An Evaluation Of Agricultural Financing Practices And Productivity Of Agricultural Cooperatives In Kamwenge District

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APPROVAL

This research proposal titled "An evaluation of agricultural financing practices and productivity of agricultural cooperatives in Kamwenge District" is submitted for examination the approval of the University supervisor.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This study will evaluate the different agricultural financing practices and productivity of agricultural cooperatives in Kamwenge district. In this study, agricultural financing practices will be treated as the independent variable while productivity of agricultural cooperatives will be treated as the dependent variable. Agricultural financing practices will be measured as the different approaches to financing agriculture by cooperatives while productivity will be measured as the output volume of produce from the selected farmers of the selected agricultural cooperatives in Kamwenge district.

According to the United Nations Food and Agricultural Organisation (FAO, 2011), Agricultural finance refers to financial services ranging from short-, medium- and long-term loans, to leasing, to crop and livestock insurance, covering the entire agricultural value chain, input supply, production and distribution, wholesaling, processing and marketing. However the study will dwell more on loans and savings by farmers in cooperatives.

A big majority of inhabitants in Kamwenge district are smallholder farmers. Smallholder farmers can be defined as those farmers owning small-based plots of land (1 to 2 acres) on which they grow subsistence crops and one or two cash crops relying almost exclusively on family labour and Agricultural productivity is a measure of how efficiently resources are being used in producing agricultural products. When productivity increases, there is an increase in the amount of output for any given amount of inputs used in its production. Productivity gains can be realised through increases in the efficiency with which labour, capital and land are used (DFID, 2005).

The history of cooperation is directly related with human being, because, human being traditionally cooperate with each other in their day to day life to overcome their immediate problems and also to share their feelings. Representative body for cooperatives in the world, the International Cooperative Alliance (ICA) defined cooperative in 1995, as "An autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise", (FCA, 2015).

Since farming requires capital like other business, timely availability of capital leads to adoption of improved seeds, fertilizers and modern technologies which in turn increase the farm production. Therefore, agriculture financing is an essential element for modernization in agriculture (Saeed Ur Rahman, 2014).

1.2 Background to the study

The study will be sectioned according to recommendation by (Amin.M.E, 2005) that is to say it will follow the background breakdown as; historical background, theoretical background, conceptual background and contextual background.

1.2.1 Historical background

Modern cooperatives originated in Europe and spread to other industrializing countries during the late 19th century as a self-help method to counter extreme conditions of poverty (Hoyt., 1989). The development of cooperatives over time has been shaped by many factors and influences such as economic conditions, farmer organizations and public policy (Ingalsbe G & Groves FW, 1989).

Cooperatives offer a number of economic services to their membership which includes agricultural financing. The provision of agricultural financing services to farmers helps in increasing agricultural production and thus improving food security (Shiferaw B, Hellin J, Muricho G., 2011). It is also on record that a number of agricultural financing initiatives have been initiated by GoU since 1990s, and complemented by implementing partner programmes. These interventions were to improve access to agricultural financing. These include; the Cooperative Societies Programme in 1992, the Poverty Eradication Action Plan (PEAP) in 2004/5-2007/08, Plan for Modernization of Agriculture (PMA), National Agricultural Advisory Services in 2001, The rural financial services programme in 2005, the poverty alleviation fund in 1996, Entandikwa scheme in 1996, the rural micro-finance support project in 2003, the microfinance deposit taking institution programme in 2003, the Plan for enhancement of sustainable financial services or microfinance outreach plan in 2003 , prosperity for all (PSA) of 2005 and the operation wealth creation in 2016. While these interventions were well designed, they have faced policy challenges including political interference and lack of institutional framework for funding, monitoring and implementation (Munyambonera, E. Mayanja, M. Lwanga; D. Nampeewo, A. Adong, 2014).

1.2.2 Theoretical background

This study will be carried out based on three theories that have been put forward by scholars regarding financing. That is to say, the financial intermediation theory that looks at the relationship between financial intermediation and productivity. The Pecking order theory which postulates that the cost of financing increases with asymmetric information and that financing comes from three sources, internal funds, debt and new equity. The trade off theory of capital structure which looks at the fact that corporations, firms and individual ventures are usually financed partly with debt and partly with equity. Many societies in Kamwenge have embraced agricultural finance based on economic theory as a major strategic tool to combat the severe poverty, particularly in rural areas. This stems mainly from the belief that providing small loans, savings facilities, insurance products, money transfer services and skills training to poor people, and more especially women, could be a way of providing opportunities to be self-reliant and play active roles in their households and communities and the economy as a whole (Muhammad, 2004).

1.2.3 Conceptual background

Agricultural productivity remains a viable means of poverty reduction in sub-Saharan Africa (Dorosh PA and Mellor JW, 2013) and agricultural co-operatives are an integral part of the strategy for catalyzing smallholder farmer commercialization (Tafesse, Bernard, Speilmen, & Gabre-Madhin, 2010).

Smallholder commercialisation and increased productivity can be achieved through increasing capital to the smallholders through credit. Credit can be obtained for agricultural purposes (Agricultural financing) from formal and informal sources. The informal type of agricultural credit refers to credit from moneylenders, friends, relatives and the like. Whenever small farmers need emergency loans to put into their farming businesses in order to increase productivity or small investment funds, they often resort to moneylenders (Olatomide, W Olowa; Omowumi, A Olowa;, 2011). It is also believed that where enterprise leads finance follows. According to this view, agricultural development creates demands for particular types of financial arrangements such as loans and savings from agricultural cooperatives.

1.2.4 Contextual background

Improving smallholder agriculture productivity is important for enhancing farmer livelihood, reducing rural poverty and increasing food security (Shiferaw B, Hellin J, Muricho G., 2011). Through co-operatives, smallholders may obtain inputs, adopt new agricultural technologies and access technical assistance. Co-operatives also provide credit services to member farmers which ease production constraints. This all has led to the claim that co-operatives have a positive impact on farm incomes in particular and on food security in general (Shiferaw B, Hellin J, Muricho G., 2011).

Farmers and rural populations, in general, in developing countries have always found it difficult to obtain credit financing. Indeed, the research underpinning this study reveals that most farmers in developing countries have no access to any kind of financial service (payments, safekeeping and saving, credit and insurance), which hampers the efficiency and security of their operations (Athmer, 2008).

Uganda being predominantly an agricultural country with approximately 6000 marketing cooperatives across the country, emphasis has been redirected to promotion of agricultural and marketing cooperatives and to the reactivation of rural savings schemes, which are more suitable for improving productivity of rural farmers in areas including Kamwenge district (Lawrence, 2010). Access to finance is another way of increasing production, promoting business start-ups and small entrepreneurial skills. A combination of access to saving and credit through cooperatives directly lead to increased farmer production (Beck, T.H.L., & Demirgüc-Kunt, A., 2008). Smallholder farmers in cooperatives who have access to finance through the use of the appropriate agricultural financing practice get all the benefits accrued to it including increased production ,better premium for their produce, good quality produce and food security. Evaluation of Smallholder farmers' agricultural financing practices and productivity of cooperatives in Kamwenge district is important in determining the best appropriate practice to be adopted by government and other development partners.

1.3 Statement of the Problem

With the right kind of investment, particularly in relation to agricultural financing, greater productivity increases are possible in less favoured regions than in already developed regions of the country. Cooperatives have come up with different agricultural financing practices though they are faced with problems such as lack of proper information and knowledge on the influence of the financing practices on their productivity, low member participation, weak leadership, and dependence on supporting organizations, low production, lack of working capital and data to inform decision making (Borda-Rodriguez A, 2016).

Although agricultural financing has been seen as one of the ways of encouraging increased production and productivity in cooperatives, little country-focused studies and evaluations have been done on agricultural financing and co-operatives in developing countries like Uganda with regards to their influence and impact on the productivity (Johnson H and Shaw L;, 2014). An evaluation study on agricultural financing practices and productivity of cooperatives in Kamwenge district is a way contributing to the few studies and evaluations that have been done which will be used to determine the best practice to be adopted by government and other development partners in this area. The study aims at generating information on the best agricultural financing practices and productivity of farmers in cooperatives of Kamwenge and Uganda at large in order to inform proper decision making in the field of agricultural financing.

1.4 General Objective

The general objective of the study is to evaluate the influence of agricultural financing practices by smallholder farmer members on the productivity of their agricultural cooperatives of Kamwenge district.

1.5 Specific objectives

The specific objectives of the study are:

i. To establish the influence of agricultural loans by smallholder farmer members on the productivity of their cooperatives

ii. To establish the influence of agricultural savings by smallholder farmer members on the productivity of their cooperatives

iii. To establish the influence of enabling environmental conditions on agricultural financing practices and the productivity of cooperatives in Kamwenge district

1.6 Research questions

a. What is the influence of agricultural loans by smallholder farmer members on the productivity of their cooperatives?

b. What is the influence of savings by smallholder farmer members on the productivity of their cooperatives?

c. What is the influence of enabling environmental conditions on agricultural financing practices and on the productivity of cooperatives in Kamwenge district?

1.7 Hypotheses of the Study

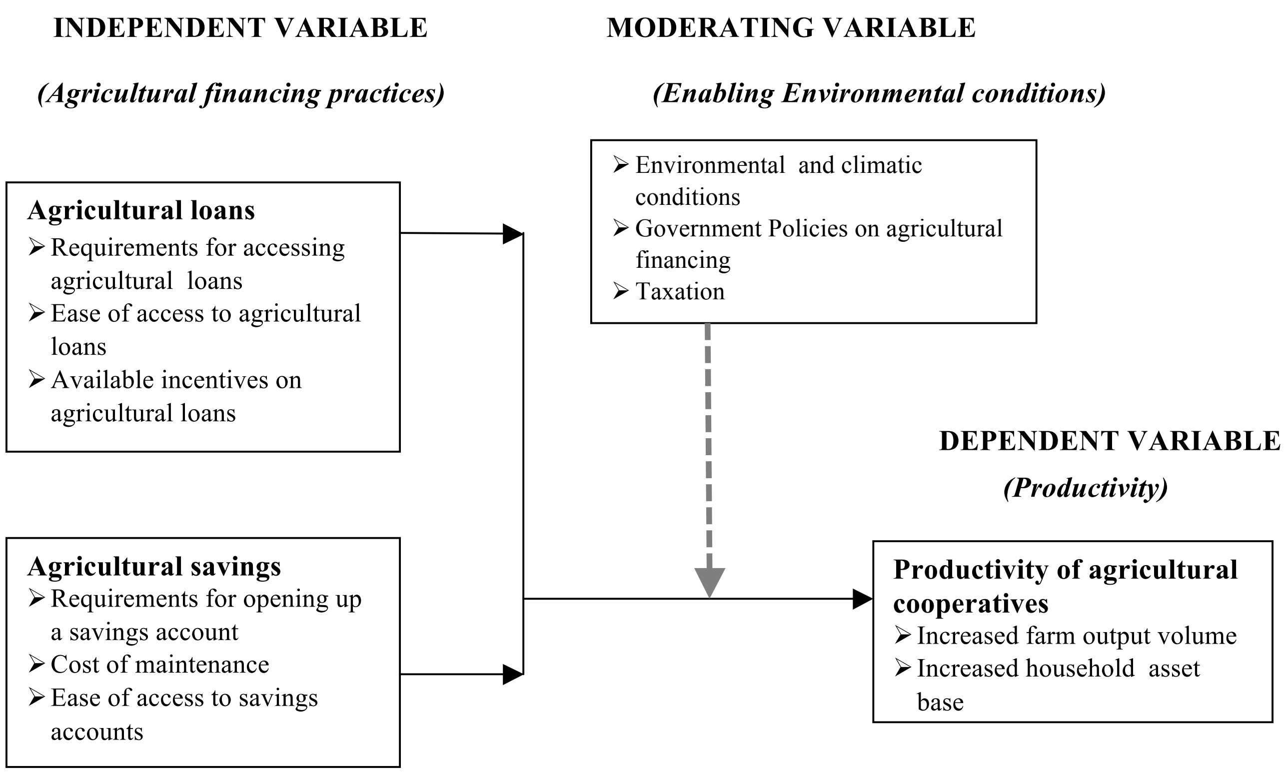
H0: There is influence of agricultural loans by smallholder farmer members on the productivity of their cooperatives

H0: There is influence of agricultural savings by smallholder farmer members on the productivity of their cooperatives

H0: There is of enabling environmental conditions on agricultural financing practices and on the productivity of cooperatives in Kamwenge district

1.8 Conceptual framework

The relationship between agricultural financing practices and productivity of agricultural cooperatives in Kamwenge District



Source: Adopted and modified from Ahnyidoho *et al.* (2015) "Youth, people, agriculture and employment."

In this study, agricultural financing practices, the independent variable (proxied by agricultural loans and agricultural savings), is postulated to promote the productivity of cooperatives proxied by increased farm output volumes (from increased production in various value chains) and increased household asset base (assumed to be measured by more assets accumulated by the smallholder farming households of cooperatives). The study variables and dimensions are explained as follows. The variable agricultural financing practices includes, agricultural loans and agricultural savings which when favorable will boost productivity of primary agricultural products, that will in turn provide raw materials for processed products to boost returns from sales of both primary commodities and/ or processed ones possibly causing improvement of incomes of the smallholder farmers of the cooperatives.

This conceptual framework dwells on the fact that agricultural financing practices by smallholders in cooperatives are intrinsically linked to the general increment in the productivity of cooperatives.

1.9 Significance of the Study

The information and recommendations that shall be generated from the study will be used by actors in agricultural financing including governments and Non-Government Organisations determining the best agricultural financing practices that can be adopted for smallholder farmers in cooperatives. It is envisaged that the findings of this study may extend the frontiers of knowledge. Finally, this study may meet the researcher's partial requirements for the award of a Master's degree in Monitoring and Evaluation

1.10 Justification

Access to credit and savings products is essential to optimise the agricultural and financial cycles. Without access to finance (savings and credit), farmers remain in low-investment/low-productivity agricultural operations. It is believed that agricultural financing is expected to increase as more farmers and practitioners become aware of the benefits of and best practices of agricultural financing. The study aims at generating information on the best agricultural financing practices that can be adopted by financial institutions in Uganda specific for smallholder farmers. Evaluating agricultural financing practices and productivity of smallholder farmers in the cooperatives of Kamwenge district will provide useful information for improving local farmers' access and use of the best agricultural financing practices in cooperatives. Although the examples of agricultural financing practices have been sighted in Uganda, this serves as a starting point to determine the best agricultural financing practices by smallholder farmers and inform decision making. It is therefore deemed necessary to evaluate the agricultural financing practices and productivity of smallholder farmers in the cooperatives of Kamwenge district.

1.11 Scope of the study

1.11.1 Geographical scope

The study will cover smallholder farming households that are in cooperatives and limited to the district boundaries of Kamwenge district found in western Uganda.

1.11.2 Content scope

Basically, mixed methods of data collection will be used; a questionnaire and an interview will be done at every household visited. In this study technical competence of the respondents will be investigated to find out whether they have gained or are aware of the agricultural financing concept. In addition, the current engagements will be explored to find out whether they are practicing any form of agricultural financing practices (Independent variable) and its implications to farm productivity (dependent variable). Lastly, inquiries will be made on what is thought to be the challenges and opportunities in agricultural financing and what corrective measures should be taken to ensure that such practices are sustained.

1.11.3 Time scope

This study is expected to consider a period of 16 months that is to say from January 2016 to April 2017. This is the time the researcher deems suitable to collect the necessary information and also for finishing the research on time with regards to the university timeline and convenient for the researcher to achieve the award on time.

1.12 Operational Definitions

1. **Cooperatives**

   A cooperative is an autonomous association of people united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled business.

2. **Agricultural financing Practices:**

This refers to the activities with regards to financial services ranging from short-, medium- and long-term loans, to leasing, to crop and livestock insurance, covering the entire agricultural value chain – input supply, production and distribution, wholesaling, processing and marketing.

3. **Farm output volume:**

The efficiency of the farm in terms of what it can produce as in tonnage.

4. **Agricultural loans:**

Agriculture loans are credits made to assist agricultural businesses and in this case smallholder farmers in opening and expanding their operations

5. **Agricultural savings:**

Agricultural savings are unspent incomes or deferred consumptions and in this case it is the unspent incomes and deferred consumptions that smallholder farmers shall report.

6. **Productivity of cooperatives:**

This shall be defined as the yields per unit area and in this case is the yield shall be in kilograms per hectare realized by the farmers in the cooperatives.

7. **Enabling Environmental conditions**

This refers to a set of interrelated conditions such as legal, organizational, fiscal, informational, political, and cultural that impact on the capacity of the agricultural financing practices to influence productivity of cooperatives in an effective manner.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction.

This chapter will focus on the relevant literature related to agricultural financing practices and productivity of cooperatives. Under this chapter various write ups are reviewed and analyzed to establish the contributions therein as well as getting related backup literature. The review will be based on the outline below:

1) Historical review
2) Theoretical review
3) Conceptual review
4) Empirical studies
5) Synthesis of the literature review

2.2 Historical review

The modern cooperative originated in Europe and spread to other industrializing countries during the late 19th century as a self-help method to counter extreme conditions of poverty (Hoyt., 1989). The development of cooperatives over time has been shaped by many factors and influences. (Ingalsbe G & Groves FW, 1989) group these into three main types (1) economic conditions (2) farmer organizations and (3) public policy.

Cooperatives offer a number of economic services to their membership and such include financing. The provision of economic services such as agricultural financing to farmers helps in increasing agricultural production and thus improving food security (Shiferaw B, Hellin J, Muricho G., 2011). A number of agricultural financing initiatives have been initiated by GoU since 1990s, and complemented implementing partners' programmes. These interventions were basically to improve access to agricultural financing.

Improving smallholder agriculture productivity is important for enhancing farmer livelihood, reducing rural poverty and increasing food security (Tefera, Jos, & Slingerland, 2016). Through co-operatives, smallholders may obtain inputs, adopt new agricultural technologies and access technical assistance. Co-operatives can also provide credit services to member farmers which ease production constraints. This all has led to the claim that co-operatives have a positive impact on farm production in particular and on food security in general (Shiferaw B, Hellin J, Muricho G., 2011). In addition, cooperatives offer prospects that smallholder farmers would not be able to achieve individually such as helping them to secure land rights and better market opportunities (FAO, 2011).

2.3 Theoretical Review

2.3.1 The financial intermediary theory

Credit is an important aspect that provides funds to those economic entities that can put them into the most productive use. Theoretical studies have established the relationship that exists between financial intermediation and increase in production.

For instance it was observed that financial development can lead to rapid production (Jeremy, Greenwood; Boyan, Jovanovich;, 1990). In a related study it is explained that development of banks and efficient financial intermediation contributes to production growth by channeling savings to high productive activities and reduction of liquidity risks (Valeria, Bencivenga R; Bruce, Smith D;, 1991). They therefore concluded that financial intermediation leads to production growth. This means that a financial institution can effect production growth by efficiently carrying out its functions, among which is the provision of credit. Production growth is the increase in the amount of the goods and services produced by an economy over time. With this respect individual farmer productivity increment truly feeds into productivity growth of their respective cooperatives.

2.3.2 The pecking order theory

In corporate finance, pecking order theory (or pecking order model) postulates that the cost of financing increases with asymmetric information and that financing comes from three sources, internal funds, debt and new equity. Companies prioritize their sources of financing, first preferring internal financing, and then debt, lastly raising equity as a last resort. Hence: internal financing is used first; when that is depleted, then debt is issued; and when it is no longer sensible to issue any more debt, equity is issued. This theory maintains that businesses adhere to a hierarchy of financing sources and prefer internal financing when available, and debt is preferred over equity if external financing is required (equity would mean issuing shares which meant 'bringing external ownership' into the company). Thus, the form of debt a firm chooses can act as a signal of its need for external finance. The pecking order theory is popularized by (Mayers, SC; Majluf, NS;, 1984) where they argue that equity is a less preferred means to raise capital and therefore smallholders through the different agricultural financing practices also prefer debt after internal financing to raise capital.

2.3.3 Trade off Theory of capital structure

The trade-off theory of capital structure refers to the idea that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits. The theory explains the fact that corporations usually are financed partly with debt and partly with equity. It states that there is an advantage to financing with debt. The marginal benefit of further increases in debt declines as debt increases, while the marginal cost increases, so that a firm that is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing (Frank, Murray Z.; Goyal, Vidhan K. , 2011). For the farmers who have accessed financing through cooperatives, it is assumed that they need finance inform of debt to increase on their marginal benefits.

2.4 Conceptual Review

Freedom of association and the right to form organizations that are genuinely accountable and advance poor people's interests may contribute to sustainable poverty reduction and food security. Cooperatives can help in assuring farmers to have access to inputs, credit, output markets, and opportunities to engage in more diversified, higher value crop production (Tesfay & Tadele, 2013). Members of these agricultural cooperatives are largely rural large-and small-scale farmers. In these settings, there are people from diverse ethnic backgrounds participating in the same cooperatives. Credit access reduces liquidity problems that household could face while intending to purchase agricultural inputs; and hence paves the way for timely application of inputs thereby increase the overall productivity and farm income (Mpawenimana, 2005). Experts have indicated that the role of primary co-operatives is particularly in distributing inputs and in collecting farm products, on behalf of the unions (Tefera, Jos, & Slingerland, 2016). Agricultural co-operatives also play an important role in the provision of agricultural inputs (fertilizers, improved seeds and pesticides) to smallholders, distributing 95 per cent of all fertilizers used (FCA, 2015). However, the common problems for co-operatives in developing countries are low member participation, weak leadership, dependence on supporting organizations, unfavorable government policies and majorly a lack of working capital (Borda-Rodriguez A, 2016). Most of the farmers' in Africa and Uganda in particular have small plots of land for their living, farming and rearing animals and thus need to increase on their production by securing inputs both in financial and material in nature. Although it is obvious that smallholder farmers are characterized by producing small amount of produce, they might bring small portion of their product to market through their agricultural cooperatives, and the earnings goes to cover their routine expenditure and might save the remaining for next farming (Nuredin, Mohammed; Byeong, Wan Lee;, 2014).

2.5 Empirical studies

Many empirical studies on African agrifood markets have shown that high transaction costs are a serious constraint on smallholders' market participation (Holloway, GN; Delgado, C; Staal, S; Ehui, S;, 2000). These transaction costs result from the small size of the farm, lack of market information, weak bargaining position and perishability of many agricultural products (Abebe, Bijman, & Royer, 2016). Collective action in the form of a co-operative allows smallholders to pool resources through savings and credit to overcome the risks related to asset specificity, to realize economies of scale and to gain countervailing power in sales transactions. Empirical studies also confirmed that co-operatives in Ethiopia had a positive effect on smallholder agricultural production performance through their different financing practices. These cooperatives and particularly agricultural cooperatives do play a major role in acquiring inputs for production, primary processing and marketing of agricultural commodities. When the cost of quality requirements goes up then additional investments in quality improving assets and activities are needed.

Studies have also shown that co-operatives are successful in improving countervailing power, linking smallholders to modern value chains and increasing production (Fischer & Qaim, 2012)

2.6 Synthesis of literature Review

Lessons show that empowered by being a part of a larger group in this case cooperatives, farmers members can negotiate better terms in credit acquisition, contract farming and lower prices for agricultural inputs like seeds, fertilizer and equipment. In addition, cooperatives offer prospects that smallholder farmers would not be able to achieve individually such as helping them to secure land rights and better market opportunities (FAO, 2011). They do so through different financing practices that is explained theoretically here by The financial intermediary Theory, The Trade off Theory of capital structure and The Pecking Order Theory.

The financial intermediary theory relates to the Theoretical studies that have established the relationship which exists between financial intermediation and increase in production. Credit is an important aspect that provides funds to those economic entities that can put them into the most productive use.

For instance it was observed that financial development can lead to rapid production (Jeremy, Greenwood; Boyan, Jovanovich;, 1990). In a related study it is explained that development of banks and efficient financial intermediation contributes to production growth by channelling savings to high productive activities and reduction of liquidity risks (Valeria, Bencivenga R; Bruce, Smith D;, 1991). It is therefore concluded that financial intermediation leads to production growth. This means that a financial institution can effect production growth by efficiently carrying out its functions, among which is the provision of credit. Production growth is the increase in the amount of the goods and services produced by an economy over time. With this respect, individual farmer productivity increment truly feeds into productivity growth of their respective cooperatives.

The Trade-off theory of capital structure explains the fact that corporations usually are financed partly with debt and partly with equity. It states that there is an advantage to financing with debt. The marginal benefit of further increases in debt declines as debt increases, while the marginal cost increases, so that a firm that is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing (Frank, Murray Z.; Goyal, Vidhan K. , 2011).

The Pecking Order Theory maintains that businesses adhere to a hierarchy of financing sources and prefer internal financing when available, and debt is preferred over equity if external financing is required (equity would mean issuing shares which meant 'bringing external ownership' into the company). Thus, the form of debt a firm chooses can act as a signal of its need for external financing. Therefore the financing practice here is governed by the choice of the smallholder farmer.

In Africa and Uganda in particular, cooperatives can help in assuring farmers to have access to inputs, credit, output markets, and opportunities to engage in more diversified, higher value crop production (Tesfay & Tadele, 2013). Cooperatives and particularly agricultural cooperatives do play a major role in acquiring inputs production, primary processing and marketing of agricultural and livestock commodities for their memberships who are majorly smallholder farmers. The justification for cooperative arises from their potential in maximization of profits, harnessing various skills with members, enhancing advocacy and bargaining power, enhancing financial accessibility, boosting social capital, promoting investment, providing educational opportunities, improving market access and contributing to poverty reduction.

2.7 Conclusion

Generally, the above literature exhibits some knowledge gaps and questions are not adequately answered by already existing literature and studies: These include; whether agricultural financing practices such as agricultural loans and savings used by smallholder farmers in cooperatives have influence on their productivity especially for smallholder farmers in Kamwenge district. Where attempts are made, it is limited by time and geographic scope. However primary data will be used to evaluate the influence of agricultural financing practices mainly agricultural loans and savings on the productivity of cooperatives in Kamwenge district.

In conclusion, the influence of the different agricultural financing practices by small holder farmers on the productivity of their cooperatives need to be evaluated in order to determine the best approach to be taken on by decision makers and different actors in efforts to popularize and support agricultural financing in Uganda.

CHAPTER THREE

METHODOLOGY

3.1 Introduction.

This chapter presents the methodology for the proposed study which includes the research design, study population, sample size and selection, sampling techniques and procedure, data collection instruments, data quality control (validity and reliability), procedure of data collection, data analysis and measurement of research variables.

3.2 Research Design

The research design refers to the overall strategy that a researcher chooses to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem; it constitutes the blueprint for the collection, measurement and analysis (Labaree, 2009).

The research design that will be used in the study will be exploratory research design that involves focusing on two variables that is agricultural financing practices and productivity of cooperatives. The research design will involve both qualitative methods basically cross sectional survey methods and quantitative methods. A cross-sectional study is a type of observational study that analyses data collected from a population, or a representative subset, at a specific point in time (Schmidt, 2008) and quantitative research is the systematic empirical investigation of observable phenomena via statistical, mathematical or computational techniques, therefore in this case a group of smallholder farmers in cooperatives practicing agricultural financing and the productivity of these cooperatives will be investigated.

The study will involve focusing on two variables that is agricultural financing practices and productivity of cooperatives of the participating member farmers in Kamwenge district. This design is suitable because it will enable to collect the needed information on several predetermined variables at a single point in time and from a cross-section of a fairly uniform cohort group. It is also easy to administer and its responses generalized to other members of the population under the study and other similar populations.

This design is also timesaving and gives room to understand more of the whole research problem.

3.3 Study Population

The target population will include s farmer members of the selected cooperatives in Kamwenge district. Purposively the study will focus on smallholder farmers of cooperatives in the sub counties of Kamwenge district.

3.4 Determination of the Sample size

The total number of cooperatives and population of the farmer members in these cooperatives will be got from the district production officer. The sample in this study will include a simple random sampling and *n* individuals will be randomly drawn from the target population.

To arrive at the above sample size, we shall use the formula

$$n = \frac{N}{1 + N(\alpha^2)}$$

Where; n= sample size

N= total population

a= error factor $(0.05)^2$ (Yamane, 1967)

The above formula will be used to determine the sample size of cooperatives to be studied and the same for sample size of farmer members in each cooperative to be interviewed.

3.5 Sampling techniques and procedure

The sampling technique and procedure will be based on simple random sampling principles where individuals will be randomly sampled from the target population. This will include getting a list of all cooperatives in the district from the DCO and from the list a sample size of cooperatives will be determined and the cooperatives from which the respondents will selected will be randomly selected using the simple random sampling techniques. Then the sample size of the respondents will be determined from the total number of members of the selected cooperative and the individual respondents will be randomly selected by use of probabilistic sampling where every individual has an equal chance of being selected

3.6 Data Collection Methods

A survey will be carried out and the data collection techniques will include the following; face-to-face interview, key informants interview, survey and observations. These will be carried out using tools such as an interview guide and a questionnaire whereby a questionnaire will be administered to the respondents with semi structured questions with regards to the subject matter

3.6 Data collection instruments

The data collection instruments will include; interview guides and questionnaires, Key informants' guides, group discussion topics, observation checklists, and the researcher will use them for the purpose of explaining to the respondents the reason for the research and receive appropriate and reliable information from the respondents.

3.7 Pre-testing (Validity and reliability)

To ensure validity and reliability of the research instrument, the researcher will ensure that the Questions that are asked are in conformity with the research objectives of the study and a pilot test of the research instrument will be conducted and a calculation using office Microsoft excel will be computed for question reliability and validity assessment

3.8 Procedure of Data Collection

The researcher will collect the data by administering a semi structured questionnaire to the respondent and recording their responses, an interview guide will also be used during the face-to-face interview of key informants.

3.9 Data Analysis

3.9.1 Quantitative data analysis

Data from the questionnaires was arranged, coded, edited for consistency and easiness and later entered using Statistical Package for Social Scientists (SPSS). This will involve allocating numerical values to the answers given by respondents for the ease of data entry and analysis (Williams, 2003).

3.9.2 Qualitative data analysis

Regarding qualitative data, the different answers from the respective respondents will be categorized into common responses. Qualitative data which is descriptive will be obtained from interviews and open-ended questions. This data will be presented in accordance with the objectives of the study and will help to substantiate findings from quantitative data. Some themes and appropriate response from the interview will be stated to support the quantitative findings in form of direct quotations from the respondents as noted by (Kothari, 2003).

3.10 Description of variables measurements of variables

Agricultural Loans: This can be defined as a short-term unsecured loan, regardless of whether repayment of loans is linked to a borrower's income. The loans are also sometimes referred to as small loans since they attract a small interest rate. These loans rely on the farmer having good previous royalty records with the cooperative. This will be measured as the amount of money that has been advanced to individual farmer members as loans at that time.

Agricultural Savings: These are the amounts of money that the individual farmer member deposits at the cooperative. These already have accounts which offer small interest rates. With these savings accounts, a member commits to paying in a certain amount each month mainly after harvesting. In return, the cooperative gives him/her an interest rate higher than on the ordinary savings**.** This will be measured as the amount of money that has been deposited by the member to the cooperative as per at that time.

Productivity of cooperatives: This will be defined as the yields/output per unit area and in this case is the yield will be in kilograms per hectare realized by the farmers in the cooperatives. This will be measured as the number of kilograms/tonnes realized by the farmer members in these cooperatives.

Improved household income: Income is the consumption and savings opportunity gained by an entity within a specified timeframe, which is generally expressed in monetary terms. However, for households and individuals, it is the sum of all the wages, salaries, profits and interests payments received in a given period of time. Increase in this is what we may refer to as improved household incomes. This will be measured according to the amount of assets accumulated by the cooperative members in a given period of time.

3.11 Ethical Considerations

The researcher will adhere to ethical norms in research because norms promote the aims of research, such as knowledge, truth, and avoidance of error. The ethics framework is essential will focuses on observing, voluntary informed consent of the participants. Participants informed consent will be obtained through a letter (from UTAMU) given to respondents/superiors that clearly specified what the research involves, including clearly laid down procedures and explained the ways in which their confidentiality will be assured. The respondent's names will be withheld to ensure anonymity and confidentiality in terms of any future prospects and also informed that data will be shared, results, ideas, tools, resources. Respect for intellectual property shall be adhered to and no use of unpublished data, methods, or results without permission. Proper acknowledgement or credit for all contributions to research shall be prioritized to avoid plagiarism.

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APPENDICES

Appendix 1: Questionnaire to evaluate the influence of agricultural financing practices on the productivity of cooperatives in Kamwenge district.

I am a student of UGANDA TECHNOLOGY AND MANAGEMENT UNIVERSITY (UTAMU), Faculty of Business and Management carrying out research on the influence of agricultural financing practices on the productivity of cooperatives in Kamwenge district. The research is meant for academic purposes only. The information will be treated with confidentiality. May you please kindly respond to this questionnaire designed to get information on the peoples' views on the influence of different agricultural financing practices on the productivity of cooperatives in Kamwenge district.

a) **Background information:**

Gender of the respondent ………………Name of the cooperative………………………

Sub-county …………………………………Parish…...………………………………..

Village……………………………………………………………………………………

Are you a member in the cooperative? (Tick one) **Yes/No**

If yes:

When did you join the cooperative?...

What are the requirements for joining the cooperative?

……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………

What are the benefits of being a member of the cooperative?

……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………

Are there requirements for having a savings account with your cooperative? **Yes/No**

If yes, what are they?

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…………………………………………………………………………………………
…………………………………………………………………………………………

Have you saved with the cooperatives? (Tick one) **Yes/No**

If yes, how much have you saved with the cooperative in the last one year?..

How has the savings been able to help you with your farming business in the last one year?.......………………………………………………………………………………

If no,why?..

Are there any requirements for accessing a loan from your cooperative? **Yes/No**

If yes, what are they?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

Have you ever received a loan from the cooperative in the last one year? **Yes/No.**

If yes, how much?..

What did you use the loan for?...

How has the loan been able to help you with your farming business in the last one year?

…………………………………………………………………………………………
…………………………………………………………………………………………

If no, why?...

What was your production in kgs before you joined the savings and loans scheme of the cooperative?...

What was your production in kgs after you joined the savings and loans scheme of the cooperative?..

What other challenges do you face with the types of agricultural financing practices within your faming cooperative business?

……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………

What would you recommend as solutions to the above challenges?

……………………………………………………………………………………………
……………………………………………………………………………………………

What affects you most in your cooperatives business in your area? ***Tick one***

1- Environmental conditions such as (Drought, diseases, Hailstorms etc.)
2- Government Policies
3- Taxation

THANK YOU VERY MUCH FOR THIS INFORMATION AND FOR YOUR TIME.

MAY GOD BLESS YOU

Appendix 2: Interview guide

Interview guide to evaluate the influence of agricultural financing practices on the productivity of cooperatives in Kamwenge district

INTRODUCTION;

The purpose of the interview is to gather farmers' views on the influence of agricultural financing practices on the productivity of cooperatives in Kamwenge district.

1. Are you a resident of this area
2. How much cooperative experience does the farmer has?
3. What are the criteria for becoming a member of the cooperative?
4. What benefits do you realize as a member of the cooperative?
5. What requirements are there for opening up a savings account with the cooperative?
6. How easy is it to open up a savings account with the cooperative?
7. How much have you saved with the cooperative since last year?
8. How have those savings helped you in boosting your farming business? Increased production or decreased production?
9. What requirements are there for getting a loan from the cooperative?
10. How easy is it to get a loan from the cooperative?
11. How much of a loan did you get from the cooperative since last year?
12. How has the loan from the cooperative helped you in boosting your farming business? Increased production or decreased production?
13. What challenges do you face with the cooperatives agricultural financing practices?
14. Environmental factors, government policies affecting your productivity (Positive or negative)?
15. What solutions do you suggest for those challenges?

Appendix 3: Work plan and Timeframe

Activity	Duration (days/weeks/months)	Responsible
Designing the data collection tool	Before 15th April 2017	Researcher
Locate Respondents	Before 15th May 2017	Researcher
Pretesting data collection tools	Before 22nd May 2017	Researcher
Data Collection	Before 8th June 2017	Researcher
Data Coding	Before 15th June 2017	Researcher
Data interpretation and dissertation writing	Before 15th July 2017	Researcher

Appendix 4: Budget

Item	Quantity	Unit Cost	Total Cost
Subsistence Allowance	4 months	50000	200000
Travel (Vehicle Hire)	4 months	100000	400000
Data Analysis	1	50000	50000
Secretarial Services (Processing the research instruments and reports)	1	50000	50000
Photocopying	1	20000	20000
Dissertation Production (Printing and Binding)	1	30000	30000