putting up most of the agriculture projects in the area than women do.

 Table 4.1.2 Frequency distribution for Age group of respondents

Years	Frequency	Percent	
20-30	5	12.2	
31-40	13	31.7	
41-50	15	36.6	
Above 50	8	19.5	
Total	41	100.0	

Source; Primary data 2015

As presented in the table 4.2.2 above, the majority of the respondents were in the age bracket of 41-50 years (36.6) percent, 12.2 percent was in age group of 20-30years, 31.7 percent in the age group of 31-40 years and 19.5 percent of respondents were 50 or above years of age . This distribution shows that agriculture loan schemes favors people who are in the age bracket of 41-50 years, this is because they are seen as having many responsibilities, being energetic and having capacity to plan for the loans granted to them and thus able to use those loans profitably for intended purposes and being able to pay back those loans. The adolescents that is the age

bracket of 20-30 years are usually considered as un serious and not stable in what ever they are planning or what they are doing while the elderly that is the age bracket of above 50 years are usually considered to be weak and not able to utilize the loans granted to them as they can easily channel the loan purpose for their care.

Table 4.1.3 Frequency Distribution of family size of respondents

Family size	Frequency	Percent	
Less than 5	8	19.5	
5-10	30	73.2	
11-15	2	4.9	
Above 16	1	2.4	
Total	41	100	

Source; Primary data 2015

The table 4.2.3 above shows family sizes of the respondents, where by family within the range of 5-10 members shows a high percent of 73.2, family size that belongs to range below 5 members has 19.5 percent, family size in the range of 11-15 constitutes 4.9 percent and the family size with the range above 16 has 2.4 percent, this is an indication that agriculture loan schemes work well with the families that can be easily handled financially, since there no dependants that can easily lead to channeling of the loan funds to un productive activities such as family maintenance, thus the smaller size of the family the more likely to benefit from the schemes.

**Table 4.1.4 Frequency Distribution of educational status of respondents** 

	Frequency	Percent
Formal education	33	80.5
Informal education	8	19.5
	41	100.0

Source; Primary data 2015

Findings of the study form table 4.2.4 above show that majorities of the respondents had attained formal education which includes primary, secondary, certificates, diplomas, degrees and post graduate with 80.5 percent of respondents while the remaining percent of 19.5 respondents are the respondents who have not attained any educational level of study ,thus this shows that the scheme work well with the educated respondents because they understand well the terms and conditions which leads to high rate of compliance to the standards of the scheme and also educated respondents tend to utilize the loan funds effectively unlike the 8 respondents who are not educated which usually becomes hard task to first teach them with the basics of the schemes, thus costly and also high chases of failure.

**Table 4.1.5 frequency Distribution of farming experience of respondents** 

Years	Frequency	percent
0-5	6	14.6
6-10	7	17.1
11-15	12	29.3
16-20	9	22.0
Above 20	7	17.1
	41	100

Source; Primary data 2015

Findings of the study from the table 4.2.5 above show that majority of the respondents that is 29.3 percent have taken a bigger experience with the range of 11-15 years, 14.6 percent in the range of 0-5 years, 17.1 percent 6-10 years, 22.0 percent falls in the year experience of 16-20 and 17.1 percent falls in the year range of experience of 20 and above. Basing on these experience intervals it is indicated that, farmers who have operated for more than 10 years of experience are highly entrusted by the schemes as they are usually termed as established farms with high or medium farm size that posses appositive value of farm production, while farmers with the experience of less than 10 years, according to USDA are referred to as beginning farmers who are so prune to risks than the established ones. Farmers that have year experience of more than 20 years usually indicate a less percent since most of them do not trust the schemes as they keep on doing what they are supposed to do for substance purposes.

## 4.2 Agriculture Credit and agriculture production

One of the objectives of the study was to examine the role of agriculture credit facility and agriculture production by beneficiaries. According to Abedulallah, (2009), agriculture as a sector depends more on credit than any other sector of the economy because of the seasonal variations in the farmer's returns and a changing trend from subsistence to commercial farming. As suggested by (Sidhu, 2000), the demand for capital increases with transformation of agriculture sector from traditionalism towards commercialization.

Therefore, as indicated in the chapter three of the study, the questionnaire which was used to obtain data from the respondents was developed on a five point likert scale with different levels of agreement and disagreement for each objective statement that is, 1-Strongly Disagree, 2 Disagre, 3 Not Sure, 4-Strongly Agree, 5-Agree.thus, this shows that all responses averaging 3.0 and above indicated "Agree" while all responses averaging below 3.0 average indicated "Disagree".

The agriculture production by the agriculture credit facility was established by computing the mean and standard deviation from statements that were indicated as; farming assets acquired by loan, sufficient loan amount, loan extension, loan payment, expected period .the finding basing on the analysis are shown in the table below.

Table 4.2.1: Mean and standard deviation for Agricultural credit facility

Agriculture credit facility	N	Min	Max	Mean	Std. Dev
Farming assets acquired by loan	41	1	5	2.85	1.797
Sufficient loan amount	41	1	5	2.5	1.433
Loan extension	41	1	5	3.90	1.338
Loan payment	41	1	5	3.34	1.510
Expected period for loan	41	1	5	2.61	1.563

Source; Primary data 2015

## 4.2.2 Farming assets acquired by loan

Findings of the table 4.3.1 above show that respondents of mean 2.85 disagree with the statement that, they acquire farming business asset by the loan this is evidenced by the fact that most of the loans that are acquired are used for farm operating actives such as buying raw materials like seeds, fertilizers and labor and more to that as suggested by (Manukwe,2007) that restricted access to the finance, lack of agricultural inputs, inefficient market systems and continued use of the traditional techniques being the factors responsible for the low agricultural production. With a high standard deviation of 1.797, this shows that there were high variations in the views .Therefore in recommendation, (Duvvuri, 2012) states that credit is an important determinant of value added in agriculture since it contributes positively to the adoption of modern production inputs and private investments in irrigation and other farm machinery that assists towards the growth of the agriculture sector.

#### **4.2.3** Sufficient loan amount

Respondents of mean 2.54 and standard deviation 1.433 disagree with the statement that PFIs provide sufficient loan amounts to the farmers. This is because most of the farmers are appraised for their activities and usually the institutions give out loans basing on the cash flow and earnings of various farmers thus, they give out specific amount of loan basing on what you can manage and pay back, this is supported by (Vyas, 2004) who says that, various farm level studies have shown that the access to institutional finance of small holders is limited and inadequate. Also Majnoni, (2012) supports the statement by saying that, provision of loan is insufficient when the collateral is of high value.

#### 4.2.4 Loan extension

Basing on the findings of the table 4.3.1 above, most of the respondents agreed that PFIs have extended agricultural loans to various areas this is evidenced by the respondents of mean 3.90 who agreed with the statement by saying that the PFIs reach in the deep places by use of services such as financial mobile services to reach out to various places so as to enable various farmers to acquire financial services. In addition to the agreement, Agricultural Finance Year Book, (2010) supports that statement by saying that, much larger number of small holders has access to short term credit for the purchase of inputs from cooperative societies. Respondents agreed with the high varying responses as indicated by the standard deviation of 1.338.

## 4.2.5 Loan payment

Majority of the respondents are able to pay pending loans even if they make farm losses this is evidenced by the findings of the table 4.3.1 were by respondents of mean 3.34 and standard deviation of 1.510 who agreed with the statement because even if they make loses they tend to

look for the loan repayment from friends and relatives for the fear of their collaterals and farms being taken away.

## **4.2.6** Expected period

Basing on the findings from the table 4.3.1 above, respondents of mean 2.61 disagree with the statement that PFIs process and give loans with in the expected period, this is because usually the institutions consider the compliance with the formalities and procedures for one to obtain loan hence making it delay for the farmers to get their loans in the expected period of time.

## 4.3 Group loan and Individual loan and Agriculture Production

Another objective of the study was to examine the role of group and individual loan towards agriculture production by the beneficiaries. This was examined by the statements which included; group loan provision, individual loan provision, group loan requirement, group and individual loan difference paying back group loan and individual loan requirement.

Table 4.3.1: Mean and standard deviation of group and individual loan

Group and individual loan	N	Min	Max	Mean	Std. Dev
Group loan provision	41	1	5	3.41	3.41
Individual loan provision	41	1	5	3.90	1.179
Group loan requirement	41	1	5	2.98	1.214
Group and individual loan difference	41	1	5	3.22	1.173
Paying back group loan	41	1	5	3.32	1.234
Individual loan requirement	41	1	5	3.17	1.302

Source; Primary data, 2015

## 4.3.2 Group loan provision

From the findings shown in the table 4.41 above, respondents of mean 3.41 agreed that the PFIs provide group loans this is evidenced by various groups that are in the area such as twenatukore group, early bird group. In support to the agreement, Private sector development (2001) stated that, agricultural loans support activities to the agricultural groups and farmers ranging from farm demonstration, seed provision and post harvest support programs which have greatly helped in the reduction of the harvest losses through provision of storages. Raymond, (2000) further supported the statement by saying that agricultural group lending is to provide credit to the farmers who would otherwise not have received the loans because of transaction costs of the individual loans.

## 4.3.2 Individual loan provision

From the findings of the table 4.4.1 above, Respondents of mean 3.90 with a standard deviation of 1.179 were also able to agree that the PFIs are providing the individual loans in the area, and this is because most of the farmers in the area are operating on the individual farms which are acts as a necessity for one to obtain loan. This seems to be in agreement with the study done by (Waswa, 2002) who says that the individual loan payment period depends on the farmer's capacity to pay since most of individual who opt for individual loan have enough collateral to guarantee the loan. In the support to the statement, (Ayisisk, 2004) adds that, access to credit requires collateral mostly in form of land rights. However in disagreement with the statement, Linder, (2010) says that, rural farmers lack sufficient collateral, capital crops and contracts to attract investment and improve farming business.

## 4.3.3 Group loan requirement

Most of the respondents do not understand group loan requirements, this is evidenced by the mean of 2.98 and standard deviation of 1.214 from the table 4.4.1 above, where by the respondents don't know the requirements of the group loan because of the limited extension services by the leaders in the area. This is in agreement with the study by Development plan, (2000) which found out that, credit programs invariably involve only a relatively small number of farmers in contrast, education, extension and research could presumably benefit a relatively large number of farmers within the budgets projected and should have the potential for contributing to the welfare of every practical farmer in the country.

## 4.3.4 Individual and group loan difference

From the findings of table 4.4.1 above, the respondents of mean 3.22 and a standard deviation of

1.173 agree with the statement that they understand the difference between individual and group loans.

### 4.3.5 Paying back group loan

According to the table 4.4.1 above, respondents of mean 3.32 and standard deviation of 1.234 agree with the statement that, they are able to pay the group loan, this is because with in the group loan systems members are usually tasked to pay with in the short period interval such as every week, after two weeks, thus this pressures them to pay since failure to pay may easily lead to channeling of the default to the guarantee from the group. This is in agreement to study done by (Raymond, 2000), who says group lending schemes work well with the groups that are homogenous and which are jointly liable for their defaults since there is always wide fact of the default by the borrowers reflected in the delinquency in the loan repayment and in the bad debt losses.

### 4.3.6 Individual loan requirements

Basing on the findings from the table 4.4.1 above, most of the farmers understand the requirements of individual loan this is evidenced by the mean of 3.17 respondents and standard deviation of 1.302,who are well away of the requirements since individual loan is highly preferred than group loan hence making it more understandable. As it is stated by Hoff (2003) that individual loan is pointed out as one of the agriculture loan extended for the growth of improved loan accessibility.

## 4.4 Rural farmers loan scheme and agriculture production

Under this, the study emphasizes on the objective three of the study to evaluate the role of rural farmers scheme and agriculture production by beneficiaries, where by, the determination of the

roles was done by examining the following statements; understanding the scheme, procedures involved, loan accessibility, loan payment ,understanding loan requirement.

4.4.1 Mean and Standard Deviation of Rural farmers scheme

Rural farmers loan scheme	N	Min	Max	Mean	Std. Dev
Understanding the scheme	41	1	5	2.63	1.655
Procedures involved	41	1	5	2.83	1.340
Loan accessibility	41	1	5	3.34	1.296
Loan repayment	41	1	5	3.34	1.063
Understanding loan requirement	41	1	5	3.37	1.318

Source; Primary data 2015

## **4.4.2** Understanding the scheme

According to the findings in the table 4.5.1 above, respondents don't understand the rural farmers scheme. This is evidenced by the respondents of mean 2.63 because the scheme has not well been in the operation in the area. As supported by the study carried out by World Bank, (2003), that most of the agriculture production in the rural areas is demonstrated by the small scale resource poor farmers, who lack skills in modern agriculture practices by only depending on the rudimentary farming methods since poverty is more persuasive in the rural areas particularly in the farmer homelands.

#### 4.4.3 Procedures involved

From the table 4.5.1 above, respondents represented by the mean of 2.83 shows that they don't understand the procedures with in the rural farmers scheme which is an indication that farmers have not well understood the scheme thus the call for the government to teach people about the scheme.

### 4.4.4 Loan accessibility

According to that findings of the table above, most of the farmers are able to access loan under this scheme this is evidenced by the respondents shown in the mean of 3.34 with a standard deviation of 1.296 this is because farmers are able to access facilities from this scheme because of use of various loan officers who go around in deep villages to access farmers and also as (Rooijalkers, 2010) supported the statement by stating that money for farming not only means access to credit, but also access to other financial products and services. Therefore, farmers invest their own labor and part of their income to improve land, access improved seeds and other inputs, thus they often need loans to acquire new equipment, expand livestock and other post harvest handling facilities. In the support of the agreement, Lakwo (2010) found out that rural farmer's access to credit from banks has changed the way rural farmers see agriculture and the strategies they adopt for sustainable agricultural production.

### 4.4.5 Loan repayment

From the findings of the table 4.5.1 above, majority of respondents by the mean of 3.34 standard deviation of 1.063 agree that they are able to pay the loan under the scheme this is because farmers usually respect their loan payments because of fear to be fined and lose their farms in case they default their loan payments.

## 4.4.6 Understanding loan requirement

According to the table 4.5.1 above, respondents shown in the mean of 3.37 and standard deviation of 1.318, agreed that they understand the requirements of loan under this scheme thus this indicates that most of the agriculture loans in the area tend to have same loan requirements for a farmer to obtain one, as supported by the (World Bank, 2000), that many efforts have been made and continuous search for sustainable interventions through appropriate credit schemes to improve the living conditions and quality of life of small farmers in the rural areas. Thus the schemes are specifically designed for small scale famers since small holders form majority of primary producers of all but a few plantation crops like sugarcane and to some extent tea, such farmers need financial services.

## 4.5 Agriculture Production by the Beneficiaries

According to the study, the agriculture production is established by the proper examining of the dimensions such as out put, sales and mechanization, where by each is categorized and analyzed basing on its statements.

### **4.5.1 Output**

Under this dimension, it is analyzed by statements such as stable out put, loan to increase out put, price fluctuation and out put, expected out put, reduced out put and losses.

Table 4.5.2: Mean and Standard Deviation of out put

Out put	N	Min	Max	Mean	Std. Dev
Stable output	41	1	5	3.51	1.630
Loan to increase out put	41	1	5	3.54	1.267
Price fluctuation and output	41	1	5	4.07	0.818
Expected out put	41	1	5	3.15	1.652
Reduced output and losses	41	1	5	3.05	1.465

Source; Primary data 2015

## 4.5.3 Stable output

According to the table 4.6.1 above, most of the farmers out put has grown steadily over the time, this is evidenced by the respondents of mean 3.51, who agreed with the statement. This is because most of the farmers have obtained loans to facilitate the farm operations. In agreement with the statement, Abrima, (2001) says that agricultural credit has been rising in the recent years as a share of both the value of inputs and the value of out put therefore, direct agriculture credit has a positive impact on the agriculture production and statistically significant impact on agriculture output and its effect is immediate.

## 4.5.4 Loan to increase out put

Basing on the findings in the table 4.6.1 above, most of the farmers need loans in order to increase out put, as it is evidenced by the respondents of mean 3.54 who agreed with the statement .This is because loan acts as a lubricate that facilitates farmers to meet their farm targets, as (Abdullah at el, 2009), states that agriculture depends more on credit than any other

sector because of seasonal variations in farmer's returns and high rate of changing trend from the subsistence to commercial farming. Ahmad, (2011) supports the statement by saying that transformation of traditional agriculture sector to modern commercialization, farming needs credit facility.

## 4.5.5 Price fluctuation and output

From the findings of the table 4.6.1 above, it showed that in the agriculture sector, price fluctuation has been considered as the main problem, this is evidenced by the mean of 4.07and standard deviation 0.818 of respondents who agreed with the statement in the agreement with findings, a study on Agriculture (Lending,2014), found out that price fluctuation is as the result of; un favorable weather, domestic and global supply and demand changes and macro changes in political or economic policy.

### 4.5.6 Expected out put

From the findings of the study as shown in the table 4.6.1 above, most of the farmers have achieved their out put expectations because of loans this is evidenced by the mean of 3.15 of respondents and standard deviation of 1.652 who agreed with the statement basing on Seeram, (2007) who says that increased supply and administered pricing of agriculture credit helps in the increase of agriculture productivity and well being of agriculturists.

### 4.5.7 Reduced output and losses

From the findings of the table 4.6.1 above, most of the farmers make losses as the result of reduced output, this is evidenced by the respondents of mean 3.05 .this is because most farmers get loans on expectation to pay back from the farm out put but when the out put is low this makes it hard for them to pay the loan and cover up other operation costs thus a loss to the

farmer.

**4.6 Sales** 

Table 4.6.1: Mean and Standard deviation of sales

Sales	N	Min	Max	Mean	Std .Dev
Profits from sales	41	1	5	3.78	1.151
Overtime sales	41	1	5	3.59	1.284
Prices and profitability	41	1	5	3.56	1.226
Payment of pending loans	41	1	5	3.63	1.392
Operating costs	41	1	5	3.59	1.183
Over time profits	41	1	5	3.68	0.986

Source; Primary data 2015

## 4.6.2 Profits from sales

Most of the farmers basing on the table 4.7.1 above make profits out from their sale ,this is shown by the respondents of 3.78 who agree with the statement, this is because agriculture being the backbone of our economy, the demand for the agricultural products is always high thus farmers making moiré profits out from it.

#### 4.6.3 Overtime sales

The findings of the table 4.7.1 above, show that agriculture product sales have grown over the time as evidenced by the respondents of mean 3.59, this is because of the increased innovation in the sector and extension of financial services in form of agriculture credit to various farmers since with an appropriate loan, farmers are able defer part of the sales and obtain a higher average price, as this can contribute to raise their welfare.

## 4.6.4 Prices and profitability

The findings from the table 4.7.1 above show that usually prices of the agriculture produce affect profitability. This is shown by the respondents of mean 3.56 who agreed with the statement. This is because when prices of agriculture produce go high, the level of profits will also increase but when the prices of produce are lowered especially due to pretty of produce, prices tend to reduce hence affecting the profitability of the farmers who usually strive to overcome operational costs. The statement was also supported by (Alsiyez, 2012) who says has that there has been credit rationing because of the transaction costs as lenders face high costs to get information about that borrower, lack of confidence in the farmers, the low profitability of the farms and undeveloped property markets. In support to the agreement, the study carried out on agriculture lending (2014), found out that market price and product cost can affect both revenues and expenses because many agriculture products are globally traded commodities and also currency exchange rates usually affect their prices.

## 4.6.5 Payment of pending loans

The findings of the table 4.7.1above showed that Farmers usually pay back their loans after making profits from the farm produce. This is evidenced by the respondents of mean 3.63 who

agreed with the statement. This is because they usually pay back loans after the produce.

# **4.6.6 Operating costs**

The findings of the table 4.7.1 above, showed that most of the farmers are able to cover all the operating costs from the income generated from the farm this is shown by the mean of 3.59 respondents who agreed with the statement .This is because usually farmers pay for all the operational costs from the farm and the surplus is the one usually referred to as the profit from the produce.

## **4.6.7** Over time profits

According to the table 4.7.1 above, most of the farmer's profits have been increasing over the time, this is evidenced by the mean 3.68 of respondents who agreed with the statement. This is because most of the farmers output and general growth have been due over year to year thus, an indication in the growth of profits.

#### 4.7 Mechanization

Table 4.7.1: Mean and Standard Deviation of Mechanization

Mechanization	N	Min	Max	Mean	Std. Dev
Loan for tools acquisition	41	1	5	2.22	1.541
Machines than human labor	41	1	5	1.98	1.313
Seasonal changes	41	1	5	2.51	1.535
Scale production	41	1	5	3.22	1.492
High yield products	41	1	5	3.71	1.327

Source; Primary data 2015

## 4.7.2 Loan for tools acquisition

According to the findings of the table 4.8.1 above, most of the farmers in the area of the study have not used loans in order to acquire farming tools, this is evidenced by the respondents constituting mean of 2.22, this is because most of the a farmers like to use rudimentary tools such as hoes, rakes, pangas which are shared among them selves thus ignoring the cost attached to buying new ones using the loan in support of the argument, (Omeh ,2006) stated that small scale farmers are known to be economically weak with little or no capital investments. Consequently, they use low technology tools and methods in their production activities which in turn leads to reduced output and productivity. World Bank, (2003), supported the statement by saying that, most of the agriculture production in the rural areas is demonstrated

by the small scale resource poor farmers, who lack skills in modern agriculture practices by only depending on the rudimentary farming methods.

#### 4.7.3 Machines than human labor

The findings of the table 4..8.1 above showed, that a mean of 1.98 respondents, disagree with the statement that harvest from the farm is high due to use of machines than human labor, this is because most of the farmers in the area establish their farms on a small scale and mainly for subsistence purposes thus requiring them to use human labor rather than machines which are usually considered to be more expensive in terms of maintenance and operating costs.

### 4.7.4 Seasonal changes

According to the findings of the table 4.8.1 above, Seasonal changes usually have effect on the agriculture. This is evidenced by the respondents of mean 2.51 who disagree with the statement that the seasonal factors don't have effect on farm operations, this is because usually farmers are faced with frequent changes in seasons that affect their operations for example they can plant when expecting to become wet season and then it becomes dry throughout thus leading to the loss of the plantings or usually it rains much which leads to leaching of the soil and loss of fertility in the soil hence poor farm yields.

### 4.7.5 Scale production

According to the findings of the table 4.8.1 above, acquiring of the loan by the farmers leads to increased scale of production this is evidenced by the respondents of mean 3.22, who agreed with the statement that loans lead to improved scale of production. This is because they are able to obtain all necessary raw materials for farming by use of the agriculture loans as suggested by (Masaka, 2009) that the role of credit and loan schemes in the agricultural production are the

crucial because inputs such as seeds and fertilizers are usually purchased at the beginning of the production season, but returns are realized only at the end of the production season.

## 4.7.6 High yield products

Findings from the table 4.8.1above, most of the farmers have produced high yields in the past years, this is evidenced by the mean of 3.71 of the respondents who agreed with the statement because most of them have acquired agricultural loans that have boosted their agriculture production by purchasing quality farming materials such as improved seeds, fertilizers, storage treatment medicines thus enabling quality of farm produce.

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSIONS AND RECOMMENDATION

#### 5.0 Introduction

This chapter provides the summary, conclusions and recommendations on agriculture loan schemes and agriculture production by beneficiaries in relation to the findings from the study. The findings, conclusions and recommendations were to establish how agricultural loan schemes lead to agriculture production in terms of agriculture credit facility, individual and group loan and rural farmers scheme and to the extent to which they have achieved their objectives in term of agriculture production such as out put, mechanization and sales.

The information were analyzed inform of tables which were used to test the relationship between the independent variables and (agriculture loan schemes) and dependent variables (agriculture production).

## 5.1 Summary of findings

#### 5.1.1 Agriculture credit facility and agriculture production

While assessing agriculture credit facility, the researcher used various qualities of the agriculture credit facility like; farming asset acquired by loan, sufficient loan amount, loan extension, loan payment, expected period for loan.

Findings from the study showed that majority of the respondents agreed that agriculture credit facility leads to the agriculture production for example, the scheme helps farmers to commercialize agriculture through provision of medium and long term projects engaged in the agriculture processing, modernization and mechanization.

## 5.1.2 Group and individual loan and agriculture production

Assessment of group and individual loan was measured using variables such as group loan provision, individual loan provision group loan requirement, group and individual loan difference, paying back group loan and group loan requirement.

Study findings revealed that majority of the respondents agreed to the view that the group and individual loans lead to agriculture production, through helping farmers who don't have collaterals to obtain loans since forming groups, can help them to obtain credit from the scheme without collateral as members are usually guaranteed as collateral thus, this enables all farmers to obtain credit to enhance their agriculture production by purchasing necessary items for large scale agriculture production.

While with the individual loans, it enhances farmers production since its payment is based on one's capacity to pay thus, enabling farmers to pay usually after the farm produce and also helping out farmers to finance small projects such as piggery, poultry and others.

#### 5.1.3 Rural farmers loan scheme

Throughout the process of assessing rural farmers scheme, it was measured using the variables such as; understanding the scheme, procedures involved, loan accessibility, loan payment understanding loan requirement.

Study findings disclosed that majority of the respondents agreed that the rural farmers scheme leads to the agriculture production, by improving on the loan accessibility in the rural areas, provision of extension services to farmers, improved access to un collateralized credits, as the way to raise the welfare of the people in the rural areas that are dependent on the agriculture.

#### **5.2 Conclusions**

The research ended with the conclusion that the hypothesis that agricultural loan schemes contribute importantly to agriculture production in Nyakabirizi Division Bushenyi municipality, thus it can be highly initiated and supported in the area. Therefore, out of the research we were able to conclude that indeed agriculture loan schemes play big role in the agriculture production hence increased level of agriculture productivity in the area. However, poverty is a strongly undesirable phenomenon mostly concentrated in rural areas.

Agriculture productivity can lead to the economic growth thus, there is a need for essential component of agricultural development, like timely access to adequate financial services, such as subsidized agriculture credit, and therefore, it should always be made sustainable by ensuring that its offer by the participating financial institutions is viable over the long term.

This research study has examined a lot in relation to how agricultural loan scheme has endeavored to help people in Uganda at a large. The majority of the beneficiaries of the scheme interviewed were aware of the all formalities to enable them to get the loans as analyzed above. Many knew that there is a need to have already established farms, collateral security in order to obtain the necessary subsidized loan from PFIs, thus most of the beneficiaries were happy that the subsidized loans from the schemes had helped them and they were willing to borrow more.

Subsidized agricultural loan has supported many farmers in the country both large scale and small scale farmers, there has also been extension of credit and advisory services to farmers, which has significantly improved the development of agriculture production in the country.

#### **5.3 Recommendations**

There is evidence that despite financial sector liberalization in Uganda and initiation of agricultural financing initiatives, access and use of credit by farmers has remained very low. On condition of the significance of agriculture to Uganda's economy, there is need for the government to take up convenient policy actions to turn around the current trend. These policies include the following;

There is need for the government to improve agriculture financing through existing commercial banks by facilitating them to develop and diversify their portfolios on agricultural financing which can lead to creation of demand for the bank's products and services.

The government should take up the initiative to build capacity of rural cooperatives by weighing and developing successful models such as Area Cooperative Enterprise (ACE) of Uganda cooperative Alliance (UCA) which has demonstrated success in increasing access to agricultural finance by small holder farmers along key commodity value chains such as maize, coffee, rice, livestock, cotton banana and others.

There is need to transform all the various agricultural financing initiatives that is to say agricultural credit facility, micro financing, through micro finance support center and others into rural and agricultural development bank, which prioritizes agricultural financing with standard banking best practices.

There is a need for the government to support commodity cooperatives and farmers associations along the value chains. These farmer organizations could be important in intervening credit to farmers.

There is a need for the development of new credit products, in addition to collaborating on only

subsidized loans, there is always a need to work directly with the participating financial institutions, to provide grants and technical assistance to help them to develop and launch other new credit products which can mitigate the risk of lending to agriculture related business by taking into considerations the realities of farming and related activities. The new products can lead to increasing opportunities for the rural Ugandans to improve and expand their small farming business.

Government should put in place a frame work to examine on the policies and procedures of the practices of the agriculture loan schemes so as to control conditions and circumstances where by the schemes have not met their expected objectives and targets. With this in place, effective agriculture loan methods will be implemented and thus will reduce the present loan diversion and default rates which are most causes of the failure of the schemes.

Currently most of the agriculture loan schemes in Uganda are still funded by the donors. Therefore, in most of participating financial institutions the donor body makes major demands upon those who are responsible for the actions and the management of the schemes funds. As for that case therefore, the modes and methods of delivery of the scheme products and services needs to be flexible and streamlined for the beneficiaries and to make sure that all the terms and conditions for the agriculture loans are in the line with the mission and objectives of the participating financial institutions.

There is always great desire for the PFIs to improve the quality of the financial services they render. Other than struggling of the PFIs to recover their operational costs and to achieve great financial self reliance, what needs to be revised and improved may include; high interest rates to be reduced, mobile services to increase loan accessibility to all and in particular to poor who are

often excluded from today's banking system by making them vulnerable, for instance, to predatory lending. For efficiency and sustainability, PFIs need to put in place open commutation between management and clients as the way to address weaknesses and strength for better improvement and performance.

## **5.4 Areas for Further Research**

- a) Agricultural loan terms and loan accessibility
- b) Financial accessibility and poverty eradication
- c) Service extension and education of farmers
- d) Linking credit with savings
- e) Minimization of loan delinquency and defaults
- f) Targeting of credit towards small scale farmers
- g) Evaluation of performance of agricultural loan schemes
- h) Credit programs for small scale farmers

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## Appendix I

## QUESTIONNAIRE ONE :( BORROWERS/MEMBERS)

### **SECTION A**

Dear sir/madam;

This is basically an academic research that is meant to determine the agriculture loan schemes and agriculture production by beneficiaries in the Uganda. For that case therefore, you have been selected as a respondent because you are a beneficiary of the agriculture loan schemes. I therefore, request that you may create ample time and help me answer these questions by ticking in the boxes and filling in the gaps that are provided. As a researcher therefore, I promise that all information that you provide will be handled carefully and ethically.

### **SECTION ONE**

#### Personal details

Please tick your choice in	the box provided	appropriately.		
Sex				
Male	female			
Age				
20-30 31-40	41-50	above 50		
Family size				
Less than5 5-1	0	11-15	above16	

Educational status									
Formal education			Informal ed	ucation					
Farming Experience	ce (years)								
0-5 6-	-10 1	1-15	16-20	ab	ove	21			
SECTION TWO									
Please respond to	the following s	tatements by in	dicating the ex	xtent to	whic	ch y	ou aş	gree	and
diaganaa an 41a maa	vided scale.								
disagree on the pro									
PARTICULARS	STRONGLY	DISAGREE	NOT SURE	STRO	NGL	Y	AGF	REE	
		DISAGREE	NOT SURE	STRO		Y	AGF	REE	
	STRONGLY	DISAGREE 2	NOT SURE			Y	AGF	REE	
PARTICULARS	STRONGLY DISAGREE			AGRE		Y		REE	
PARTICULARS	STRONGLY DISAGREE	2		AGRE		Y		REE	
PARTICULARS  SCALE	STRONGLY DISAGREE	2		AGRE		Y		REE	
PARTICULARS  SCALE  AGRICULTURE I	STRONGLY DISAGREE 1 LOAN SCHEME	2 ES	3	AGRE 4		Y		REE	
PARTICULARS  SCALE  AGRICULTURE I  Objective 1	STRONGLY DISAGREE 1 LOAN SCHEME	2 ES	3	AGRE 4		Y 2		REE 4	5

Banks provide me with sufficient loan amount for my farming business			
The banks have been able to extend loans to some of the farmers in my			
home area			
I am always able to pay back my pending loans even if I make losses			
Banks usually process and give loan with in the expected period			

# Objective 2

Group and individual loan and agriculture production

STATEMENT	1	2	3	4	5
Participating Financial institutions provide group loans to the farmers					
Participating Financial institutions provide individual loans to farmers					
The requirement for group loan is understood by the farmers					
The extent to which group loan differs from individual loans is					
understood by the farmers					

Farmers are able to pay back the group loans			
Farmers are able to meet all the requirements of individual loans			

# Objective 3

Rural farmers' scheme and agriculture production

STATEMENT	1	2	3	4	5
The scheme is understood by most of farmers					
The procedures that involved in the scheme are understood by the					
farmers					
Farmers have access to the loans					
Farmers are able to repay the loan					
All the requirements needed for the loan are understood by the farmers					

# SECTION 3

# AGRICULTURE PRODUCTION AND BENEFFICARIES

# Out put

STATEMENT	1	2	3	4	5
My farm output has steadily grown over the time					
I need a loan to increase my output					
Price fluctuation affects my output					
My farm has always achieved the expected output as a result of the					
bank loan					
My farm has made losses over the past years due to reduced output					

# Sales

STATEMNET	1	2	3	4	5
I always make good profit from the sales of my farm products					
My sales have steadily grown over the years					
					l
					l

prices of my produce affect my profitability			
The farm always generates enough profits to enable me payback my			
nonding loops			
pending loans			
I can cover all my operating costs from the income generated by the farm			
My profits have been increasing over time			

# Mechanized Agriculture

STATEMENT	1	2	3	4	5
I have used bank loans to acquire new farming tools					
The harvest from my farm has always been high due to use of machines					
other than human labor					
Seasonal factors have no effect on my farm operations					
I have acquired loan to increase scale production on my farm					
My farm has always produced high yield farm products in the past years.					