

**AN EVALUATION OF THE CONTRIBUTION OF CREDIT FACILITIES
TOWARDS SMALL SCALE FARMER'S ECONOMIC EMPOWERMENT IN
UGANDA. A CASE STUDY OF KYANKWANZI DISTRICT**

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DEDICATION

I dedicate this work to my darling mother Ssekabembe Norah, dearest brother Ssewagudde Richard, lovely friends; Kivumbi Lawrence, Ndagire Proscovia ,Nangobi Peninah, and Mudondo Maureen and whoever has supported me spiritually, socially and financially throughout my academic journey.

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ABSTRACT

This study evaluated the contribution of credit facilities towards small scale farmers' economic empowerment in Kyankwanzi District in Uganda. Specifically, the study sought to assess the effect of agriculture loans on small scale farmer's economic empowerment in Kyankwanzi District; examine the effect of financial literacy on small scale farmer's economic empowerment in Kyankwanzi District and establish the impact of value chain financing on small scale farmer's economic empowerment in Kyankwanzi District. The study utilized a cross-sectional survey research design, taking on both quantitative and qualitative approaches. The researcher used a sample of 152 respondents. Simple random sampling and Purposive sampling techniques were used. The data collection methods were self-administered questionnaires and interviews. Descriptive data was analyzed based on tables and graphs derived from SPSS. The findings of the study revealed weak positive correlation between agriculture loans and farmer's economic empowerment in Kyankwanzi District. ($r=.289^*$ $p < 0.05$); a weak positive correlation between financial literacy and farmer's economic empowerment in Kyankwanzi District. ($r=.263^*$ $p < 0.05$); and a weak positive correlation between value chain financing and farmer's economic empowerment in Kyankwanzi District. ($r=.149$ $p > 0.05$). It was concluded that access to credit facilities, provision of financial training and access to markets lead to economic empowerment of small scale farmers in Kyankwanzi District. The study recommends that government through the ministry of agriculture should partner with microfinance institutions to provide more and cheaper loans to smallholder farmers; government of Uganda, through the ministry of education and that of agriculture should provide more financial trainings and literacy skills to small scale famers' and concerted efforts should be made by the central and local government to provide infrastructural facilities such as roads, electricity and safe drinking water to the rural areas of Kyankwanzi so as to improve their economic well-being.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Small-holder farmers remain the bedrock of agricultural production especially in the developing countries including Uganda (Kasekende, 2016). The study evaluated the contribution of credit facilities towards small scale farmers' economic empowerment in Kyankwanzi District in Uganda. This chapter presents the background to the study, statement of the problem, objectives of the study, research questions, conceptual framework, scope of the study, significance of the study and justification of the study.

1.2 Background to the Study

1.2.1 Historical Background

Agriculture is an important sector in the economic development and poverty alleviation drive of many countries. The role agriculture has played in the industrial growth and development of most of the industrialized countries in the world cannot be over emphasized. Agriculture is a mainstay of Uganda's economy, accounting for over 70 % of total employment (UBOS, 2011), yet at the same time the agricultural sector only accounts for 17.5 % of GDP (FAO, 2011).

Agricultural output in Uganda comes predominantly from the country's many smallholder farmers, poverty and food insecurity are wide spread problems in rural areas (UBOS, 2011).

The Ugandan government recognizes the importance of agriculture in rural poverty alleviation and economic development at the national level, as shown by the establishment of the Plan for Modernization of Agriculture that is part of the Poverty Eradication Action Plan of 1997. However, the impact of these central initiatives on rural areas have been expected to be slow and uneven (Ellis & Bahiigwa, 2003).

Indeed, Uganda's agricultural sector is still vulnerable and constrained by factors like access to extension services and continued concentration on low value crops (James, 2010). Therefore, this study evaluated the contribution of credit facilities towards small scale farmers' economic empowerment in Kyankwanzi District in Uganda.

1.2.2 Theoretical Background

This study was guided by the Profit-maximizing Peasant Theory (Schultz, 1964) Theory assumes that farm households in developing countries are “poor but efficient.” Referring explicitly to allocative efficiency, and implicitly to technical efficiency, Schultz describes the peasant production mode as profit-maximization behavior, where efficiency is defined in a context of perfect competition (i.e., where producers all apply the same prices, workers are paid according to the value of their marginal product, inefficient firms go out of business, and entrepreneurs display non diminishing marginal utility of money income).

Economic work on farm household behavior, though, has evolved along the line of other important criticisms of the profit maximization theory, such as the existence of trade-offs between profit maximization and other household goals, and the role of uncertainty and risk in farm household production decisions (Schultz, 1964). Therefore this study was guided by the Profit-maximizing Peasant Theory (Schultz, 1964) in evaluating the contribution of credit facilities towards small scale farmers' economic empowerment in Kyankwanzi District in Uganda.

1.2.3 Conceptual Background

Agricultural credit is any of several credit vehicles used to finance agricultural transactions, including loans, notes, bills of exchange and banker's acceptances (Bashir & Azeem, 2009).

Financial literacy is the education and understanding of knowing how money is made, spent, and saved, as well as the skills and ability to use financial resources to make decisions (OECD, 2008).

Value chain finance refers to financial products and services that flow to or through any point in a value chain that enable investments that increase actors' returns and the growth and competitiveness of the chain (Bashir & Azeem, 2009).

Farmer Economic Empowerment involves the provision of all the necessary financial support to enable individuals and businesses excel in agriculture. It also involves the elimination of constraints that prevent or derail the success of agricultural practices (OECD, 2008). According to Friis-Hansen (2003), farmer empowerment is a process that increases the capabilities of small scale farmers and farmer groups to make choices and to influence collective decisions towards desired actions and outcomes on the basis of those choices.

1.2.4 Contextual Background

Kyankwanzi district lies between latitude 010 12N and longitude 310 48E in the north western part of Uganda (UBOS, 2017). Kyankwanzi district approximately 150 Kilometers, by road from Kampala. It's bordered by Masindi District in the north, Hoima District in the northwest, Nakaseke District in the east, Kiboga District in the southeast, Mubende District in the south and Kibaale District in the southwest. The district covers a total land area of about 2,326 square kilometers (UBOS, 2017).

Uganda agriculture is comprised of mainly two categories; the subsistence and the large-scale commercial farming. One of the most challenging socio-economic problems currently facing Uganda is how the large number of African rural residents could be assisted in establishing viable rural livelihoods.

Despite Uganda's overall high level of food production, food security remains an important problem, with a portion of the population failing to access diversified food items and hence poor diets.

Poverty has been among the reasons failing the population to access diversified food items and hence poor diets. Proteins and specifically those of animal origin (fish, livestock and milk) are consumed in small amounts, hence perpetuating low levels of micronutrient deficits (James, 2010). Limited food diversification and specifically those, which are nutrient dense (horticultural products – root and fruits), have been the roots of poor nutrition among Ugandans. Uganda has the potential of improving its food security through improving of dietary diversity (Bahiigwa, 2003).

Overall, Ugandan economic performance with regard to poverty reduction indicates that there has been a progressive decline in the number of people living below the poverty line from 38% in 2003 to 23.1% in 2010. While poverty rates remained the same in the urban areas, declines have been observed for the rural areas from 42.7% to 34.2% (James, 2010). However, despite these positive achievements, Kyankwanzi registered only negligible reductions in the poverty headcount index.

The households in Kyankwanzi district participate mainly in the growing of six major crops. That is cassava, maize, beans, sweet potatoes, coffee, and banana. Kyankwanzi Sub Country has the highest proportion of households owning cattle and goats (69.1 percent and 33.9 percent) respectively with most of the cattle and goats coming from Lwebisanja (UBOS, 2017). The pressing agricultural issues in Kyankwanzi are lack of storages facilities, lack of knowledge and skills in intensive farming practices, fake inputs on markets and high prices and low income (poverty).

Kyankwanzi district is one of the poorest communities in Uganda with at least 34.67% of the population living below the poverty line (Action for Rural Women Empowerment, 2017). The poorest sub-counties include; Kyankwanzi, Butemba, Wattuba in that order.

The reasons for the poor scenario of these sub-counties are; Decline in farmers' prices; Use of rudimentary methods of farming yet there is no other identified source of revenue; Low literacy levels, which affect peoples' mindsets in innovation capacity; and Bad roads especially for Gayaza Sub-county (Action for Rural Women Empowerment, 2017).

Pride microfinance Limited and other companies have disbursed low-interest agricultural loans to farmers in a bid to boost crop and animal production in the area (Mugalu, 2014). Pride microfinance limited alone has extended credit facilities worth 2 billion to close to 260 beneficiaries with intensions to empower the small scale farmers by way of increasing their income levels, enhancing their financial independence as well as their overall standards of living. Pride microfinance charges a monthly interest of two per cent on the loans. Coffee, maize, beans, sweet potatoes and cattle keepers are targeted customers in this loan scheme (Mugalu, 2014). However, despite these steps, Kyankwanzi registered only negligible reductions in the poverty headcount index (Action for Rural Women Empowerment, 2017). Therefore, this study evaluated the contribution of credit facilities towards small scale farmers' economic empowerment in Kyankwanzi District in Uganda.

1.3 Problem Statement

Access to credit facilities is increasingly becoming a central component for small scale farmers' economic empowerment, the world over (Johnson and Shaw, 2014). Indeed, in Kyankwanzi District, government and financial institutions are attaching utmost significance to provision of credit facilities as a strategy of stepping up their agricultural production and subsequent small scale farmers' economic well being. In Kyankwanzi District, Pride Microfinance Ltd for example, has in the recent past disbursed low-interest agricultural loans worth 2 billion to close to 260 beneficiaries both individual farmers and groups, range from Shs 500,000 to Shs 50m for coffee, maize, beans, sweet potatoes farmers and cattle keepers (Mugalu, 2014), in addition to providing financial literacy and value chain financing. These are intended to increase on crop and animal production in the area so as to improve on the small scale farmers' economic empowerment.

In spite of the above, small scale farmers' economic empowerment is still a distant reality. On average, at least 34.67% of the population in the district is living below the poverty line (Action for Rural Women Empowerment, 2017). This failure to create small scale farmers' economic empowerment is affecting the overall level of economic development of the district. This study therefore, evaluated the contribution of credit facilities towards small scale farmers' economic empowerment in Kyankwanzi District.

1.4 General Objective

The study aimed to evaluate the contribution of credit facilities towards small scale farmers' economic empowerment in Kyankwanzi District in Uganda.

1.5 Specific Objectives

The study was guided by the following objectives;

- i. To assess the effect of agriculture loans on small scale farmer's economic empowerment in Kyankwanzi District.
- ii. To examine the effect of financial literacy on small scale farmer's economic empowerment in Kyankwanzi District.
- iii. To establish the impact of value chain financing on small scale farmer's economic empowerment in Kyankwanzi District.

1.6 Research Questions

The study was guided by the following objectives;

- i. What is the effect of agriculture loans on small scale farmer's economic empowerment in Kyankwanzi District?
- ii. What is the effect of financial literacy on small scale farmer's economic empowerment in Kyankwanzi District?
- iii. What is the impact of value chain financing on small scale farmer's economic empowerment in Kyankwanzi District?

1.7 Scope of the Study

1.7.1 Geographical Scope

The study was carried out within Kyankwanzi District in Nsambya, Bananywa, Butemba and Kyankwanzi Sub counties. The district is located in central Uganda bordering with Nakaseke District to the east across river Mayanja, Kiboga district to the south-east, Mubende and Kibaale district to the south-west and Hoima and Masindi districts in the north.

The area was chosen because Kyankwanzi is part of the former Luweero triangle which suffered a lot during the liberation war; the government is working with the development partners to rejuvenate the economic status of the people by extending credit facilities. Secondly, Nsambya, Bananywa, Butemba and Kyankwanzi Sub counties were considered due to the need to target respondents who were knowledgeable on required information (Sekaran, 2005).

1.7.2 Content Scope

The study focused on access to credit facilities as the independent variable (IV) and small scale farmers' economic empowerment as dependent variable (DV). Access to credit facilities was considered under the dimensions of agricultural loans, financial literacy and value chain financing while small scale farmers' economic empowerment was measured as income levels, level of financial independence and standards of living. The study was carried out to evaluate whether people have been empowered by the credit facilities.

1.7.3 Time Scope

This study collected data covering the period of 5 (five) years 2014 to 2018 so that the required information is collected from small scale farmers who acquired loans during that period.

1.8 Significance of the Study

The study findings will be important to different stakeholders as it will provide critical information about the contribution of access to credit on small scale farmers' economic empowerment in Kyankwanzi District.

In addition to this, the information obtained during the study will ultimately build on the existing body of knowledge to pave way for further research in the field of small scale farmers' economic empowerment and access to credit in academia. Lastly, the study findings shall be the basis for future academic research into socio-economic development in Uganda.

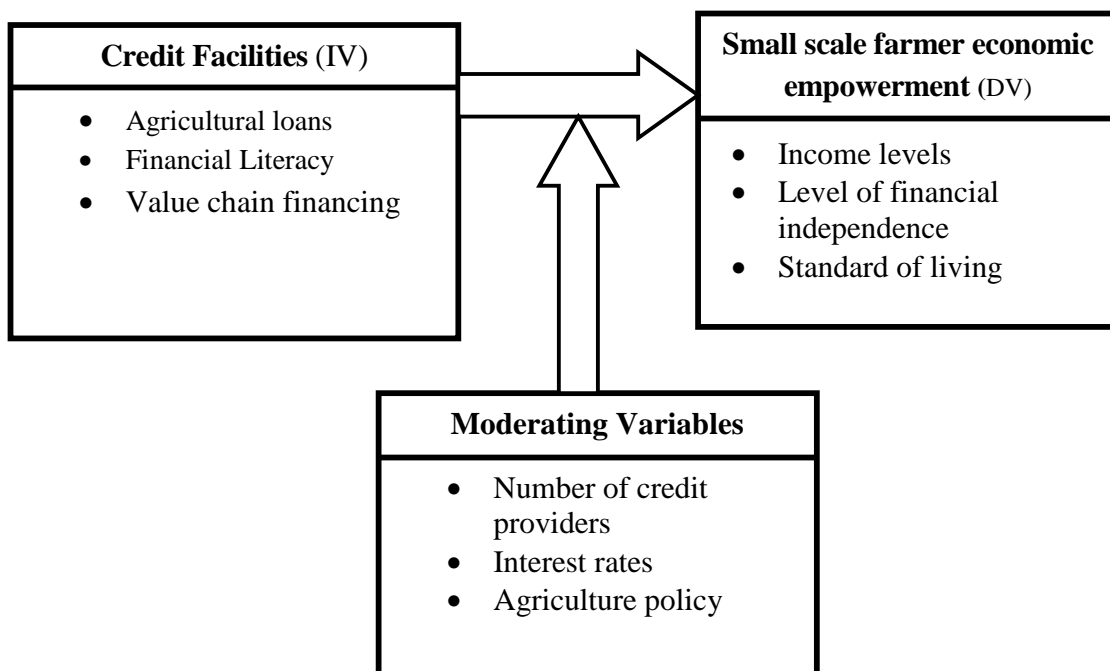
1.9 Justification of the Study

Many studies have been conducted on access to credit facilities and small scale farmers' economic empowerment in Kenya, Tanzania, Ghana and Nigeria. Such studies include: (Kamara, 2010; Kimanjara, 2013; Girabi & Mwakaje, 2013; Adefila, 2012; Adams, 2010),

Seemingly no study had investigated the contribution of access to credit facilities on small scale farmers' economic empowerment in Kyankwanzi District in Uganda.

1.10 Conceptual Framework

The study evaluated the contribution of credit facilities towards small scale farmers' economic empowerment in Kyankwanzi District in Uganda. The framework of this study was based on the model shown in figure 1.1.



Source: *Adopted from Kamara (2010) and modified by researcher*

Figure 1. 1: Conceptual framework

The conceptual framework showed the relationship between the variables. It suggested that access to credit facilities relates to small scale farmers' economic empowerment. In this study access to credit facilities was conceived as the independent variable (IV) and small scale farmers' economic empowerment as dependent variable (DV). Access to credit facilities was considered under the dimensions of agricultural loans (Loan availability, Access to loans, Loan affordability), financial literacy (Financial decision making, Financial planning, Savings and investment) and value chain financing (Access to farm inputs, post-harvest handling, access to Markets) while small scale farmers' economic empowerment was measured as, income levels, level of financial independence and standards of living. In this study number of credit facility providers, Interest rates and Agriculture policy were perceived as the moderating variables.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter contains a review of existing literature as presented in textbooks, journals, magazines and newspaper articles, related to access to credit and small scale farmers' economic empowerment. The chapter was structured under the headings of; Introduction, conceptual review, reviews of related literature and summary of the literature review.

2.2 Effect of agriculture loans on farmer's economic empowerment

Girabi and Mwakaje (2013) defined access to credit facilities as small loans where microfinance is appropriate, where NGOs and microfinance institutions supplement the loans with other financial services such as; savings, insurance, pension and payment services.

Ojiako and Ogbukwa (2012) examined loan repayment capacity of small – holder cooperative farmers in Yewa North area of Ogun State, Nigeria using correlation and regression techniques. The study showed that farm credits played vital roles in the socio-economic transformation of the rural economies. However, loan acquisition and repayment were characterized by numerous challenges including high levels of default among beneficiaries. The study concludes that promoting small-holder cooperative farmers' loan repayment capacity would require conscious use of policies directed at increasing loan size and farmers' farm holdings or reducing household size.

Similarly, Ofuoku and Urang (2009) assessed the effect of cohesion of farmer co-operative societies on loan repayment among members in Delta State, Nigeria using Spearman's rank order

correlation analysis. The study observed that there was almost perfect positive relationship between rates of loan repayment perception and cohesion.

Consequently, they recommended that extension agents should take advantage of the effect of cohesion on loan repayment to promote cohesion in upcoming co-operative societies. In evaluating agricultural credit utilization by cooperative farmers in Benue State, Nigeria, Okwoche *et al* (2001) observed a significant difference between the agricultural output and income of farmers' before and after the utilization of loan acquired. The t-test analysis shows that farmers joined the farmer co-operatives societies mainly to access credit facilities. The study recommended that the farmers should be adequately motivated with needed credit facilities as this will further enhance agricultural production. However, considering various studies (Adefila, 2012; Ojiako and Ogbukwa, 2012) little attention is drawn to the farmers' co-operatives and their influence on agricultural development particularly in Kwali area council, federal capital territory (FCT), Abuja and this is the gap in knowledge that this present study intends to fill.

Munyori and Njugi (2014) posted that production challenges facing the farmers could be attributed to the limited access to finances despite the existence of various financial institutions. The main reason behind the limited access is because of the stringent conditions put in place by the financial institutions that the farmers are not able to meet.

Meeme (2013) asserted that provision of credit facilities can encourage farmers to invest in new technology and purchase farm inputs hence bringing them to a higher productivity and as a result empowerment to the small holder farmers is realized through increased income. Meeme (2013) posted that agricultural credit can be used by farmers to enhance their bargaining power through establishment of storage facilities and providing transport system.

A similar observation was made by Reyes (2014) that access to credit allows farmers to satisfy their needs induced by agricultural production cycle and consumption requirements.

Bolarinwa and Fakoya (2011) found that Farmers secured loans from informal credit institutions more than formal credit institutions. Hence, they paid high interest rates of about 300% on loan collected per annum. Agricultural credit facilities influence farmers' crops production, income level and consequently rated beneficiaries higher in SES. Bolarinwa and Fakoya (2011) study found that a positive, significant relationship between securing loans from credit institutions and farmers' performance of production operations. The study just suggests that extension agents and other community development workers as well as rural sociologists would be more successful in their efforts if the socio-economic statuses of farmers are raised through giving loans to farmers.

In many developing countries, like Bangladesh, microfinance has been used as a tool to gear up the living standard of poor people (Akram & Hussain, 2011). Agricultural credit provides financial resources to the farming community particularly for the purchase of primary inputs like fertilizer, seeds, pesticides, machinery, equipment etc. The government considers it an important instrument for achieving higher production and attaches high priority to ensure its timely availability to the farmers (Alam et al, 2014).

According to Nosiru & Omobolanle (2010), microcredit plays an important role in agricultural development. One element of an effective strategy for poverty reduction is to promote the productive use of farm inputs. This can be done by creating opportunities for raising agricultural productivity among small and marginalized farmers. Microcredit is particularly relevant to increasing productivity of rural economy, especially agricultural productivity in such an environment where economic growth is occurring.

Microcredit may enable small and marginalized farmers to purchase the inputs they need to increase their productivity, as well as financing a range of activities adding value to agricultural output.

Bashir (2009) stated that Credit is an important tool for getting the inputs in time thereby, increasing the productivity of the farms particularly those of small ones. Bashir (2009) suggested that improvement in education status will help farmers not only to understand the myths about loan / credit but also to utilize the finances in a much better way.

The importance of agricultural credits, especially from the institutional sources, is widely recognized as an effective tool to enhance agricultural productivity (Alam et al, 2014). Jehanzeb (2008) conducted the study on “The effects of agricultural credit on farm productivity and the income of the small farmer” as a result of the credit provided by Zarai Tarraqiati Bank of Pakistan. Farming was the main occupation of both respondents. The result reveals that the credit advanced by ZTBL in the study area has made a positive effect on the area of wheat and maize.

Akram & Hussain (2011) conducted the study to assess the contribution of microfinance in raising the living standard of low income people of District Okrara-Pakistan. Borrowers of microfinance from major microfinance institutions operating in the district Khushhali Bank Limited (KBL), Tameer Micro Finance Bank (TMB) and The First Micro Finance Bank (FMB) were studied. Positive impact of microfinance on income level and customers’ satisfaction level about the services of microfinance institutions were observed.

Credit and savings play a significant role in creating long-term achievements for women in the agricultural sector (Alam et al, 2014).

As a result, microloans and micro savings were provided or encouraged by the majority of projects we interviewed, though approaches varied, influenced by intended purpose and local financial markets (Alam et al, 2014).

Credit to farmers occupies a special place in developing countries. The importance of food production and the size of the agricultural sector in many countries make agricultural credit politically and economically more salient than credit for other kinds of products and services. India is an important illustration of these statements, with loans to farmers and forgiveness of those loans being tied to electoral considerations (Miller et al, 2014). On the other hand, there is also evidence that small and marginal farmers still depend on informal lenders, and this can contribute to agrarian distress in some cases (Miller et al, 2014).

Micro-studies of loans to farmers suggest that there are inefficiencies in the allocation and use of agricultural credit. A study of 300 farmers in Nigeria (Omunjalu, 2014) finds delays in disbursing bank loans as well as considerable diversion of loans to non-farm purposes. Ojiako & Ogbukwa (2012) finds that farm credit in Bangladesh may be inefficiently and insufficiently allocated, especially in the context of a positive correlation between the credit and output. Studies for India (Khan & Rahaman, 2007) also document similar situations: loans are made and monitored inefficiently, so even though credit is rationed, increasing its supply may not be welfare improving in the absence of institutional improvements such as better targeting and monitoring.

2.3 Effect of financial literacy on farmer's economic empowerment

Financial literacy is the ability to analyze financial information, manage and communicate about personal financial decisions so as to impact one's material well-being (Abreu and Mends, 2010). Thus, financial literacy influences one's ability to process economic information about financial matters and make informed decision (Mahdzan and Tabiani, 2013)

The literature confirms that there is a strong link between financial literacy, use of financial services and consumer welfare (Lusardi and Mitchell, 2008). Low financial literacy has also been found to lead to poor risk diversification, inefficient portfolio allocations and poor use of financial services (Japelli and Padula, 2011). The literature further indicates that besides being financially literate, a person must be willing to pay for micro-insurance to make it successful (Aidoo et al., 2014).

Mwongera (2013) described financial literacy as the ability to have appropriate book keeping skills and financial management skills. Girabi and Mwakaje (2013) observed that one of the major factors constraining access to credit by small holder farmers was lack of microfinance credit information. Meeme (2013) argued that education on small holder farmers is of paramount importance. She argues that better equipped farmers with financial skills will be better placed to form trusting relationships with sales banking institution. However this study was intended to find out whether this was the case with small scale farmers in Kyankwanzi District.

Adams (2010) noted that access to credit for farmers provides a potent tool for expanding economic opportunities and reducing the vulnerabilities of the poor. He further argued that access to credit provides the poor with productive capital that helps build up their sense of dignity, autonomy hence they are motivated to become participants in the rural economic development. He asserted that microfinance alone was not enough to enhance productivity. Other support services are for instance literacy classes and training programs, community development, market based farm development and market based development services.

Micro finance play a role in creating employment and income opportunities to participants and subsequently in empowering them to play an active role in economical, political and social cultural sphere in the society (Kimanjara, 2013).

Kimanjara (2013) posted that the main causes of failure of small enterprises are lack of planning, improper financing and poor management. Kimanjara (2013) further posted that financial management is not a choice if one has to become economically empowered because it is a necessity for survival especially in financial transactions where large amount of income is to be financially managed. Kyale (2013) in his study on impact of microfinance institutions on economic empowerment observed that provision of financial management skills by microfinance institutions helped the MFIs owners to be better placed in managing their finances hence growth was realized.

Adomi (2013), observed that this category of farmers lives in the rural area and they lack necessary information and awareness for better tools and implementation strategies that can improve their means of farm method, marketing and food storage for all year round food sufficiency. The ever increasing information explosion on agricultural produce: Seedling, harvesting, marketing and storage among others. Information is a means of transferring events for better awareness to add new meaning that could change events, lives or experiences; this could have considerable implications on farmers, farm produce, implementation of farm tools and the extension services. This present work is therefore an attempt to survey how farmers' information literacy affect agricultural produce, food security, marketing, storage and the lives of the farmers in other to alleviate poverty in the study area and Nigeria in general. There is need for good information flow and information sharing among agricultural stakeholders for better professional update and improved produce, according to Joel (2011).

This can best be carried out among researchers, policy makers, and the farmers who must be well informed by all means in order to enhance better agricultural produce, marketing and food storage to ensure food security.

The importance of farmers' information literacy and awareness towards agricultural produce and food security cannot be over-emphasized. Lusardi and Mitchell (2014) observed that interpersonal connectivity between farmers and agricultural extension agents will enhance farmers' information literacy, knowledge and awareness of current trends in farming that will boost stages of farming and abundance food supply. The importance of farmers' information literacy cannot be over emphasized as they produce what the nation need to feed her populace all year round.

Lusardi and Mitchell (2014) provide a theoretical and empirical survey of issues surrounding financial literacy, although their empirical evidence is from industrial countries, which also face challenges of educating consumers of financial services. In all countries, one basic problem is lack of information (Gine et al., 2014, for Mexico), but how information asymmetries are overcome can be crucial (Alan et al., 2015, for Turkey). Miller et al. (2014) surveyed evaluations of 188 financial education programs, and found weak evidence for positive impacts on financial knowledge, let alone decision-making. However, it appears that teaching simplified guidelines for behavior as rules-of-thumb can have a positive impact (Drexler et al., 2014). However this study was intended to find out whether this was the case with small scale farmers in Kyankwanzi District.

2.4 Impact of value chain financing on farmer's economic empowerment

Adams (2010) in his study asserted that lack of market for the products contributed to most of the farmers being unable to pay off their debt. Girabi and Mwakaje (2013) in his study on small scale holders in Tanzania posted that access to market for the agricultural products impacted positively on agricultural productivity and in turn economic empowerment of small scale holders is enhanced. However, Pender et al. (2004) observed that access to market for agricultural produce is not enough by itself but the market has to be efficient.

Baloyi (2010) made a similar conclusion that access to market alone is not good enough but market information is also necessary.

Louw, Chikazunga, Jordan and Bienabe (2007) discovered that many commercial farmers are not interested in contracts or in supplying to supermarkets, as they are of the opinion that their 'profits are squeezed' and they cannot afford the additional capital outlays to comply with the stringent quality standards. Consequently this may offer smallholder farmers a major opportunity to engage in contract farming if they are supported along the value chain. However this study was intended to find out whether this was the case with small scale farmers in Kyankwanzi District.

According to Louw *et al* (2007) the trend in the evolution of procurement systems towards large central procuring systems receiving fresh produce from a limited number of preferred suppliers is creating barriers for small-scale producers that do not have growers' programme contracts with retailers. Smallholder farmers can only have market power if they form co-operatives, which should be established with the help of the government. Groups have the potential to secure better terms of trade such as better sourcing prices, lower transaction costs and greater access to training and other services.

According to Humphrey and Schmitz (2012) smallholder producers need to access lead firms in the value chain. They stated that research in the horticultural industry in the United Kingdom and Africa suggests that smallholder growers are excluded from the value chains, with the main reason appearing not to be the efficiency advantage of large producers, but rather the lead firms' sourcing strategies, which are influenced by consumers' expectations, the safety and environmental requirements of governments and non-governmental organizations, as well as labour standards.

The sequence of steps and participants involved in the process from production to delivery of a product to market is called a value chain. A value chain is not identical to a supply chain. A value chain is about linkages generating value for the consumer. A supply chain is about processes of moving and transforming commodities into products from producers to consumers. While a value chain is about generating value for the consumer, a supply chain is about logistics (Humphrey and Schmitz, 2012).

The premise for adopting a value chain approach is that higher financial returns can be realized through value-enhancing inputs than can be obtained from simple supply chains. In commercial agriculture, the supply-chain focus is on producers and competitive advantage is derived from processes that improve efficiency and reduce costs (Ssempebwa 2010). However this study was intended to find out whether this was the case with small scale farmers in Kyankwanzi District.

The aim of promoting a pro-poor value chain is to enable poor producers to benefit from value chain improvements. Smallholder farmers can obtain a higher share of the final value of their produce through direct value addition and improved bargaining power resulting from quality enhancement with sustained demand for produce and development of stable commercial

relationships (Ssempebwa 2010). An effective pro-poor value chain ensures that higher is produced, and a larger portion of value of the final product goes to the poor.

According to Joel (2011), the major challenge for smallholder farmers is how to become part of the value chains (e.g., supermarket chains). Supermarkets decide the products that a farmer must grow according to standards that are often too high for small scale farmers to comply with. Meeting the demands of buyers and purchasing agents requires technical and management skills that small scale farmers often do not have.

Joel (2011) adds that the lack of effective linkages between stakeholders in a value chain has several consequences; the most obvious is the predominance of supply-chain bottlenecks. Bottlenecks result in produce from farmers not flowing to the market in the amount and quality necessary to ensure high and stable returns. As a result, farmers experience gluts of commodities, processors are not able to procure sufficient raw materials for their plants, retailers do not get sufficient products to meet consumer demand, and exporters are unable to meet foreign customer requirements (Joel, 2011).

In the absence of effective linkages between stakeholders, the scope for innovation is limited. As an example, lack of improvements in packaging technologies is not necessarily the result of the lack of knowledge and availability of technologies, or of the fact that technologies are expensive (Humphrey and Schmitz, 2012).

From the perspective of a fruit-processing factory, having the raw materials delivered in plastic crates rather than bamboo baskets might make sense.

However, the introduction of plastic crates involves the factory and its suppliers, and also affects the overall supply chain, requiring changes in logistic and supervisory systems that are acceptable to transporters, suppliers, farmers, and factory workers. Another example is the adoption by farmers of improved seed and crop husbandry. The resulting increase in production will not necessarily result in higher income for smallholders, unless established market linkages ensure that the increase in production is actually marketed and does not result in a glut in the market.

Low innovation implies low productivity, which in turn leads to low comparative advantage and missed market opportunities (Humphrey and Schmitz, 2012).

Agricultural productivity has leverage on the poverty reduction in the country and hence consistent improvement in the agricultural production will automatically translate into the improved livelihoods in form of improved nutritional habits, higher incomes for farmers and access to the basic needs of life (Ssempebwa, 2010).

Productive and successful business relationships have to create mutual benefits for all actors in the value chain if they are going to be successful and sustainable. Inclusive growth in Agriculture means developing the agricultural sector in a way that generates broad-based benefits for rural populations while improving economic productivity and food security at the local and national levels (USAID 2014). However this study was intended to find out whether this was the case with small scale farmers in Kyankwanzi District.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This Chapter describes the methods of data collection and analysis that was used during the study. The chapter gives details regarding research design, population of the study area, sample size and sampling techniques, data collection methods and instruments to be used, validity and reliability of instruments and finally techniques that was used to analyse data.

3.2 Research Design

According to Welman and Kruger (2004), the research design describes the plan in which information is collected from the research participants. The study employed a cross sectional survey design. The cross sectional design was used for this study because of the economical nature of the design, its rapid ability of data collection and ability to understand a population from using part of the population (Amin, 2005). This employed qualitative and quantitative research approaches. Qualitative techniques helped the researcher to come up with conclusions on variables that cannot be measured quantitatively while quantitative techniques facilitated establishing values attached to numerical variables.

3.3 Study Population

According to Welman and Kruger (2004), population is defined as a study object, which may include individuals, groups, organizations, events or the conditions to which they are uncovered.

Adding to that, Leedy (1997) maintains that the population can be viewed as a group or individuals or objects that would illustrate common feature that would be advantageous to the researcher's interest.

The study focused on 178 respondents who consisted of 10 Local leaders, 10 Bank/microfinance officers, 8 Operation Wealth Creation (OWC) officers and farmers (100 maize farmers with less than 10 acres and 50 cattle farmers with less than 50 herds) from Kyankwanzi District in Nsambya, Butemba, Bananywa and Kyankwanzi Sub counties. These categories were considered due to the need to target respondents who were knowledgeable on required information (Sekaran, 2005).

3.4 Sample size and Selection procedure

The sample size was determined using the Krejcie and Morgan (1970) table for determining sample size as cited by Amin (2005). The sample size and selection for this study is presented in Table 1 below;

Table 3. 1: Sample size and selection techniques

Category	Target Population	Sample size	Sampling technique
Local leaders	10	10	Purposive sampling
OWC officers	8	8	Purposive sampling
Bank/Microfinance officers	10	10	Purposive sampling
Farmers			
Maize farmers	100	80	Simple random sampling
Cattle farmers	50	44	Simple random sampling
Total	178	152	

Source: Kyankwanzi Local Government (2017) Records and Krejcie and Morgan's (1970)

3.5 Sampling Techniques and Procedures

The researcher used both probability and non-probability sampling techniques.

3.5.1 Simple Random Sampling

Simple random technique was mainly used to select the farmers (maize and cattle farmers) in Kyankwanzi District from Nsambya, Bananywa, Butemba and Kyankwanzi Sub counties. This employed to select the one hundred and twenty four (124) maize and cattle farmers.

Random numbers were assigned and written from one (1) up to one hundred and fifty (150), folded up, mixed thoroughly then one hundred and twenty four (124) were randomly picked. This sampling technique was appropriate because it gave all farmers in the population an equal and independent chance of being selected as a member of the sample (Saunders et al., 2007). The sample was derived from the table 3.1 above for determining sample size from a given population (Krejcie & Morgan, 1970).

3.5.2 Purposive sampling

According to Kothari (2004), purposive Sampling is a method whereby sample elements judged to be typical representative are chosen from the population. Sekaran (2003) suggests that purposive sampling involves the choice of subjects mostly advantageously placed in the best position to provide the required information. Purposive sampling was used to select Local leaders, Bank/microfinance officers and Operation Wealth Creation (OWC) officers in Kyankwanzi District from Nsambya, Bananywa, Butemba and Kyankwanzi Sub counties who were assumed to be key informants. This technique, according to Gay (1996) and Amin (2005) though may not necessarily be a representative sample, but enables the researcher to acquire an in-depth understanding of the problem.

3.6 Data Collection Methods

The data collection methods that were used during the data collection procedures include questionnaire survey and interviews.

3.6.1 Questionnaire Survey

According to Leedy (1997:191), a questionnaire is referred to as an instrument used for observing data beyond the reach of the observer or researcher in this context.

It was a good method for the researcher to use for the farmers (maize and cattle farmers) in Kyankwanzi District from Nsambya, Bananywa, Butemba and Kyankwanzi Sub counties whose number was too big to be covered by the researcher personally. It consisted of carefully prepared and logically ordered questions, to which the respondent responded in writing. They were also appropriate for large samples and correspondences can fill them in at their own convenience (Mugenda and Mugenda, 1999). Additionally, information can be easily obtained from questionnaires and be coded (see appendix 1).

3.6.2 Interview

Interviews are qualitative research methods where a researcher has a face to face encounter with the correspondent (Mugenda and Mugenda, 1999). The researcher used an interview guide to guide the interview with Local leaders, Bank/microfinance officers and Operation Wealth Creation (OWC) officers in Kyankwanzi District from Nsambya, Bananywa, Butemba and Kyankwanzi Sub counties as they were believed to be more knowledgeable to the study (see appendix 2). It was advantageous to use interview method because it allowed probing which would lead to generating of crucial results or issues on the subject (Mugenda and Mugenda, 1999).

3.7 Data collection Instruments

3.7.1 Self administered questionnaire

One set of a structured questionnaire was prepared and pretested before being used as the main data collection instrument. The structured questions arranged per objective was used for farmers (maize and cattle farmers) in Kyankwanzi District from Nsambya, Bananywa, Butemba and Kyankwanzi Sub counties because this is the most appropriate instrument for a big sample.(Mugenda & Mugenda, 1999). In order to provide consistent responses, the questionnaire was systematically organized to include demographic characteristics and items on the main variables under study.

3.7.2 Interview guide

The interview schedule or guide was used as the tool for applying this method. Interviews were conducted with the key respondents since this method gave chance for probing hence being able to draw deeper information (Amin, 2005). Semi structured questions organized per objective were used for Local leaders, Bank/microfinance officers and Operation Wealth Creation (OWC) officers in Kyankwanzi District from Nsambya, Bananywa, Butemba and Kyankwanzi Sub counties to stimulate them into detailed discussion on the main variables under study.

3.8. Validity and Reliability of Research Instruments

3.8.1 Validity of Research Instruments

Validity is the accuracy and meaningfulness of inferences which are based on the research result (Mugenda and Mugenda, 1999). Validity was measured by using the Pre-testing method which includes discussing the questionnaire and draft interview schedule with the supervisors.

The research tools were presented to other 4 (four) experts so as to get expert judgment on validity of instruments. For a research instrument to be valid, the content index should be 0.7 or above (Amin, 2005). The following formula was used to test validity index

$$\text{CVI} = \frac{\text{Number of items rated relevant}}{\text{Total number of Items}} \times 100$$

$$\text{CVI} = \frac{24}{28} \times 100 = 86\%$$

In order to ensure validity, the researcher conducted the following steps: The names and identities of the participants will remain anonymous; in this way, more accurate and true information was obtained. The researcher also obtained permission from the Kyankwanzi District Local Government so that participants do not experience any fear or uneasiness.

3.8.2 Reliability of Research Instruments

According to Sekaran (2003), reliability can be referred to as whether an instrument is consistent with no error despite fluctuations of the candidate, the research conditions under which the test is administered. The researcher pre-tested questionnaires on selected colleagues different from those used in the study which enabled the researcher to make adjustments hence ensuring reliability. Reliability of the questionnaire was established using Cornbrash Alpha reliability coefficient. This coefficient measures internal consistence of a test and it generally increases when the correlation between the variables increases. It ranges from 0 to 1, the more the value is closer to 1, and the reliable the instrument is in measuring the variables. The reliability there fore should be tested to reach for a confident value of at least 0.70 which is acceptable (Amin, 2005).

3.9 Research Procedure

The researcher ensured that the research instruments were discussed with the two supervisors. The researcher also obtained an introductory letter from Uganda Martyr's University and Kyankwanzi District Local Government to allow the study to be undertaken in Nsambya, Butemba, Bananywa and Kyankwanzi Sub counties. The research had one Research Assistant who helped in encouraging the respondents to fill the questionnaires within the required period. The researcher contacted key informants and provided them with the necessary details of the study seeking their consent to participate in the study and requesting for a date on which the interview could be conducted.

3.10 Data Analysis

3.10.1 Quantitative Data Analysis

According to Welman and Kruger (2004:194), data is analyzed by means of statistical techniques in order to investigate variables and their effects. For the purpose of this research data was analyzed by making use of descriptive statistics. According to De Vos *et al* (2001:153-155), descriptive statistics enables the researcher to present collected data in a logical and organized form. The contribution of credit facilities towards farmer's economic empowerment was evaluated using the Pearson's correlation coefficient obtained from SPSS data analysis package. This method was preferred to graphical depictions because it standardizes the variables hence change of scale or unit of measurement do not affect its value (Amin, 2005). Regression analysis was used to establish the magnitude of the contribution of credit facilities towards farmer's economic empowerment in Kyankwanzi District.

3.10.2 Qualitative Data Analysis

Qualitative data was collected through the interviews and review of documents. Qualitative data responses were transcribed into themes and categories, in order to support the hypotheses tested. Detailed information was collected, analyzed and presented in form of paraphrases or quoted up on permission of the respondents. The researcher ensured that all aspects contained in the interview guide were asked during the interview. Interview responses were recorded in an interview notebook. The responses were summarized in a narrative form as a representation of the major findings of the study.

The researcher ensured that all aspects contained in the interview guide were asked during the interview. Interview responses were recorded in an interview notebook.

3.11. Measurement of Variables

The measuring instrument serves as reliable sources for the design of questionnaires, (Welman and Kruger 2004: 142-148). The researcher developed question scales for each of the variable from the conceptual framework based on the literature reviewed. A nominal scale was used to measure the variables requiring yes or no responses.

3.12 Ethical Consideration

The researcher followed ethical standards to plan, collect, process and interpret data in line with conventional research norms. The researcher took ethical concerns about the copy rights respect and ownership of intellectual property to avoid plagiarism. This was very vital while making reference to other people's studies.

CHAPTER FOUR

PRESENTATION, ANALYSIS, INTERPRETATION OF FINDINGS AND DISCUSSION

4.1 Introduction

The study set out to evaluate the contribution of credit facilities towards small scale farmers' economic empowerment in Kyankwanzi District in Uganda. Specifically, the study sought to assess the effect of agriculture loans on farmer's economic empowerment in Kyankwanzi District; examine the effect of financial literacy on farmer's economic empowerment in Kyankwanzi District and establish the impact of value chain financing on farmer's economic empowerment in Kyankwanzi District. This chapter presents the rate of response, research findings, analysis and interpretation of findings based on the specific objectives of the study.

4.2. Response rate

The response rate was computed to establish whether it was adequate for the generation of the required data. Out of a sample size of 152 respondents, 135(89%) managed to respond to the questionnaire and interview instrument, while 17 respondents, that is, 11% failed to get time to answer questionnaire. According to Amin (2005), a response rate of over 80% is adequate enough to facilitate a research study.

Table 4. 1: Showing Response rate

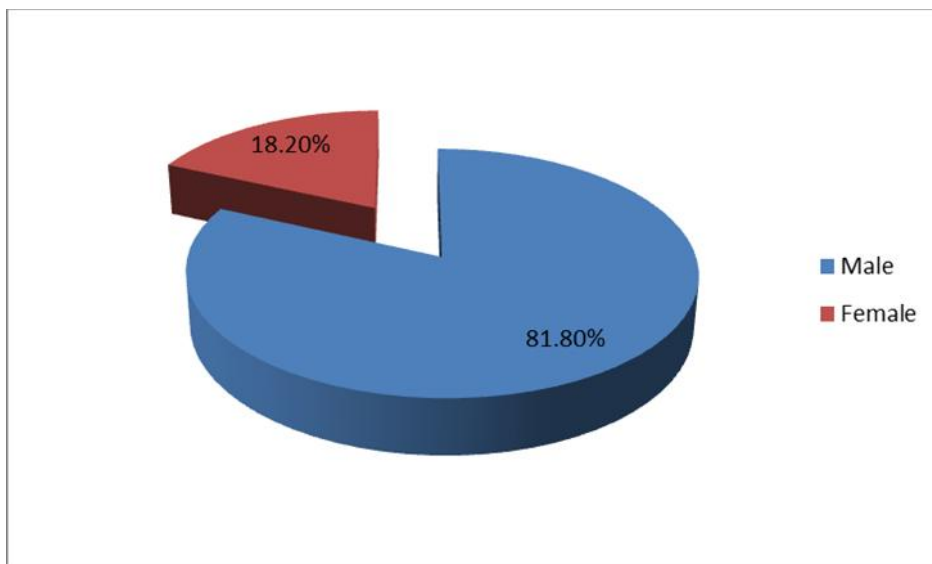
No.	Instrument	Number of Respondents	Percent (%)
1	Questionnaire	110	81
2	Interview	25	19
	Total	135	100

Source: Primary data

4.3 Demographic characteristics of respondents

This section presents the sample characteristics of the respondents such as their gender, age, educational level and number of years of farming.

4.3.1 Gender of respondents



Source: Primary data

Figure 4. 1: Gender of respondents

Figure 4.1 shows that the majority of the respondents, 111(81.8%) were male as opposed to females who were 24(18.2%). This indicated that there was a fair gender representation of both men and women in the study given the fact that they had an equal opportunity to participate. However, it indicates that more males are involved in farming than females in Kyankwanzi district.

4.3.2 Age of respondents

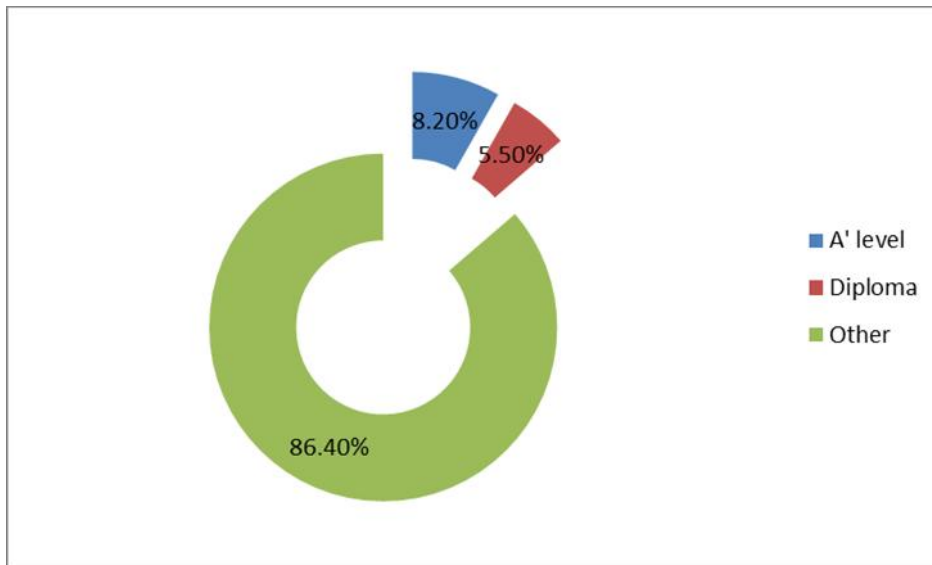
Table 4. 2: Age group of respondents

		Frequency	Percent
Valid	20-30 years	11	8.2
	31-40 years	53	39.0
	41-50 years	63	46.4
	51-60 years	8	6.4
	Total	135	100.0

Source: Primary data

Table 4.2 shows that majority of the respondents 63(46.4%) were between 41-50 years, followed by 53(39.0%) that were aged 31-40 years; this was followed by 11(8.2%) who were 20-30 years and lastly 8(6.4%) who were above 50-60 years. This indicates that the sample was fairly selected to include all age groups and therefore representative. This showed that majority of farmers in Kyankwanzi district are the older people although they are still in their productive stage of life. The younger people in the district do not participate more in agriculture due to the labour involved in it.

4.3.3 Education level of respondents

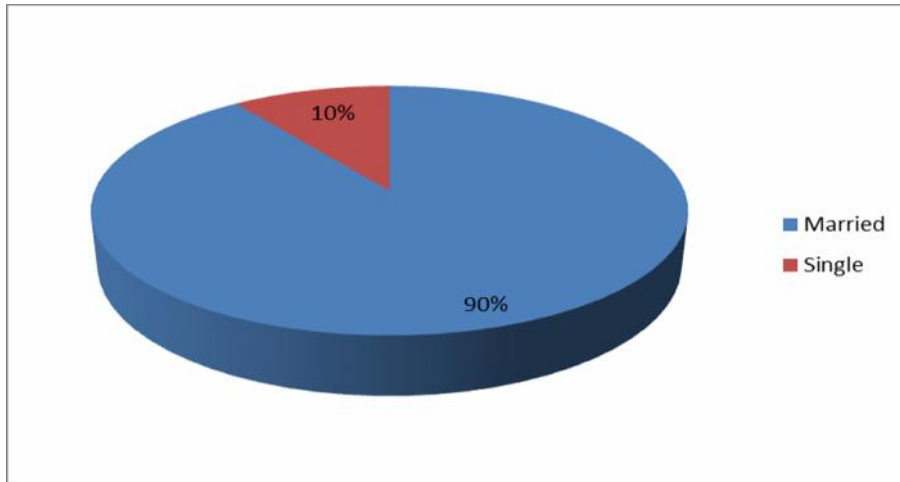


Source: Primary data

Figure 4. 2: Education level of respondents

Figure 4.2 shows that the majority 117(86.4%) of respondents indicated “other” (O’ level, Primary or below primary) in terms of level of education, 11(8.2%) had A’ level education, while only 7(5.5%) of respondents held a diploma as their highest level of education. The finding indicates that the sample selected was representative of the entire population. This further indicates that the outcome of the collected and analyzed data has a high degree of reliability. This shows that quite a good number of farmers in Kyankwanzi district were not educated. Educational level plays a good role in adoption of new and innovative production methods and undertaking risks.

4.3.4 Marital status

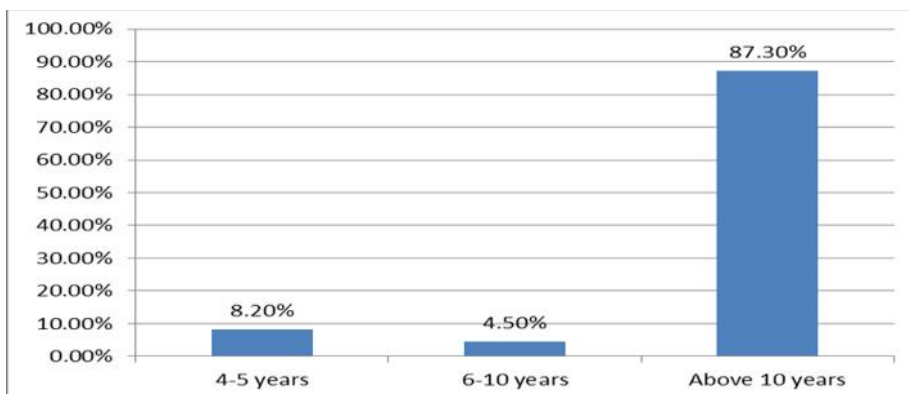


Source: Primary data

Figure 4. 3: Marital Status of respondents

The results in the table 4.1 above also show that all the respondents, 122(90%) were married; 12(10%) were single, divorced or widowed. This means married people showed more interest in the empowerment programme to support their households and cater for their families.

4.3.5 Years in farming



Source: Primary data

Figure 4. 4: Years spent in farming by respondents

In the study respondents were asked to indicate the period they had spent in farming. Table 4.1 shows that majority, that is, 118(87.3%) of the respondents had over 10 years in farming, 11(8.2%) had taken 4-5 years, and finally 6(4.5%) had been farmers for 6-10 years. The sample was therefore representative and rightly chosen to include people with experience on issues concerning farmer's economic empowerment in Kyankwanzi District. This further enhanced on the quality and reliability of the information that was collected. Indeed, experience goes along with skill acquisition, which is fundamental to efficiency and effectiveness in farming operations.

4.4 Empirical findings as per objectives of the study

The purpose of the study was to evaluate the contribution of credit facilities towards small scale farmers' economic empowerment in Kyankwanzi District. The analysis was done in a way that followed objective by objective in a chronological order.

Descriptive statistics were done to determine respondent's opinion on a particular statement, percentages, mean, and standard deviation showing degree of divergence of opinions among respondents among variables. The qualitative results were reaped from documents and the results were presented in form of themes following the objectives posed. They substantiated and gave more credibility to results obtained quantitatively.

4.4.1 The contribution of credit facilities towards small scale farmers' economic empowerment in Kyankwanzi District

Table 4. 3: Showing responses on small scale farmers' economic empowerment

Statements on small scale farmers' economic empowerment	Yes (n=110)	Yes (percentage)
There is increased farm productivity	104	95%
I realize improved income from farming activities	104	95%
I now experience Increased financial independence	104	95%
My farming activities have increased saving	104	95%
My farming activities have enabled me to acquire of more assets	95	86%
Farming has had a lot of positive change on my living standards	104	95%

Source: Primary Data

The findings show that 104(95%) of the respondents agreed that there is increased farm productivity. The findings suggest that there is increased farm productivity in Kyankwanzi District which is an indication of a higher level of farmer's economic empowerment. Such findings concur with Kimanjara (2013) who opined that when a farmer is empowered, they are freed from the chains of dependency and now they are able to control their own lives through personal decision making of life choices.

It was established that 104(95%) of the respondents agreed that they realized improved income from farming activities. This study finding is indicative of a higher level of farmer's economic empowerment. Interviews with key informants revealed;

In the past 10 years we have probably had really good years with good income despite the harsh climate changes with prolonged droughts.

This is in line with Khan and Rahaman (2007) who found that the indicators of economic empowerment include increment in savings, reduced levels of unemployment, and reduced levels of indebtedness, sound decision making and increased cases of self-employment.

The study findings also indicate that 104(95%) of the respondents agreed that they now experience increased financial independence. This study finding shows a higher level of farmer's economic empowerment. One respondent interviewed said,

I know because of a lot of the changes that we have made with the farm, we can see things starting to change in the right direction so I have got to say we are independent especially in terms of provision of farm inputs and requirements.

This finding supported by Khan and Rahaman (2007) who asserted that empowerment encourages people to gain more skills and knowledge and as a result productivity in their line of involvement is realized and consequently income is generated hence more savings and reduced levels of debt and reliance.

Majority of the respondents 104(95%) agreed that their farming activities have increased savings. The study revealed that the increase in agricultural financing caused increases in agricultural output. This is in agreement with Khan and Rahaman (2007) who also suggested that agricultural financing results into increment in savings, reduced levels of unemployment, reduced levels of indebtedness, sound decision making and increased cases of self-employment.

The findings also revealed that 95(86%) of the respondents agreed that their farming activities have enabled them to acquire of more assets. This study finding is indicative of a higher level of farmer's economic empowerment. Key informant Interviews revealed;

As a result of empowerment, many farmers are enabled to gain access to and control over more and better resources on favorable terms, which they can contribute to their own production processes and for which they can get remuneratively compensated; this gives them access to new or better technologies that can make their available resources more productive.

Such responses appeared to imply that there was increased access to assets by farmers in Kyankwanzi district which could be used to access credit thus leading a higher level of farmer's economic empowerment.

Findings show that 104(95%) of the respondents agreed that farming has had a lot of positive change on their standards of living. The study revealed a higher level of farmer's economic empowerment in Kyankwanzi. In confirmation, a key informant interviewed said

The provision of credit to farmers in our area has guaranteed families' secure livelihoods and overall well-being. Specifically in my village, the interventions have had a positive impact on, the farmers' social and political empowerment, through their increased respect, status, and self-confidence and increased decision-making power in households.

Such findings seem to concur with the view held by Mjomba (2011) who posted that empowerment includes similar capabilities like the ability to make decisions about personal/collective circumstances and ability to access information and resources for decision making. Consequently, the findings imply that there is a lot of positive change on farmers' living standards in Kyankwanzi district thus leading a higher level of farmer's economic empowerment.

4.4.2 The effect of agriculture loans on smallholder farmer's economic empowerment in Kyankwanzi District

The purpose of this objective was to assess the effect of agriculture loans on farmer's economic empowerment in Kyankwanzi District. The researcher used questionnaires to get responses from the various respondents.

Table 4. 4: Views on effect of agriculture loans on small scale farmer’s economic empowerment

Statements on effect of agriculture loans on farmer’s economic empowerment	Yes (n=110)	Yes (Percentages)
I at least have an account with any microfinance institution	50	45%
Financial institutions give out loans to finance farming activities	76	69%
The interest rate charged on loans restrict farmers from borrowing	64	58%
The interest rate charged by the bank is always favourable to farmers	59	54%
Farmers are able to take loans at any interest rate	50	45%
The loan repayment period that the bank gives enables farmers to accumulate assets	64	58%
Farmers have reliable source of income that enables them to pay back their loans in time	61	55%

Source: Primary Data

The findings show that 50(45%) of the respondents agreed that they at least have an account with any microfinance institution. This shows that many farmers in Kyankwanzi District still do not have an account with any microfinance institution.

Many of our colleagues do not save their money in any microfinance institution simply because the branches are far away from us; one needs to move for several kilometers.

Such findings imply that majority of farmers are likely not to access credit facilities in form of loans from micro finance institutions which means that the level of farmer’s economic empowerment is likely to decline. It was established that 76(69%) of the respondents agreed that financial institutions give out loans to finance farming activities.

This shows that farmers in Kyankwanzi District receive loans from financial institutions. One respondent acclaimed that;

When I heard that i would get money to buy inputs, I had to make use of the opportunity. But it was not clear to me that these institutions would give us loans instead, I expected free inputs. By the time it became clear to me that we have to pay back, I was already a member. So I have been getting loans and paying back overtime.

Such findings imply that many of farmers in Kyankwanzi District are getting loans to finance farming activities from financial institutions which is likely to improve the level of farmer's economic empowerment. This assertion is confirmed by Meeme (2013) who found that provision of credit facilities encouraged farmers to invest in new technology and purchased farm inputs hence bringing them to a higher productivity and as a result empowerment to the small holder farmers was realized through increased income. This was confirmed by Alam et al (2014) Agricultural credit provides financial resources to the farming community particularly for the purchase of primary inputs like fertilizer, seeds, pesticides, machinery, equipment etc. Alam et al (2014) further opined that the government considers it an important instrument for achieving higher production and attaches high priority to ensure its timely availability to the farmers.

The study findings also indicate that 64(58%) of the respondents agreed that the interest rate charged on loans restrict farmers from borrowing. This shows that the interest rate charged on loans restrict farmers in Kyankwanzi District from borrowing. One Microfinance Official interviewed said

Rural borrowers in particular are not in an attractive proposition for formal financial institutes because they cannot meet the minimum requirements and are perceived as high risk borrowers.

Such findings imply that many of farmers in Kyankwanzi District are likely to fail at getting loans to finance farming activities from financial institutions which is likely to negatively affect the level of farmer's economic empowerment.

Majority of the respondents 59(54%) agreed that the interest rate charged by the bank is always favourable to farmers. This study found that there the interest rate charged by the bank is not always favourable to all farmers. This implies that many of farmers in Kyankwanzi District are likely to fail at getting loans to finance farming activities from financial institutions which is likely to negatively affect the level of farmer's economic empowerment. In agreement Meeme (2013) wrote that agricultural credit can be used by farmers to enhance their bargaining power through establishment of storage facilities and providing transport system meaning that without it farmers may fail; Nosiru & Omobolanle (2010) also found that microcredit plays an important role in agricultural development; consequently, negatively affects the level of farmer's economic empowerment.

Findings show that at least 50(45%) of the respondents agreed that farmers are able to take loans at any interest rate. The study research found out that farmers are not able to take loans at any interest rate which implies that many of farmers in Kyankwanzi District are likely to fail at getting loans to finance farming activities from financial institutions which is likely to negatively affect the level of small scale farmer's economic empowerment.

The study findings also indicate that 64(58%) of the respondents agreed that the loan repayment period that the bank gives enables farmers to accumulate assets.

This study, found that the loan repayment period that the bank gives is not always favourable to all farmers which implies that many of farmers in Kyankwanzi District are likely to fail at getting loans to finance farming activities from financial institutions which is likely to negatively affect the level of farmer's economic empowerment. This view is supported by Munyori and Njugi (2014) found that production challenges facing the farmers could be attributed to the limited access to finances despite the existence of various financial institutions.

Munyori and Njugi (2014) added that the main reason behind the limited access is because of the short loan payment periods put in place by the financial institutions that the farmers are not able to meet.

The study findings also indicate that 61(55%) of the respondents agreed that farmers have reliable source of income that enables them to pay back their loans in time. This means that a reasonable number of farmers had a reliable source of income that enables them to pay back their loans in time. This implies that there is likely to be an improvement in the level of farmer's economic empowerment in Kyankwanzi District. This finding is supported by Nosiru & Omobolanle (2010) who found that one element of an effective strategy for poverty reduction is to promote the productive use of farm inputs. Nosiru & Omobolanle (2010) added that this could be done by creating opportunities for raising agricultural productivity among small and marginalized farmers.

Correlation between agriculture loans and small scale farmer's economic empowerment

There was need to establish whether there was a correlation between agriculture loans and smallholder farmer's economic empowerment. The analysis was done using Pearson product moment correlation coefficient. The results were presented in Table 4.5.

Table 4. 5: Correlation Results for agriculture loans and small scale farmer’s economic empowerment

		Correlations	
		Availability of loans	Farmer's economic empowerment
Availability of loans	Pearson Correlation	1	.289**
	Sig. (2-tailed)		.002
	N	110	110
Farmer's economic empowerment	Pearson Correlation	.289**	1
	Sig. (2-tailed)	.002	
	N	110	110

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Primary data

Table 4.5 above shows a weak positive correlation between agriculture loans and smallholder farmer’s economic empowerment in Kyankwanzi District. ($r=.289^{**}$ $p < 0.05$). This means that making loans available to farmers; ensuring that the loans are accessible, ensuring that the loans are affordable to the farmers, other factors remaining constant, is likely to improve smallholder farmer’s economic empowerment in Kyankwanzi District by 28.9%. However, the researcher needed to test this further in order to confirm the correlation finding.

Table 4. 6: Modal Summary on agriculture loans and small scale farmer’s economic empowerment in Kyankwanzi District

Modal Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.289 ^a	.083	.075	.22070

a. Predictors: (Constant), Agriculture loans

Source: Primary Data

The modal summary in the Table 4.6 reveals the adjusted R square value of 0.075 which is the coefficient of determination. The adjusted R square tells how a set of independent variables explains variations of a dependent variable (Mugenda & Mugenda, 1999). This implies that 07.5% of the variation in smallholder farmer’s economic empowerment in Kyankwanzi District can be explained by agriculture loans.

To answer the question what is the effect of agriculture loans on smallholder farmer’s economic empowerment in Kyankwanzi District? A standardized coefficients table was used and the results are shown in Table 4.7.

Table 4. 7: Coefficients of agriculture loans

Model		Coefficients ^a			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
	(Constant)	.400	.214		1.863	.065
1	Availability of loans	.545	.174	.289	3.133	.002

a. Dependent Variable: Smallholder farmer's economic empowerment

Source: Primary Data

In Table 4.7, the results show that the effect of a dependent variable (smallholder farmer’s economic empowerment in Kyankwanzi District) is measured by a standardized regression coefficient (Beta). The results show that agriculture loans standardized regression coefficient (Beta) was 0.289. When the Beta value is higher, then the impact of the predictor variable on the criterion is greater (Mugenda & Mugenda, 1999). This implies that the strength of the relationship between agriculture loans as an independent variable and the dependent variable smallholder farmer’s economic empowerment in Kyankwanzi District is 0.289. The unstandardized coefficients (B) are the regression coefficients. In the regression equation $y = a + bx$; where y = smallholder farmer’s economic empowerment in Kyankwanzi District, a = the intercept, b =the slope and x = agriculture loans, therefore smallholder farmer’s economic empowerment in Kyankwanzi District = $0.400 + 0.545x$ which implies that a unit change in agriculture loans a 0.545 change in smallholder farmer’s economic empowerment in Kyankwanzi District. As a result, it can be concluded that agriculture loans is positively related to smallholder farmer’s economic empowerment in Kyankwanzi District.

Therefore if there is any variation in agriculture loans, there will be a corresponding effect on small scale farmer’s economic empowerment in Kyankwanzi District.

4.4.3 The effect of financial literacy on small scale farmer’s economic empowerment in Kyankwanzi District

The purpose of this objective was to examine the effect of financial literacy on farmer’s economic empowerment in Kyankwanzi District. The researcher used questionnaires to get responses from the various respondents. Findings on M&E reports are presented in Table 4.8 followed by an analysis and interpretation. A Likert scale was used.

Table 4. 8: Views on effect of financial literacy on smallholder farmer’s economic empowerment

Statements on effect of financial literacy on farmer’s economic empowerment	Yes (n=110)	Yes (Percentages)
I personally make day to day decisions about money in my household	63	57%
A household budget is used to decide what share of my household income will be used for spending, saving or paying bills	50	45%
Before I buy something I carefully consider whether I can afford it	43	39%
I tend to live for today and let tomorrow take care of itself	23	21%
I find it more satisfying to spend money than to save it for the long term	63	57%
I am prepared to risk some of my own money when saving or making an investment	28	25%
I keep a close personal watch on my financial affairs	35	32%
I set long term financial goals and strive to achieve them	53	48%)

Source: Primary Data

Majority of the respondents 63(57%) agreed that they personally make day to day decisions about money in their household. The study revealed that farmers made day to day decisions about money in their household in Kyankwanzi District. This was an indicator that majority of the farmers were financially literate. The results further suggest that there is likelihood of an improvement in the level of farmer's economic empowerment in Kyankwanzi District. This finding concurs with Mahdzan and Tabiani (2013) that financial literacy influences one's ability to process economic information about financial matters and make informed decision.

It was further established that 50(45%) respondents agreed that a household budget is used to decide what share of farmer's household income will be used for spending, saving or paying bills. The study revealed that majority of the farmers (55%) do not use household budgets to decide what share of their income will be used for spending, saving or paying bills. This finding was confirmed by an interview response that many farmers don't prepare household budgets to guide expenditure after earning, which implies that many of farmers in Kyankwanzi District are likely to fail to repay loans or fail to save which is likely to negatively affect the level of farmer's economic empowerment. This view concurs with the findings of Japelli and Padula, 2011) who opined that low financial literacy leads to poor risk diversification, inefficient portfolio allocations and poor use of financial services.

The findings also show that 43(39%) respondents agreed that before they buy something they carefully consider whether they can afford it.

The study show that majority were financially literate as far as spending is concerned which implies that many of farmers in Kyankwanzi District are likely to afford repayment of loans or save which is likely to improve on the level of farmer's economic empowerment. In addition a key informant noted

Many farmers in our country have basic [preliminary] education. They are oblivious of financial matters such as cost & profit analysis, increasing income by proper selection of crops, and application of optimum conditions that end up with successful marketing. Because they are financially illiterate, many farmers passed through repeated cycles of losses. It is the duty of financial institutions & agricultural departments to teach farmers what they need in financial awareness. Once, they know the "golden" value of the land & how to manage it, they will stick to it utilizing most of the potential that is present.

Such findings imply that financial literacy for farmers Kyankwanzi District would help them manage efficiently their finances, reducing their often impoverished state, having enough start up and working capitals to reduce the seeking for financial loans with skyrocketed interests that takes away all the profit gained by these poor farmers.

The findings show that 23(21%) respondents agreed to the statement that they tend to live for today and let tomorrow take care of itself.

This means that the majority of the smallholder farmers (79%) in Kyankwanzi District lack financial literacy information, which information would help them manage efficiently their finances, reducing their often impoverished state thus likely to repay loans or save which is likely to improve on the level of farmer's economic empowerment. This is similar to the findings of Girabi and Mwakaje (2013) who observed that one of the major factors constraining access to credit by small holder farmers was lack of microfinance credit information. In the same line Meeme (2013) argued that education on small holder farmers is of paramount importance.

She argued that better equipped farmers with financial skills are better placed to form trusting relationships with sales banking institution.

The study findings also indicate that 63(57%) of the respondent agreed that they find it more satisfying to spend money than to save it for the long term. This means that many farmers in Kyankwanzi district don't know the importance of long term saving which is likely to prevent them from involving themselves in long term capital developments such as purchase of heavy agricultural equipment thus likely to result into poor levels of farmer's economic empowerment. In agreement Kimanjara (2013) posted that the main causes of failure of small enterprises are lack of planning, improper financing and poor management. Kimanjara (2013) further posted that financial management is not a choice if one has to become economically empowered because it is a necessity for survival especially in financial transactions where large amount of income is to be financially managed.

The study findings also indicated that only 28(25%) of the respondent agreed that they were prepared to risk some of their own money when saving or making an investment.

This means that many farmers in Kyankwanzi district don't know the importance of long term saving which is likely to prevent them from involving themselves in long term capital developments such as purchase of heavy agricultural equipment thus likely to result into poor levels of farmer's economic empowerment. This analysis was confirmed by a respondent interviewed who said

Financial Literacy is an important prerequisite for farmers from all walks of life to manage their farming business efficiently and to access productive credit. Financial Literacy is therefore crucial element of farmer training in order to pave the way for increases in productivity, income and profitability, improved and sustainable livelihoods.

The study findings also indicated that only 35(32%) of the respondent agreed that they keep a close personal watch on their financial affairs.

Although 32% of the respondents reported they keep a close personal watch on their financial affairs, the researcher did not find documentary evidence to support the report from respondents.

The study findings also indicated that 53(48%) of the respondent agreed that they set long term financial goals and strive to achieve them. This therefore means that there is still lack of adequate training on the importance of setting long term financial goals among smallholder farmers in Kyankwanzi District because financially literate farmers save the surplus cash and invest the same for the future other than spending.

Correlation between financial literacy and smallholder farmer’s economic empowerment

There was need to establish whether there was a correlation between financial literacy and smallholder farmer’s economic empowerment. The analysis was done using Pearson product moment correlation coefficient. The results were presented in Table 4.9.

Table 4. 9: Correlation Results for financial literacy and small scale farmer’s economic empowerment

		Financial literacy	Farmer's economic empowerment
Financial literacy	Pearson Correlation	1	.263**
	Sig. (2-tailed)		.006
	N	110	110
Farmer's economic empowerment	Pearson Correlation	.263**	1
	Sig. (2-tailed)	.006	
	N	110	110

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Primary data

Table 4.9 above shows a weak positive correlation between financial literacy and smallholder farmer's economic empowerment in Kyankwanzi District. ($r=.263^{**}$ $p < 0.05$). This means that educating farmers in making financial decisions; training farmers in financial planning skills, sensitizing farmers on the need for saving and better saving strategies, sensitizing farmers on how to invest their profits, other factors remaining constant, is likely to improve smallholder farmer's economic empowerment in Kyankwanzi District by 26.3%. However, the researcher needed to test this further in order to confirm the correlation finding.

Table 4. 10: Modal Summary on financial literacy and smallholder farmer's economic empowerment in Kyankwanzi District

Modal Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.263 ^a	.069	.061	.22240

a. Predictors: (Constant), Financial literacy

Source: Primary Data

The modal summary in the Table 4.10 reveals the adjusted R square value of 0.061 which is the coefficient of determination. The adjusted R square tells how a set of independent variables explains variations of a dependent variable (Mugenda & Mugenda, 1999). This implies that 06.1% of the variation in smallholder farmer's economic empowerment in Kyankwanzi District can be explained by financial literacy.

To answer the question what is the effect of financial literacy on farmer’s economic empowerment in Kyankwanzi District? A standardized coefficients table was used and the results are shown in Table 4.11.

Table 4. 11: Coefficients of financial literacy

Coefficients^a						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.118	.336		.351	.727
	Financial literacy	.803	.283	.263	2.832	.006

a. Dependent Variable: Small scale farmer's economic empowerment

Source: Primary Data

In Table 4.11, the results show that the effect of a dependent variable (smallholder farmer’s economic empowerment in Kyankwanzi District) is measured by a standardized regression coefficient (Beta). The results show that financial literacy standardized regression coefficient (Beta) was 0.263. When the Beta value is higher, then the impact of the predictor variable on the criterion is greater (Mugenda & Mugenda, 1999). This implies that the strength of the relationship between financial literacy as an independent variable and the dependent variable farmer’s economic empowerment in Kyankwanzi District is 0.263. The unstandardized coefficients (B) are the regression coefficients. In the regression equation $y = a + bx$; where y= smallholder farmer’s economic empowerment in Kyankwanzi District, a= the intercept, b=the slope and x= financial literacy, therefore farmer’s economic empowerment in Kyankwanzi District = $0.118 + 0.803x$ which implies that a unit change in financial literacy a 0.803 change in farmer’s economic empowerment in Kyankwanzi District. As a result, it can be concluded that financial literacy is positively related to farmer’s economic empowerment in Kyankwanzi District.

Therefore if there is any variation in financial literacy, there will be a corresponding effect on smallholder farmer's economic empowerment in Kyankwanzi District.

4.4.4 The impact of value chain financing on small scale farmer's economic empowerment in Kyankwanzi District

The purpose of this objective was to establish the impact of value chain financing on smallholder farmer's economic empowerment in Kyankwanzi District. Findings on the impact of value chain financing on farmer's economic empowerment are presented in Table 4.12 followed by an analysis and interpretation.

Table 4. 12: Views on impact of value chain financing on small scale farmer's economic empowerment

Statements on impact of value chain financing on farmer's economic empowerment	Yes (n=110)	Yes (Percentages)
I can afford buying high quality farm inputs	56	51%
I have the capital to handle post- harvest processing of my farm out puts into secondary products	89	81%
I can afford post- harvest storage of my farm outputs	73	66%
I can afford to buy the technology required in processing my farm outputs	68	62%
I am able to brand and package my farm outputs	75	68%
I can afford to advertise and market my farm outputs	41	37%
I can afford to transport my farm outputs to the market	67	61%

Source: Primary Data

The findings show that 56(51%) of the respondents agreed that they can afford buying high quality farm inputs. The study findings show that very few of the smallholder farmers in Kyankwanzi District can afford to buy quality farm inputs which are an indicator of low affordability of credit. Besides, as one key informant observed, indicated that he had never tried to acquire a loan. However, it was acknowledged by key informants that;

The financing provided by financial Institutions to the farmers is still insufficient to cover all the needs expressed by farmers during the primary production process. Farmers still encountered constraints to access formal credit, such as: lack of collaterals, lack of guarantors, high interest rates, lack of skills to develop bankable proposals, etc.

However farmers acknowledged that the financing received, even though insufficient, it has impacted positively their lives standards thus their level of economic empowerment.

In agreement, Girabi and Mwakaje (2013) in his study on small holders in Tanzania posted that access to market for the agricultural products impacted positively on agricultural productivity and in turn economic empowerment of small scale holders is enhanced.

It was established that 89(81%) of the respondents agreed that they had the capital to handle post-harvest processing of their farm out puts into secondary products. This means that almost all farmers in Kyankwanzi District have the capital to handle post- harvest processing of their farm out puts into secondary products. This finding is supported by response from a key informant who said

Funds provided by the Government and development agencies in Kyankwanzi District were higher than the formal credits received, and they only focused on inputs acquisition and Post-harvest infrastructure.

This means that many smallholder farmers in Kyankwanzi district are able to handle post- harvest processing of their farm out puts into secondary products which is likely to result into improved levels of smallholder farmer's economic empowerment.

The study findings also indicate that 73(66%) of the respondents agreed that they could afford post- harvest storage of their farm outputs. This means that almost all farmers in Kyankwanzi District could afford post- harvest storage of their farm outputs. This means that many farmers in Kyankwanzi district could afford post- harvest storage of their farm outputs which is likely to result into improved levels of farmer's economic empowerment. According to Joel (2011), the major challenge for smallholder farmers is how to become part of the value chains (e.g., supermarket chains).Joel (2011) adds that the lack of effective linkages between stakeholders in a value chain has several consequences the most obvious is the predominance of supply-chain bottlenecks.

Majority of the respondents 68(62%) agreed that they could afford to buy the technology required in processing their farm outputs. This means that almost all smallholder farmers in Kyankwanzi District could afford to buy the technology required in processing their farm outputs. One key respondent said that this so because both financial institutions and development agencies provide financing in different forms (loans and grants) to buy the technology required in processing their farm outputs. Secondly another respondent added that Micro finance Institutions and SACCOs are the most loan providers in the primary production, while commercial banks are interested in Post-Harvest investments and products marketing financing. This means that many smallholder farmers in Kyankwanzi district could afford to buy the technology required in processing their farm outputs which is likely to result into improved levels of smallholder farmer's economic empowerment.

Findings show that at least 75(68%) of the respondents agreed that they were able to brand and package their farm outputs. The study research found that some farmers were able to brand and package their farm outputs. This means that many farmers in the district are able to access the market thus likely to result into improved levels of farmer's economic empowerment. This view was supported by Girabi and Mwakaje (2013) who found that access to market for the agricultural products impacted positively on agricultural productivity and in turn economic empowerment of small scale holders is enhanced.

Findings show that at least 67(61%) of the respondents agreed that they could afford to transport their farm outputs to the market. The study research found that some farmers could afford to transport their farm outputs to the market thus likely to result into improved levels of smallholder farmer's economic empowerment.

Correlation between value chain financing and small scale farmer's economic empowerment

There was need to establish whether there was a correlation between value chain financing and smallholder farmer's economic empowerment. The analysis was done using Pearson product moment correlation coefficient. The results were presented in Table 4.13

Table 4. 13: Correlation Results for value chain financing and small scale farmer’s economic empowerment

		Correlations	
		Value chain financing	Farmer's economic empowerment
Value chain financing	Pearson Correlation	1	.149
	Sig. (2-tailed)		.120
	N	110	110
Farmer's economic empowerment	Pearson Correlation	.149	1
	Sig. (2-tailed)	.120	
	N	110	110

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Primary data

Table 4.13 above shows a weak positive correlation between value chain financing and smallholder farmer’s economic empowerment in Kyankwanzi District. ($r=.149$ $p > 0.05$). This means that ensuring that farmers get access to farm inputs; providing funds to farmers for post harvest handling, provision of buyers or markets for the farmers’ produce, other factors remaining constant, is likely to improve smallholder farmer’s economic empowerment in Kyankwanzi District by 14.9%. However, the researcher needed to test this further in order to confirm the correlation finding.

Table 4. 14: Modal Summary on value chain financing and smallholder farmer’s economic empowerment in Kyankwanzi District

Modal Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.149 ^a	.022	.013	.22793

a. Predictors: (Constant), Value chain financing

Source: Primary Data

The modal summary in the Table 4.14 reveals the adjusted R square value of 0.013 which is the coefficient of determination. The adjusted R square tells how a set of independent variables explains variations of a dependent variable (Mugenda & Mugenda, 1999).

This implies that 01.3% of the variation in smallholder farmer’s economic empowerment in Kyankwanzi District can be explained by value chain financing.

To answer the question what is the effect of value chain financing on smallholder farmer’s economic empowerment in Kyankwanzi District? A standardized coefficients table was used and the results are shown in Table 4.15.

Table 4. 15: Coefficients of Value chain financing

Coefficients^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.632	.279		2.264	.026
1 Value chain financing	.285	.181	.149	1.568	1.568

a. Dependent Variable: Smallholder Farmer's economic empowerment

Source: Primary Data

In Table 4.15, the results show that the effect of a dependent variable (smallholder farmer’s economic empowerment in Kyankwanzi District) is measured by a standardized regression coefficient (Beta). The results show that value chain financing standardized regression coefficient (Beta) was 0.149. When the Beta value is higher, then the impact of the predictor variable on the criterion is greater (Mugenda & Mugenda, 1999). This implies that the strength of the relationship between value chain financing as an independent variable and the dependent variable smallholder farmer’s economic empowerment in Kyankwanzi District is 0.149. The unstandardized coefficients (B) are the regression coefficients. In the regression equation $y = a + bx$; where y = smallholder farmer’s economic empowerment in Kyankwanzi District, a = the intercept, b =the slope and x = value chain financing, therefore farmer’s economic empowerment in Kyankwanzi District = $0.632 + 0.285x$ which implies that a unit change in value chain financing a 0.285 change in smallholder farmer’s economic empowerment in Kyankwanzi District.

As a result, it can be concluded that value chain financing though not significant is positively related to small scale farmer's economic empowerment in Kyankwanzi District. Therefore if there is any variation in value chain financing, there will be a corresponding effect on small scale farmer's economic empowerment in Kyankwanzi District.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents conclusions and recommendations based on the findings of the study. The recommendations are proposed for improving on small scale farmers' economic empowerment in Kyankwanzi District in relation to the study objectives which include; assessing the effect of agriculture loans on smallholder farmer's economic empowerment in Kyankwanzi District, examining the effect of financial literacy on farmer's economic empowerment in Kyankwanzi District and establishing the impact of value chain financing on smallholder farmer's economic empowerment in Kyankwanzi District.

5.2 Summary

5.2.1 The effect of agriculture loans on small scale farmer's economic empowerment in Kyankwanzi District

The study found that many farmers (at least 55%) in Kyankwanzi District still do not have an account with any microfinance institution; the interest rate charged on loans restricts 58% of farmers in Kyankwanzi District from borrowing; the interest rate charged by the bank is not always favorable to 46% of the farmers and 55% of farmers are not able to take loans at any interest rate. The study findings show that the loan repayment period that the bank gives is favorable to 58% of the farmers and that 55% of farmers had a reliable source of income that enables them to pay back their loans in time in Kyankwanzi District.

The correlations revealed that there was a weak positive correlation between agriculture loans and farmer's economic empowerment in Kyankwanzi District. ($r=.289^{**}$ $p < 0.05$). This study found that making loans available to farmers; ensuring that the loans are accessible, ensuring that the loans are affordable to the farmers other factors remaining constant were likely to improve smallholder farmer's economic empowerment in Kyankwanzi District.

5.2.2 The effect of financial literacy on farmer's smallholder economic empowerment in Kyankwanzi District

The study found that 57% of the farmers make day to day decisions about money in their household; 61% of the farmers do not use household budgets to decide what share of their income will be used for spending, saving or paying bills; 61% were financially literate as far as spending is concerned; smallholder farmers in Kyankwanzi District would help them manage efficiently their finances, reducing their often impoverished. The researcher found that many farmers in Kyankwanzi district don't know the importance of long term savings, there is still lack of adequate training on the importance of setting long term financial goals among farmers in Kyankwanzi District. The correlations revealed that there was a weak positive correlation between financial literacy and farmer's economic empowerment in Kyankwanzi District. ($r=.263^{**}$ $p < 0.05$). This study found that educating farmers in making financial decisions; training farmers in financial planning skills, sensitizing farmers on the need for saving and better saving strategies, sensitizing farmers on how to invest their profits, other factors remaining constant, were likely to improve smallholder farmer's economic empowerment in Kyankwanzi District.

5.2.3 The impact of value chain financing on smallholder farmer's economic empowerment in Kyankwanzi District

The study found that only 51% of the smallholder farmers in Kyankwanzi District can afford to buy quality farm inputs; 81% of the farmers in Kyankwanzi District have the capital to handle post-harvest processing of their farm outputs into secondary products; 66% of the farmers in Kyankwanzi District could afford post-harvest storage of their farm outputs; 62% of the farmers in Kyankwanzi District could afford to buy the technology required in processing their farm outputs. The researcher found that many farmers in the district are able to access the market and some farmers could afford to transport their farm outputs to the market in Kyankwanzi District. The correlations revealed that there was a weak positive correlation between value chain financing and farmer's economic empowerment in Kyankwanzi District. ($r=0.149$ $p > 0.05$). This study found that ensuring that farmers get access to farm inputs; providing funds to farmers for post-harvest handling, provision of buyers or markets for the farmers' produce, other factors remaining constant, is likely to improve smallholder farmer's economic empowerment in Kyankwanzi District.

5.3 Conclusions

5.3.1 Agriculture Loans and small scale farmer's economic empowerment in Kyankwanzi District

Basing on the finding, the study concludes that expanded economic empowerment is as a result of increased changes in access to credit, provision of financial literacy and access to market therefore making loans available to farmers; ensuring that the loans are accessible, ensuring that the loans are affordable to the small scale farmers improves farmer's economic empowerment in Kyankwanzi District.

5.3.2 Financial Literacy and smallholder farmer's economic empowerment in Kyankwanzi District

Basing on the finding, the study concludes that access to credit information, provision of financial training and having knowledge of where the market is by small scale farmers; accordingly educating farmers in making financial decisions; training farmers in financial planning skills, sensitizing farmers on the need for saving and better saving strategies, sensitizing farmers on how to invest their profits, improves smallholder farmer's economic empowerment in Kyankwanzi District

5.3.3 Value chain financing and small scale farmer's economic empowerment in Kyankwanzi District

Basing on the finding, the study concludes that expanding access to finance to small producers enhances increase of productivity and yields, gross margins, creates employment in rural areas and causes the general economic growth; therefore ensuring that farmers get access to farm inputs; providing funds to farmers for post harvest handling, provision of buyers or markets for the farmers' produce, improves smallholder farmer's economic empowerment in Kyankwanzi District.

5.3 Recommendations

On the basis of analysis of the study, the following recommendations were made:

5.3.1 The effect of agriculture loans on small scale farmer's economic empowerment in Kyankwanzi District

The government through the ministry of agriculture should partner with microfinance institutions to provide more and cheaper loans to small scale farmers.

The farmers in the Kyankwanzi District, in general, have positive attitude towards utilization of credit, but cannot get maximum benefits due to the low credit limits by the financial institutions. Therefore, the financial institutions should increase credit limit to the borrowers to increase production per unit area.

To avoid undue hurdles in the application process, the financial institutions should facilitate the farmers and open up branches nearest to the farmers to make the loans easily available to the farmers.

The financial institutions' monitoring team should regularly interact with the successful borrowers to ensure proper utilization of credit at the farm.

Financial institutions should avoid the hard-to-meet preconditions of the credit programme, which most of the small scale farmers cannot comply with, the financial institutions should widen the network not only to collect the credit after due time, but to create awareness among the farmers, and to facilitate them about the proper procedure of application for different type of credits.

Financial institutions should review their current requirements to borrow. Consider expanding the menu of acceptable collateral to also include social collateral and the type of physical assets farmers are more likely to own or control. Offer incremental loans based on individual repayment behaviour to reach out to farmers who might not be able to provide collateral.

5.3.2 The effect of financial literacy on small scale farmer's economic empowerment in Kyankwanzi District

The government of Uganda, through the ministry of education and that of agriculture should provide more financial trainings and literacy skills to small scale famers.

Local governments should create and source for more markets for small scale farmers' agricultural products, within and across other counties.

Financial Institutions should review their current requirements to save. Consider whether the existing charges and fees combined with any minimum initial deposit requirements are set at a level that poor farmers can afford.

Offer a menu of savings programmes that take into account the diversity of farmers' needs and constraints. Some farmers may prefer a programme that makes savings compulsory where the amounts saved and the timing of deposits are known and agreed as a commitment device that prevents them from diverting those funds to meet other needs or helps them resist pressure from family and friends. Others probably want more flexible packages that allow them to adjust the timing and amount of their savings to their consumption needs and investment opportunities.

5.3.3 The impact of value chain financing on small scale farmer's economic empowerment in Kyankwanzi District

From the guidance of policy makers, the government and other supporting agencies have to take their facilitation role and make sure that the financial system provides adequate finance to AVC actors that meet demands arising from activities along the value chain; Build capacity of small producers and other chain actors towards clear separation of roles; enhance sustainable market linkages between small scale producers and agribusinesses; promote promising VCF strategy and business model development and facilitate linkages between local financial institutions and leaders in value chains development.

The local government needs to provide necessary support for farmers' groups so as to meet the challenges of boosting agricultural production. It could be ensuring farmers' groups to gain accessibility to capital. The local government on its own part can contact research training institutes to provide technical and cooperative training services according to the farmer groups' needs. Training is better delivered by the use of a participatory approach with a focus on learning by doing. This kind of partnership will help demonstrate the adoption of innovative ideas and techniques in farm operations.

In addition, concerted efforts should be made by the central and local government to provide infrastructural facilities such as roads, electricity and safe drinking water to the rural areas of Kyankwanzi so as to improve their economic well-being.

This may impact positively on agribusiness since the time lost due to none availability of these essential infrastructural facilities in all the study sites can be channeled to productive use in farming which may also increase their income, improve standard of living and further reduce level of poverty.

5.4 Areas for further Research

Further research can be conducted on the effect of farmers' cooperatives and agricultural development in Uganda. Secondly other researchers may conduct studies on the determinants of lending to farmers by financial institutions in Uganda. Lastly the same study on evaluation of the contribution of credit facilities towards small scale farmers' economic empowerment can be carried out in other districts of Uganda.

REFERENCES

- ABREU, M., & MENDES, V. (2010). Financial Literacy and Portfolio Diversification. *Quantitative Finance*, 10(5), 515 -528.
- ACTION FOR RURAL WOMEN EMPOWERMENT (2017). A Research to Assess Knowledge, Attitude and Practices on SRHR; Access to Information and Services; Legal Environment of SRHR issues and Gender Budget Analysis in Wattuba and Nsambya SubCounties, Kyankwanzi District.
- ADAMS, S. (2010). Impact of microfinance on maize farmers in Nkoranza (BrongAhafo Region of Ghana). *Journal of Management Research*, 2 (2), 3-7.
- ADEFILA J. O. (2012). Spatial assessment of farmers' cooperatives organizations in agricultural development in Gurara area of Niger State, Nigeria. *Journal of Ecology and Natural Environment*. 4(2): 51-57.
- ADOMI, E. E., OGBOMO, M. O. AND INONI, O. E. (2013,). "Gender factor in crop farmers' Access to agricultural information in rural areas of Delta State, Nigeria" [*Library Review*, Vol.52 No. 8, pp. 388-393.]
- AIDOO, R., OSEI, J., WIE, P., & AWUNYO-VITOR, D. (2014). Prospects of Crop Insurance as a Risk Management tool among Arable Crop Farmers in Ghana. *Asian Economic and Financial Review*, 4(3), 34-354.
- ALAM, M, ULLAH. R, MIRZA. A, SALEEM.W AND ELAHI.M (2014). Impact of Microcredit Scheme on Socio-economic Status of Farmers (A case study of PRSP in District Gujranwala). *A Research Journal of South Asian Studies Vol. 29, No. 1, January – July 2014, pp. 163-172*
- SULE, A. CEMALCILAR, M. KARLAN, D. AND ZINMAN, J (2015). "Unshrouding

Effects on Demand for a Costly Add-on: Evidence from Bank Overdrafts in Turkey." NBER Working Paper No. 20956.

AKRAM, M., & IMTIAZ, H. (2011). The role of microfinance in uplifting income level: A study of District Okara – Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*. Vol.2, No.11, March 2011

AMIN, M.E. (2005), *Social Science Research; Conception, Methodology and Analysis*. Makerere University.

BASHIR , M.K & AZEEM M.M (2009) . A comparative analysis of loanee and non-loanee farmers. *Pakistan Journal of Life and Social Sciences*., vol. 7 (2):155-160, 2009

BALOYI, J. K. (2010). *An analysis of constraints facing smallholder farmers in Agrifarm value chain: A case study of farmers in the limpopo province*. Pretoria: University of Pretoria.

BOLARINWA, K. K AND FAKOYA, E.O (2011). Impact of Farm Credit on Farmers Socio-economic Status in Ogun State, Nigeria. *JSocSci*, 26(1): 67-71.

CRESWELL, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). Upper Saddle River, NJ: Pearson.

DREXLER, A. GREG, F. AND ANTOINETTE S. S. (2014). "Keeping it Simple: Financial Literacy and Rules of Thumb." *American Economic Journal: Applied Economics* 6(2): 131.

ELLIS, F., BAHIGWA, G. (2003). Livelihoods and rural poverty reduction in Uganda. *World Development* 31(6), 997-1013

FAO. (2011). FAO Country briefs - Uganda. <http://www.fao.org/countries/55528/en/uga/> (updated 2011-07-20, accessed 2012-01-04).

GINÉ, X., C. MARTINEZ CUELLAR, AND R. KEENAN, M. (2014). "Financial (dis) information: Evidence from an audit study in Mexico." World Bank Policy Research Working Paper 6902.

GIRABI, F. & MWAKAJE, G. (2013). Impact of microfinance on small holder farm productivity in Tanzania: The case of Iramba District. *Asian Economic & Financial review*, 3 (2), 227-242.

HAZELL P., P. C. (2007). *The future of small farms for poverty reduction and growth*. International food policy research institute. Washington, DC: International Food Policy Research Institute 2033 K Street

HUMPHREY, J. & SCHMITZ, H. (2012). *Developing country firms in the world economy: Governance and upgrading in global value chains. INEF Report, Heft 61/2002*. Institut für Entwicklung und Frieden der Gerhard-Mercator-Universität Duisburg.

JAMES, P.A.S. (2010). Using farmers' preferences to assess development policy: A case study of Uganda. *Development Policy Review* 28(3), 359-378.

JAPPELLI, T., & PADULA, M. (2011). *Investment in Financial Literacy and Savings Decisions*. CSEF Working Paper No. 272. Retrieved on September 30, 2014 from www.csef.it/WP/wp272.pdf

JOEL, S. (2011) Agricultural Information Sharing in – the Gains Experience CSIR-Institute for Scientific and Technological Information

KAMARA, A. (2010). Impact of market access on input input use and agricultural productivity; Evidence from Kiambu District. *African Economic Research, Policy and practice*, 4 (2), 1-16 .

KASEKENDE, L (2016). Remarks at the High-Level Meeting on Agricultural Financing in Uganda, *Kampala, 30 August 2016*

- KHAN, M.A. & RAHAMAN, M. A. (2007). *Impact of microfinance on living standards, empowerment and poverty alleviation of poor people: A case study on microfinance in the Chittagong District of Bangladesh*. Umeå School of Business (USBE)
- KIMANJARA, T. M. (2013). *influence of microfinance on economic empowerment of women. A case of Kenya Women Finance Trust*. Nairobi: University of Nairobi.
- KOTHARI, C. R. (2009) "Research Methodology: Methods & Techniques" (Second Revised Edition), New Age International Publishers, New Delhi.
- KREJCIE, R. & MORGAN, D. (1970). "Determining Sample Size for Research Activities"
- KYALE, M. S. (2013). *impact of microfinance institutions on growth and development of small and medium enterprises: A survey of Kiambu Town*. Nairobi: University of Nairobi.
- LOUW, A., CHIKAZUNGA, D., JORDAN, J. & BIENABE, E. (2007). *Regoverning markets: Smallscale producers in modern agrifood markets. Agrifood Sector Series: Restructuring Food Markets in South Africa: Dynamics within the context of the tomato sub-sector*. Pretoria: University of Pretoria.
- LUSARDI, A., & MITCHELL, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44.
- MAHDZAN, N.S., & TABIANI, S. (2013). The Impact of Financial Literacy on Individual Saving: An Exploratory Study in the Malaysian Context. *Transformations in Business & Economics*, 12(1), 41-55.
- MAMUM, A., WAHAB, S. & MALARRIZHI, C.A. (2010). Examining the effect of Access to credit on employment in Peninsular Malaysia. *Journal of Sustainable development*, 4(2).

MBABAZI, J, MOYO E. M. B, AND AUDREY V. C. (2015). “Africa Competitiveness Report 2015, Chapter 2–Transforming Africa’s Economies.” African Development Bank. Accessed at: http://www3.weforum.org/docs/WEF_ACR_2015/Africa_Competitiveness_Report_2015.pdf

MEEME, B. M. (2013). *Factors influencing Access to formal credit by small scale women tea farmers in Kenya: A case of Thika District , Kiambu County*. University of Nairobi.

MILLER, M., REICHELSTEIN, J., SALAS, C., ZIA, B. (2014). Can You Help Someone Become Financially Capable? A Meta-Analysis of the Literature. World Bank.

MJOMBA, E. M. (2011). *Micro Finance and Financial empowerment of women in Kenya. Case of Kenya Women Finance Trust*. University of Nairobi.

MUNYORI, J. K. & NGUGI, J.K. (2014). Factors affecting the growth of small and Micro Enterprises Dairy farmers in Kenya: case of Gatundu South Farmers Dairy Co-operative Society Ltd. *International Journal of current Farm and Social Sciences* ,1 (1), 1-16.

MUGENDA, O. M. & MUGENDA, A. G. (2003). *Research methods: Quantitative and qualitative Approaches*. Nairobi: African Centre for Technology Studies.

MUGALU, M. (2014). Kiboga farmers get Advance agriculture loans, insurance. The Observer.

MUGENDA, O. M. AND MUGENDA, A.G. (1999). *Research Methods: Quantitative and Qualitative Approaches*. Acts Press, Nairobi.

NEUMAN, W. L. (2003). *Social research methods: Qualitative and quantitative approaches*, 4th ed. Boston: Allyn and Bacon.

OFUOKU A. U. & URANG, E. (2009). Effect of cohesion on loan repayment in farmer cooperatives societies in Delta State, Nigeria. *International Journal of Sociology and Anthropology*. 1(4):70-76.

OJIAKO, I. A. & OGBUKWA B. C. (2012). Economic analysis of loan repayment capacity of small-holder cooperative farmers in Yewa North Local Government Area of Ogun State, Nigeria. *African Journal of Agricultural Research*. 7(13):2051-2062.

OMOBOLANLE, N & NOSIRU. (2010). Microcredits and agricultural productivity in Ogun State, Nigeria. *WJAS World J. Agric. Sci.*, 6 (3): 290-296, 2010

OMUNJALU, B.S. & FONDO, F. (2014). The role of microfinance in economic empowerment of the youth: Case of Mombasa County. *Journal of Farm and management* ,16(5), 26-32.

SEKARAN, U. (2003). *Research Methods for business: a skill building approach*. New York. John Wiley

SSEMPEBWA (2010); *Constraints of Agric Productivity in Uganda Agriculture is the largest employer in Uganda*. Downloaded on 20th September 2016. Doi

USAID (2014); Smallholders and Inclusive Growth in Agricultural Value Chains FIELD Report No. 18.

UGANDA BUREAU OF STATISTICS (UBOS). (2011). Uganda Census of Agriculture (UCA) 2008/09 at a glance. UBOS in collaboration with MAAIF, May 2001. Available at: <http://www.ubos.org/onlinefiles/uploads/ubos/pdf%20documents/UCAGlance.pdf>

UGANDA BUREAU OF STATISTICS (2017): Statistical Abstract.

APPENDICES

APPENDIX A: Questionnaire for Farmers

Dear Respondent,

I am a student at Uganda Martyrs' University pursuing a Master of Science degree in Monitoring and Evaluation. In order to complete the study, I am kindly requesting you to take of a few minutes to participate in this research study. After your consent, I am kindly asking you to fill out the questionnaire at your most convenient time. This study is aimed at evaluating the contribution of credit facilities towards small scale farmer's economic empowerment. All information provided will be treated with utmost confidentiality. Your participation in this study is voluntary but I will be glad if you accept to participate in it.

Thank you for your cooperation.

Sincerely,

Aidah

SECTION: A

I. Demographics:

Please fill and tick (✓) where applicable.

1. Gender

Male

Female

2. Marital Status

Single

Married

Divorced

Widow/widower

Other (Specify).....

3. Age group

- 20-30years
- 31-40years
- 41-50years
- 51-60yrs

4. Highest Educational level attained

- A level
- Diploma
- Bachelor's degree
- Post graduate
- Others (Specify).....

5. Years spent

- Below 3 years
- 4 – 5 years
- 6-10 years
- Above 10 years

Section B: SMALL SCALE FARMER'S ECONOMIC EMPOERMERMENT

Please choose yes or no as provided below to select an option that you consider most appropriate. Tick () the most appropriate.

No.	Particulars	YES	NO
1	There is increased farm productivity		
2	I realize improved income from farming activities		
3	I now experience Increased financial independence		
4	My farming activities have increased saving		
5	My farming activities have enabled me to acquire of more assets		
6	Farming has had a lot of positive change on my living standards		

Section C: THE CONTRIBUTION OF CREDIT FACILITIES

Please choose yes or no as provided below to select an option that you most agree with on each of the aspects. Tick () the appropriate.

1. Agriculture loans

No.	Particulars on agriculture loans	YES	NO
1	I at least have an account with any microfinance institution		
	Financial institutions give out loans to finance farming activities		
2	The interest rate charged on loans restrict farmers from borrowing		
3	The interest rate charged by the bank is always favourable to farmers		
4	Farmers are able to take loans at any interest rate		
5	The loan repayment period that the bank gives enables farmers to accumulate assets		
6	Farmers have reliable source of income that enables them to payback their loans in time		

2. Financial literacy

No.	Particulars on financial literacy	YES	NO
1	I personally make day to day decisions about money in my household		
2	A household budget is used to decide what share of my household income will be used for spending, saving or paying bills		
3	Before I buy something I carefully consider whether I can afford it		
4	I tend to live for today and let tomorrow take care of itself		
5	I find it more satisfying to spend money than to save it for the long term		
6	I am prepared to risk some of my own money when saving or making an investment		
7	I keep a close personal watch on my financial affairs		
8	. I set long term financial goals and strive to achieve them		

3. Value chain financing

No.	Particulars on Value chain financing	YES	NO
1	I can afford buying high quality farm inputs		
2	I have the capital to handle post- harvest processing of my farm out puts into secondary products		
3	I can afford post- harvest storage of my farm outputs		
4	I can afford to buy the technology required in processing my farm outputs		
5	I am able to brand and package my farm outputs		
7	I can afford to advertise and market my farm outputs		
8	I can afford to transport my farm outputs to the market		

Thank you for your Cooperation

Appendix D: Interview Guide

- a) What credit services do you offer for small farmers in the area?
- b) What are the features of the credit services you are offering?
- c) Do you promote credit service to small farmers? How?
- d) What are the requirements for obtaining a loan from the credit you offer small farmers?
- e) What are the requirements for obtaining a loan from the credit you offer small farmers?
- f) What is the maximum amount that the farmers can borrow? What rate of interest do you charge? How long do you allow the borrowers to repay the loans?
- g) How do you collect the payments from the loans?
- h) How long have you been offering credit to farmers?

Thank you for your cooperation

Appendix VI: Table for determining Sample Size from a given Population.

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note:

“N” is population size

“S” is sample size.

Krejcie, R.V. & Morgan, D. W, (1970).“Determining Sample Size for Research Activities”,
Educational and Psychological Measurement.