INFLUENCE OF CREDIT ACCESSIBILITY ON THE PERFORMANCE OF BANANA FARMING: A CASE OF KANYAKINE WARD, SOUTH IMENTI SUB-COUNTY

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DECLARATION

I declare that this research project report is my original work and has not been presented

for a degree or any other award in any other university.

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DEDICATION

I dedicate this research project to my loving parents, Mr. and Mrs. Mbogo, for guiding me into becoming the person I am today and for their moral and financial support throughout the whole process. I also dedicate it to my dear husband Dr. Wachira Ndwiga who supported and encouraged me to pursue this course, and our daughter Gylian Mumbi, who gives me the motivation to be an achiever.

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LIST OF ABBREVIATIONS AND ACRONYMS

ANOVA: Analysis of Variance

ERSWC: Economic Recovery Strategy for Wealth and Employment Creation

GDP: Gross Domestic Product

IDB: Inter- American Development Bank

ILO: International Labor Organization

KNBS: Kenya National Bureau of Statistics

MFIs: Micro Finance Institutions

MDGs: Millennium Development Goals

NGOs: Non-Governmental Institutions

ROSCAs: Rotating Savings and Credits Association

SACCO   Savings and Credit Co-Operative

SRA: Strategy for Revitalizing Agriculture

UAE: United Arab Emirates

UK: United Kingdom

USA: United States of America

ABSTRACT

The agricultural sector is the leading contributor to Kenya's economy. Besides the major cash crops cultivated in Kenya, Banana farming has too dominated the sector contributing greatly to the total GDP. However, banana farming has not been able to reach its full potential due to several factors among them being poor or lack of credit accessibility by those cultivating it. The researcher carried out a research to determine the influence of credit accessibility on the performance of banana farming in Kanyakine ward, Meru county, Kenya. The purpose of this study was to determine the influence of credit accessibility on the performance of banana farming. The study was guided by three objectives; to determine the influence of collaterals on the performance of banana farming; to determine the influence of cost of credit on the performance of banana farming and to determine the influence of availability of credit services on the performance of banana farming. This study was conducted at Kanyakine ward of South Imenti Sub- county in Meru County and was guided by the Financial Intermediary Theory and the financial inclusion theory. The study adopted a descriptive survey design using quantitative approaches. This study targeted 114 small scale banana farmers located in Kanyakine and it used Nassiuma's formula to calculate the sample size which was 54. stratified random sampling method was adopted to ensure equitable representation among 3 villages in Kanyakine ward. These are Kaira village, Kiungani village and Kirimani village. For data collection, the study used a structured questionnaire, which was first pilot-tested to assess both its validity and reliability. To facilitate data processing and analysis, version 23 software of the Statistical Package for Social Sciences (SPSS) was used. In the analysis, descriptive and inferential statistics were used and the results were presented in frequency tables from where adequate, realistic, reliable and relevant conclusions and recommendations were deduced. This study revealed that collateral requirements and cost of credit negatively influenced performance of banana farming. These variables mostly discouraged farmers from seeking credit facilities which would have in turn improved their farms' performance. It was however noted that availability of credit services had a positive relationship to the performance of banana farming. The more readily available credit facilities were, giving the farmers adequate amount of credit, at the right time and with adequate payment periods, the more farmers sought credit. The study recommended that financial service providers and financial policy makers should tailor make policies that favor the small scale producer so as to lighten their burden when it comes to access of credit. The study also recommended that farmer should seek out more information regarding credit and credit providers so as to avoid issues that might arise with failure to pay or lateness.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Today, bananas are both a major staple in the global tropical zone as well as an important cash crop and significant fruit varietal available for American and European consumption. They are the fourth most important crop worldwide for developing countries, where they provide an important starch source, especially in Africa and Asia. Bananas are produced mainly in tropical and sub-tropical areas of Africa, Asia and America, as well as the Canary Islands and Australia. The fruit is non-seasonal and thus available all year round, where it provides key foodstuffs between seasonal harvests of other staple crops (Van Asten et al., 2011).

According to Sackey (2013), a scientific approach to commercial production of plantain and banana (tissue culture) is yielding positive results in Australia, USA, UK and in Africa: Nigeria, Ghana, South Africa, Uganda, Tanzania and Kenya. This approach has the potential of producing about one million plantain and banana suckers for large scale production. This way, it is expected that these countries, and any other country that embraces this technique, will attain food sufficiency. Improving smallholder agricultural productivity is important for enhancing farmers livelihood, reducing rural poverty and increasing food security (Shiferaw B, Hellin J, Muricho G., 2011 Improving market access and agricultural productivity growth in Africa: what role for producer organizations and collective action institutions? Food Security 3(4):475-489)). Through co-operatives, smallholders may obtain inputs, adopt new agricultural technologies and access technical assistance. Co-operatives also provide credit services to member farmers which ease production constraints. This all has led to the claim that co-operatives have a positive impact on farm incomes in particular and on food security.

Scientific discourse about rural farming entrepreneurship is just the development of 1980s (ILO, 2006) and late 1990s and early 2000s in Eastern Africa especially in Kenya (Mwobobia, 2012). Rural small-scale farmers have for a long period of time participated in banana trade, though not as the sole income generating activity. In most cases, these farmers would be equally trading in other farm products such as tomatoes, onions, sweet potatoes among others. This trend, however, is changing as the demand for quality bananas is on the rise as most people travel to areas known

for banana production in search of specific quality of bananas. This has spurred a new interest in this business of bananas in these regions. As the farmers endeavor to satisfy this new demand, it becomes apparent to them that their quality of fruits is not the best hence not able to get the maximum benefit from their produce. As such, the need for funding and access to credit services has increased so as to satisfy the new demand for the modern banana seedlings, equipment and farming techniques that would aid in yielding the required quality and quantity for the market.

Bananas account for about 24% of the Agricultural output and staple food among many Kenyan communities. The plant is known to be water demanding and thus growing them is tedious especially when the annual rainfall level is below the minimum requirement (Carr, 2009; Van Asten et al., 2011). They grow best in areas with well distributed rainfall per year. Irrigation is needed if rainfall is inadequate or irregular. Banana plants should be planted in protected areas, because they are generally susceptible to wind damage. With this high rainfall/water demand, a sustainable rainwater harvesting technology, coupled with the use of organic soil enrichments, farmers can manage to produce more and healthy bananas. Executed under special farming program, rainwater harvesting technology is meant to mitigate the impact of climate change and replenish vegetation cover while also ensuring food security. The rainwater harvesting technology is relatively cheap for small scale farming, probably for farms less than quarter an acre or so. However, for large tracts of land, especially for commercial purposes, this technology may be costly to most farmers as it will need major construction of reservoirs and harvesting mechanisms. However, most farmers in already developed nations have the privilege of credit facilities, especially when the use is predefined as meant for agricultural purposes (Hisrich, 2005) But, farmers and rural populations, in general, in developing countries have always found it difficult to obtain credit financing. Indeed, the research underpinning this study revealed that most farmers in developing countries have no access or minimal access to any kind of financial service (payments, safekeeping and saving, credit and insurance), which hampers the efficiency and security of their operations.

Agriculture continues to dominate Kenya's economy, although only 15–17 percent of Kenya's total land area has sufficient fertility and rainfall to be farmed and only 7–8% can be classified as first-class land. In 2006, almost 75% of working Kenyans made their living by farming, compared with 80% in 1980. Of this 75%, an estimate of 97.6% of these farmers are found in the

rural areas where farming techniques are still traditional and reliant on natural aspects such as climate, unlike in the urban areas where most farmers have embraced modern farming techniques for maximum output (ILO, 2006). About one-half of Kenya's total agricultural output is non-marketed subsistence production. Agriculture is also the largest contributor to Kenya's gross domestic product (GDP). In 2005, agriculture, including forestry and fishing, accounted for about 24% of the GDP, as well as for 18% of wage employment and 50% of revenue from exports. Kenya also aims at attaining food security in its Vision 2030 which therefore, makes farming the most important economic sector.

In Kenya, bananas are grown in the highlands of Central, Rift Valley, Nyanza and some parts of Eastern provinces. The average annual rainfall in Kenya varies from 13 cm (5 in) a year in the most arid regions of the northern plains to 193 cm (76 in) near Lake Victoria. The coast and highland areas receive an annual average of 102 cm (40 in). Meru County is geographically located in Eastern province, but it is found on the highland part of this province. Kanyakine is one of the electoral wards in South Imenti Su-County in Meru County. The ward has a total population of approximately 11,758 people (Kenya National Bureau of Statistics 2009). The region is known to have rainfall all-round the year with a reliable annual average rainfall of 1850mm. Although this is about 72 inches of annual rainfall, the rain is all year round therefore favoring banana farming (Carr, 2009). However, the poor quality of banana seedlings that are susceptible to perennial diseases result in poor harvest and poor quality of banana fruits. Also, the lack of access to modern farming equipment, fertilizers and chemicals and services of agricultural extension services ensure that most rural small-scale farmers do not benefit much from the banana farming business. This study intended to determine the influence credit accessibility has on the performance of banana farming. This study was conducted among banana farmers in Kanyakine division in South Imenti sub-county in Meru County.

1.2 Statement of the Problem

Agriculture continues to dominate Kenya's economy. In 2006, almost 75% of working Kenyans made their living by farming, compared with 80% in 1980. Of this 75%, an estimate of 97.6% of these farmers are found in the rural areas where farming techniques are still traditional and reliant on natural aspects such as climate, unlike in the urban areas where most farmers have embraced modern farming techniques for maximum output (ILO, 2006). Agriculture is also the

largest contributor to Kenya's gross domestic product (GDP) accounting for about 24% of the GDP in 2005. Among this, bananas account for about 24% of the Agricultural output and staple food among many Kenyan communities with Meru being one of the leading producers of tissue culture banana in Kenya according to the national agricultural production report 2016 with an average farmer production of 17 tons per hectare while the national farmer average production is at 12 tons per hectare (Kwach et al, 2006).

However, even with these statistics, agriculture has not been able to meet its full potential. Studies conducted by (Hisrich, 2005) reveal that access to credit has been a main contributor to the inability of farmers to meet the full potential of their farms. Analyses of the factors influencing access to credit by farmers have included the effect of collateral and high interest rates, availability of credit institutions and availability of credit services in these institutions, among other factors. Namusonge (2006) states that access to credit has eventually become a detrimental factor to advancing their small scale farming businesses as most farms tilled or owned by the rural poor farmers are poorly managed and are meant for domestic food supply and are mostly deemed not credit worthy by financial institutions due to lack of awareness on various issues concerning farming and the farm produce.

Knowledge gaps exist whereby, with the country (Kenya) seeking to achieve food security in its Vision 2030 and MDGs, Banana farming has received immense research and support as an alternative to the traditional food crops that most communities in Kenya are used to. However, performance of banana farming among rural banana farmers with regards to availability to credit has not been studied. Despite a multitude of studies by scholars like Carr, (2009) &Van Asten et al., (2011) devoted to banana farming as a topic, the challenges affecting rural farmers' borrowers who engage in farming businesses have never been critically highlighted and their impact on the performance of their farming businesses. This remains largely unexplored in Kenya. Based on these facts, the study aimed at investigating the influence of credit accessibility on the performance of banana farming.

1.3 Purpose of the Study

The purpose of this study was to determine the influence of credit accessibility on the performance of banana farming in Kanyakine ward South Imenti Sub-county. This purpose was realized by establishing the relationship between various variables related to credit accessibility and performance of banana farming.

1.4 Objectives of the Study

The objectives of the study were:

   i. To establish the influence of collaterals on the performance of banana farming.
   ii. To determine the influence of cost of credit on the performance of banana farming.
   iii. To examine the influence of credit availability on the performance of banana farming.

1.5 Research Questions

The research questions for the study were:

   i. What is the influence of collaterals on the performance of banana farming?
   ii. How does cost of credit influence the performance of banana farming?
   iii. What is the influence of availability of credit services on the performance of banana farming?

1.6 Significance of the Study

The study is anticipated to be of importance to three cadres of interested parties, that is, Financial service providers, small scale farmers and scholars. The management of financial institutions and financial policy makers are likely to benefit from the findings of this study when working out and drawing up policies and action plans of addressing credit accessibility among small scale producers and low income earners especially in the agricultural sector. Farmers will benefit from this research in terms of increasing their knowledge base on how to tackle the question of credit accessibility. Scholars and researchers might also find this study to be of great importance since it will be a resource-base in their research and other academic works.

1.7 Scope of the Study

This study was conducted in Kanyakine ward within South Imenti Sub-county in the larger Meru County. The influence of credit accessibility on the performance of banana was the central

emphasis of this study. The target respondents were banana farmers in Kanyakine ward. These are those farmers who had either acquired credit from any financial provider previously or were in a position to acquire credit but had not for one reason or another. The banana farmers in this area are known locally as large quantity producers.

1.8 Limitations of the Study

This study limited itself only to Kanyakine ward in South Imenti Sub-county in Meru County. Consequently, its findings could not be generalized to other counties in Kenya due to different geographical environments and farming cultures. Language barriers was another limitation of this study since most banana farmers knew little Swahili or English languages. It was also challenging walking through the farms since the farms were located within steep slopes.

1.9 Delimitations of the Study

The research was conducted within Kanyakine ward in South Imenti Sub-county in Meru County. and the banana farmers in this are constituted the target population. Kanyakine ward has a total population of 11,758 people (Census 2009). It is approximated that, 114 of these participate fully in banana farming as their main source of livelihood. From this population of banana farmers 114, the sample size was derived across 3 villages which are Kaira village, Kiungani village and Kirimani village. The study also delimited itself methodologically in that, the researcher used already empirically established variables, theoretical frameworks, research designs, techniques and procedures that were representatives of the sample selected.

1.10 Assumptions of the Study

The information provided by respondents was assumed to be true and accurate and all the questionnaires were assumed to have been filled by the respective respondents. The study also assumed that the target population was appropriate for the collection of data.

1.11 Definition of Significant Terms

Credit: In this study credit refers to an agreement based largely on trust under which money is advanced to a small-scale banana farmer to acquire modern banana seedlings or farming equipment. Money is exchanged against a promise to pay later. Also called commercial credit.

Collateral requirements: It refers to a specific asset (such as land or building) pledged by a small scale banana farmer as a secondary security during the acquisition of credit from a financial institution

Cost of Credit: This is additional amount, over and above the amount borrowed, that a small scale banana farmer has to pay to the creditor. In this study it was indicated by, interest rates, admission fees, Asset valuation fees, Account maintenance fees among many others.

Credit availability: This is the amount to which a small scale banana farmer has access to at a given time. Credit availability in the study was indicated by three variables; timing of disbursement, Amount disbursed and the payment period given.

Performance of banana farming: This is the measurable output that a banana farmer receives from banana farming. This is in terms of fruit yield, amount of income from sales etc. In this study, performance of banana farming was indicated by a farmers' access to farm inputs, access to quality banana seedlings, access to agricultural extension services and ability to expand the banana farming venture.

1.12 Organization of the Study

This research project is organized into five chapters. Chapter one covers background of the study, statement of the problem, purpose of the study, objectives, research questions, significance of the study, limitations of the study, delimitation of the study and assumptions of the study. Chapter two covers a literature review of banana farming and credit accessibility, it also tackles all the objectives of study and how they affect performance of banana farming, the theoretical framework, the conceptual framework and the knowledge gap. Chapter Three covers research design, target population, sampling technique and sample size, data collection instruments, pilot testing, validity of the instruments, reliability of the instruments, data collection procedures, data analysis and ethical considerations. Chapter Four covers data analysis, presentation and interpretation of the data collected from the respondents, which include introduction, demographic information, Descriptive Findings of the Study Variables, Inferential Findings and Discussions and correlation analysis. Chapter Five covers the discussion of key data findings, conclusions drawn from the findings highlighted and recommendations made there-to.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature related to credit accessibility and performance of banana farming. Literature that corresponds with the objectives of this study is denoted under this chapter. It reviews the theoretical and empirical review on the influence of credit accessibility on the performance of banana farming among farmers and also the conceptual framework showing the relationship between the various variables. It also pinpoints the gaps in literature review.

2.2 Importance of Credit Institutions in Development of Farming Activities.

Kenya has not developed a comprehensive rural financial services strategy. The rural financial sector is governed by the Banking Act, Building Society Act and the Post Bank Act. With the passing of deposit-taking Micro Finance Bill 2005 and the proposed SACCO Societies Regulatory bill, 2004 a lot is expected to change as we have seen many microfinance institutions open their doors to the many low-income earners. However, a challenge remains, that the target of these microfinance institutions is still the urban people who engage in SMEs.

Through the Economic Recovery Strategy for Wealth and Employment Creation (ERSWC), the government has identified poor access to farm credit and financial services as a contributing factor to the decline in agricultural productivity. The Strategy for Revitalizing Agriculture (SRA) proposes to encourage an orderly development of micro-finance institutions through the enactment of facilitative legislation, encourage commercial banks to set up operations in the rural areas by providing appropriate incentives, encourage banks to lend to agriculture by reviewing and repealing legal provisions that have undermined banks' lending to the sector, recapitalize and streamline the management of Agricultural Finance Corporation so that it can perform its function of providing affordable credit to farmers (Republic of Kenya, 2004).

Credit is an important input into the production system, and it contributes to increased food productivity. Findings from existing literature (TAMPA Panel data 2004) shows that households who received credit for farming had a higher productivity per acre as compared to households that did not receive credit as shown in Table 2.1: Maize Productivity and Access to Agricultural Credit, 2004

Agricultural credit	Mean Yield in Bags per acre	Standard Deviation
Received	27.88	6.45
Did not receive	22.50	6.08

Source: Tegemeo household survey (2004)

According to this Panel data, maize farmers who accessed credit in the previous year had more produce per acre than those who had no access (Table 2.1). As such, it is evident that access to credit increases the farmers' working capital enabling the farmers to buy performance enhancing inputs such as good quality seeds, fertilizers and chemicals.

2.3 Challenges Facing Banana Farmers on Credit Accessibility in Kanyakine Ward, South Imenti Sub- County.

Walsh & Likinski (2009) notes that more farmers need to participate in farming education addressing farming business growth, technology, revenue models, and securing correct types of finance. She notes that globally, farmers led farming businesses receive less than 5 percent of venture capital. Farmers-owned farming businesses in the UK also seek less bank loans and overdraft facilities. In America, IDB (2011) states that farmers have dramatically increased their role in the farming sector and are currently driving major sectors of the economy through various activities related to farm produce. Currently, about half of farmers in the region are economically active, more than double the level in the 1970s. IDB (2011) argues that lack of access to savings may be just as critical as lack of access to credit for farmers farming entrepreneurs, because savings are the main source of start-up credit for 73 percent of businesses globally. However, a majority of farmers who own farming businesses in the US also face challenges of access to credit IDB (2011) Farmers farming entrepreneurs influence the economic growth of a country by providing jobs, enhance food security, increase income and the standard of living through the innovation, development and production of products that satisfy the needs of the population and in so doing; it provides them self-satisfaction, flexibility and independence (Waita, 2012). Nonetheless, these farmers are faced with some obstacles before reaching their goals such as their financial and psychological independence.

Gender also comes into play as a challenge, whereby, female farmers differ from their male counterparts as they encounter more problems as indicated by Jalbert (2000) and Saffu and Manu (2004). Research illustrates that men face less challenges than farmers especially with finance,

education and management skills. Firms owned and managed by men had more sophisticated planning compared to females and they survive and grow from medium to large scale enterprises because they are literate and have access to credit and credit facilities since the societal norms are more in tune with them (Dovi, 2006). The challenges raised from the above studies to a large extent also applied to Kanyakine ward. This study revealed that credit facilities were readily available in Kanyakine in terms of there were many financial service providers in the area. However, still some farmers were unable to access credit. This was mainly due to lack of awareness on the types of credit and how to go about the acquisition process. Gender also came into play to a small extent whereby, most of the land in Kanyakine was owned by men. Therefore, some of the banana farmers who were women could only acquire credit only through the approval of their male counterparts.

2.4 Influence of Collaterals on Credit Accessibility to the Performance of Banana Farming in Kanyakine Ward, South Imenti Sub- County.

Collateral is required for all borrowers by institutional sources. It is important because can be used to offset the loan if the borrower fails to pay the principal amount and interest satisfactorily under the terms of the loan agreement. The availability of collateral has a very significant impact on access to formal credit. (Denkyirah & Okoffo, 2016) studies indicate that access to bank credit by farmers has been an issue repeatedly raised as a major constraint to economic growth of this group. A common explanation for the alleged lack of access to credit by farmers is their inability to pledge acceptable collateral. In their view the current system of land ownership and transfer regulations clearly retards and to some extend limits access to formal credit. First, due to lack of clear title to much usable land in Kenya, there is a limited amount of real property that can be put up as collateral. Second, where title or lease is clear and alienable, transfer regulation needlessly delay the finalization of mortgages and consequently access to borrowed capital.

(Chandio, Magsi & Sahito, J. G. M (2017)) on the types, sources and importance of agricultural credit claimed that the available of collateral plays a significant role in the readiness of banks to meet the demand of the private sector. Collateral provides an incentive to repay and offset losses in case of default. Thus, collateral was required of nearly 75 percent of sample of farmers that need loans under a study, which they conducted on the demand supply of finance for rural farmer's small scale farming enterprises. The study also indicated that 65 percent of the total

sample of farmers had at various times applied for bank loans for their farming businesses. Nevertheless, a large proportion of the firms had their application rejected by banks. For farmers that put in loans applications there was almost 2:1 probability that the application would be rejected. On the other hand, the farmers received loans for much less than they requested for. Among farmers that had their applications rejected, lack of adequate collateral (usually in the form of landed property) was the main reason given by banks. (Denkyirah & Okoffo, 2016).) also suggest that banks can offer alternative to property as collateral such as guarantors, sales contract and liens on equipment financed. In conclusion, it is clear that when a farmer is unable to produce suitable collateral, access to credit becomes a challenge. This therefore affects the performance of the farming venture directly since the farmer is unable to acquire the required like quality seedlings, farming equipment, chemicals etc.

In the case of Kanyakine ward as revealed by this study, collateral requirements imposed by financial institutions greatly influenced the farmers' ability to access credit. A large number of small scale banana farmers agreed that providing suitable collateral was a major determinant as to whether a financial institution was willing to give them credit. These requirements had proved a challenge on numerous occasions hence preventing them from accessing credit or in some cases they received amounts far lower than what they had requested. This therefore, affected the performance of their farms as they could not access the required farm inputs.

2.5 Effects of Cost of Credit on Credit Access to the Performance of Banana Farming in Kanyakine Ward, South Imenti Sub- County.

Cost of credit is defined as extra cost placed over and above the borrowed amount that the lender required the borrower to pay within an agreed time and in a n agreed manner (Online Business Dictionary) There are many costs placed on credit. The most common cost of credit is called Interest. Interest rates are high as it is an instrument used to curb inflation rates in different countries (Dovi, 2006). Many country studies show that rural farmers are more likely to face higher interest rates, be required to collateralize a higher share of the loan, and have shorter-term loans (IFC, 2011). For example, in MENA between 50 and 75 percent of the rural farmers surveyed reported that they have sought external financing for their farming businesses at some time during the previous 12 months. Most had not received any financing from a formal financial institution. The difficulties reported include high interest rates, collateral, lack of track record,

and complexity of the application process. Fully 55 percent of rural farmers encountered an obstacle when seeking financing. For them, high interest rates (36%) were the most significant barrier (IFC, 2011). Another 11 percent were denied financing due to lack of collateral. In the UAE, 51 percent of those surveyed also encountered difficulties, ranging from high interest rates (28%) to finding the process too complicated (16%), lack of collateral (15%), and being denied formal bank credit because of the lack of a track record (14%). In Jordan, 47 percent of those surveyed encountered difficulties seeking external financing. Nineteen percent found the interest rates too high; 17 percent found the process too complicated, and another 16 percent were denied due to lack of collateral. In Lebanon and Bahrain, 29 percent encountered difficulties when seeking external financing. For them, high interest rates (16% each) were the main problem (IFC, 2011).

A recent enterprise survey of new farmers and farming enterprises in Côte d'Ivoire, Kenya, Nigeria, and Senegal finds that the share of rural farmers and farming entrepreneurs is 50 percent higher in the informal sector, with 18.1 percent of the registered firms run by farmers, compared to 27.6 percent of the informal sector. Mwobobia (2012) on the other hand notes that IGAs in the informal sector in Kenya have lower incomes compared to those in the formal sector. Mwobobia further notes that such farming enterprises with lower income usually have a poor credit history and hence do not easily qualify for credit from already established MFIs. In case of advancement of credit, these farming enterprises receive little credit advances for very high interest rates whose collaterals usually are the means of production owned by these rural farmers and farming entrepreneurs

Whereas many MFIs emerged to provide initial and working capital in Kenya, relevance and cost-effectiveness is often inappropriate in satisfying the particular needs of potential and operating rural farmers farming entrepreneurs. Where accessible, the cost of credit was found to be expensive for most rural farmers; for instance, the interest rates charged by some MFIs is as high as 54 per cent per annum. This coupled with a short repayment period becomes a major constraint, resulting in forcing the rural farmers to work almost round the clock to service the loans. The exorbitantly high cost of initial capital tends to make the enterprise almost uneconomical to operate as a business. This is common to most formal sources of credit as well as MFIs in Kenya (ILO, 2008). The other forms of cost of credit like the administration fees and

asset valuation fees charged on the farmers to get the process of credit access going were also found to be a discouraging factor for farmers.in a study in MENA between almost 70 percent of the rural farmers surveyed viewed these costs as unnecessary as they seem to work to counteract the process of credit access ("it is as if the banks were doing everything to prevent them from acquiring loans").

This study conducted in Kanyakine ward revealed a high level of agreement with the studies mentioned above. It was established that financial institutions in the area imposed several costs on the credit requested by small scale banana farmers. These costs were also said to be high and heavily burdened the farmers. High interest rates were mainly highlighted as the major cost. Banana farmers agreed that high costs imposed coupled with short payment periods discouraged most of them from acquiring credit. This aspect therefore negatively influenced the performance of their banana farms.

2.6 Influence of Availability of Credit Services on Credit Accessibility to the Performance Banana Farming in Kanyakine Ward, South Imenti Sub- County.

Karanja, Mwangi, & Nyakarimi (2014) on the investigation of factors that influenced access to credit among women enterpreneur in Isiolo town identified two basic types of financing, namely debt and equity. lmeida et. Al, 2006 describes debt as funds borrowed to be paid at a future date and a fee, referred to as interest to be paid at an agreed time schedule. The payments of interest are supposed to be done regardless of whether the firm makes profit or loss. Equity, on the other hand, is defined as funds contributed by entrepreneurs or investors who become owners or part owners of the firm and whose returns are primarily based on the profits. This implies that if a firm fails to make profits its owners do not get any returns. Generally, equity funds are long-term funds, but debt may be short to medium or long term. (Alti et. Al, 2006)) mention another basic classification of funds: internal and external funds. Internally generated funds come from a number of sources within a company and are more frequently employed. They include operational and investment profits, sales of assets, extended payment terms, reduction in working capital and accounts receivable. Another important source of internally generated funds is expediting the collection of receivable accounts. This releases funds that may be locked up with suppliers and distributors for the firm's use. Sources that are external to a firm include owners,

friends and relatives, commercial banks suppliers and distributors, government and non-government agencies.

Provision of credit is known to fuel household and national economic development (ADB. 2001; Petrick 2002; Pederso 2003; FAO. 2006). In particular, rural households who are credit rationed (Petrick 2002), have volatile and relatively low incomes and majority of whom are engaged in agriculture from which they get food, income generation, and meet other household financial obligations. Access to rural financial services has a potential to make a difference in agricultural productivity, food security and poverty reduction (Wangari & Omboi 2011). However, availability of credit institutions and availability of credit services in these institutions is another factor that may hinder the realization of this potential. An efficient, sustainable and widely accessible rural financial system remains a major development challenge in most Sub Sahara African countries.

The Economic Recovery Strategy for Wealth and Employment Creation (ERS) has identified poor access to farm credit and financial services due to a small number of credit institutions as a contributing factor to the decline in agricultural productivity. Other factors identified include the amount disbursed, timing of disbursement and the payment period given. The amount disbursed was said to be too small to serve the purpose desired, while the timing of the release of the funds mostly was too late in the season hence a farmer could not utilize the funds to increase farm productivity. In addition, the period given for the repayment of the funds was too short such that most farmers opted out of the process. While it is observed that there are financial institutions within Meru County that offer credit facilities, their number is still low and as such, lack of competition has made more inflexible credit terms to thrive within these institutions.

In Kanyakine ward, the study revealed that credit services were readily available in the area. However, despite this, some factors still affected the ability of the banana farmers to access credit. These were the amount of credit disbursed, the timing of disbursement, the payment period given and the simplicity of the credit acquisition process. Banana farmers revealed that although most institutions offered them a lower amount of credit than what they had requested there were some that catered for their needs as farmers. In addition, these credit providers tried to learn the banana season calendar so as not to delay the release of funds. The banana farmers also agreed that the payment period given by the financial providers was based on their income from

the banana harvest hence reducing the pressure on them among all the factors influencing credit accessibility, the availability of credit services in the area was said to have a positive influence on the performance of banana farming.

2.7 Theoretical Framework

This study adopts the theoretical lens of the Financial Intermediary Theory and also explores the financial inclusion theory that aims to show how and why financial institutions do not offer equal opportunities to all.

2.7.1 The Financial Intermediary Theory

The financial intermediary theory is one of the traditional theories developed by Benston and Smith Jr. 0(1976) and by Fama (1980). It was based on transaction costs and asymmetric information. It was developed to account for institutions which take up deposits and channel funds to firms. Credit is an important aspect that provides funds to those economic entities that can put them into the most productive use. Theoretical studies have established the relationship that exists between financial intermediation and increase in production. Andoh & Nunoo (2014) observed that financial development can lead to rapid production. Financial intermediaries can therefore be described as the financial institutions specialized in buying and selling of financial capital. Gorton and Winton (2003) In a related study, it is explained that development of banks and efficient financial intermediation contributes to production growth by channeling savings to high productive activities and reduction of liquidity risks ((Saunder & Cornett, 2011).). They therefore concluded that financial intermediation leads to production growth. This means that a financial institution can affect production growth by efficiently carrying out its functions, among which is the provision of credit. Production growth is the increase in the amount of goods and services produced by an economy over time. With this respect, individual farmer productivity increment truly feeds into productivity growth of their respective cooperatives.

The financial intermediary theory was effectively illustrated in Kanyakine ward whereby, it was revealed that financial institutions and credit services were readily available to the banana farmers in the area. Financial institutions were ready to provide credit to the farmers as long as the fulfilled the requirements like meeting the collateral requirements and agreeing the various costs of credit imposed. This therefore influenced the performance of banana farming and the total production of the area.

2.7.2 Financial Inclusion Theory

Financial inclusion was coined by the former reserve bank of India governor YV Reddy in 2005. Financial inclusion was defined as where individuals and businesses have access to useful and affordable financial products and services that meet their needs that are delivered in a responsible and sustainable way. Financial inclusion is defined as the availability and equality of opportunities to access financial services (Nanda, Kajole; Kaur, (Mandeep, 2016) "Financial Inclusion and Human Development: A Cross-country Evidence"). Globally there are over 2.5 billion people who are excluded or underserved by financial systems. These are often poor or underserved populations who lead complex financial lives and typically rely on a mix of informal and formal financial services, with neither fully meeting their diverse financial needs.

If there are inclusive financial market systems (made up of financial providers, market actors, appropriate technology, and an enabling environment), then target clients have access to financial products and services that benefit them. It is also believed that If targeted clients can access, use, and afford a range of appropriate financial services and products on an ongoing basis, then they can better manage, sustain, and grow their economic assets which in this case refers to banana farming ventures. Financial providers often perceive poor clients to be high risk and low profit. The result is not enough financial providers who adequately conceptualize, mitigate, and manage appropriate financial services for the poor. At the same time, clients may have limited ability to meet standard financial provider requirements (i.e. collateral or know your customer' identification). This is especially the case for extremely poor or vulnerable populations who lack legal documents and cash flow or credit history. They may also face cultural norms, such as gender inequality, that restrict access to and usage of financial services. Poorer clients often rely on informal finance mechanisms, such as savings groups, store credit, and cooperatives, to fill income gaps at the household and business-level. In the case of Kanyakine ward, the financial markets were determined to be partially inclusive from the findings of this study. This is because, some farmers found the conditions imposed on credit like collateral requirements and costs of credit too restricting therefore discouraging them from accessing credit. As a result, this study recommended the revision of these conditions to ensure that financial markets were totally inclusive.

2.8 Conceptual Framework

The correspondence between different study variables is shown by a conceptual framework as illustrated in figure 2.1. The figure illustrates the relationship between the Independent variables, the Dependent variables and the moderating variables. Independent variables refer to those whose variation or change does not depend on that of another. Dependent variables refer to those whose variation or change depends on the independent variables while the moderating or intervening variables refer to hypothetical variables i.e. cannot be measured in an experiment but are used to explain the causal links between the independent and dependent variables.

Figure 2.1: Conceptual Framework

Independent Variables   **Dependent Variable**

    Credit Accessibility

Collateral Requirements

   i.   No. of guarantors
   ii.   Value of the farm
  iii. Asset value e.g. car
  iv. Cash flow projection from the farm

Performance of Banana Farming.

- Access to farm inputs
- Access to quality banana seedlings
- Access to agricultural extension officer services.

Cost of Credit

   i.   Interest rate
   ii.   Administration fees
  iii. Insurance fees
  iv. Asset valuation fees
   v.   Account maintenance fees

Availability of Credit Services

   i.   Timing of disbursement
   ii.   Amount disbursed
  iii. Payment period

   i.   Government policies
   ii.   Taxation
  iii. Politics

Moderating variables

Figure 2.1 reveals three different types of variables. These are independent, dependent and moderating variables. In this case, independent variables are three, i.e., Collateral requirements, cost of credit and availability of credit services, while dependent variable is performance of banana farming. Moreover, government policies, taxation and politics are the moderating variable. As indicated in the framework, it is hypothesized that the three independent variables which are Collateral requirements, cost of credit and availability of credit services affect the performance of banana farming. However, government policies, taxation and politics among many others confound the stated effect of independent variables on dependent variable. Indicators of Collateral requirements include No. of guarantors, Value of the farm, Asset value e.g. car and Cash flow projection from the farm. The indicators of cost of credit include interest rates, insurance fees, asset valuation fees and account maintenance fees. While, the indicators for availability of credit services include timing of disbursement, amount disbursed and payment period. Performance of banana farming can be operationalized by a number of crucial indicators which include access to farm inputs, access to quality banana seedlings and access to agricultural extension officer services.

2.9 Knowledge gap

From the reviewed literature, it is apparent that the factors affecting access to credit and how they affect performance of banana has been extensively covered. The theories covered in this chapter i.e. financial intermediary theory and the financial inclusion theories further enhance the understanding on the issue of credit accessibility among small scale farmers and low income earners. However, some knowledge gaps exist whereby, with the country (Kenya) seeking to achieve food security in its Vision 2030 and MDGs, Banana farming has received immense research and support as an alternative to the traditional food crops that most communities in Kenya are used to but not as a potential cash crop, whereby with adequate support and research could reach the ranks of the major cash crops like coffee and tea. In addition, performance of banana farming among rural banana farmers with regards to availability to credit has not been studied, especially when statistics indicate that the farmers contribute greatly to the stability of the economy as well as food security. Therefore, by researching on the influence credit accessibility has on the performance of banana farming in Kanyakine Ward, Imenti South Sub-County, this study, filled that gap.

2.10 Summary of Literature Review

This chapter is a summation of literature regarding banana farming, credit accessibility and how credit accessibility influences the performance of agricultural products. The literature reviewed has revealed the importance of credit institutions in the development of farming activities in various areas of the world. It showed that from previous studies that where farmers were able to access credit, the agricultural productivity definitely improved. Literature regarding the challenges facing banana farmers on credit accessibility was also reviewed. Several challenges were raised among them lack of awareness by the farmers on how to access credit and also issues like gender that sometimes disadvantage some farmers from accessing credit. The influence of the study variables that is collateral requirements, cost of credit especially interest rates and availability of credit services were also tackled in some previous studies. The theoretical review gave a deeper understanding as to why small scale farmers are unable to access credit compared to the large scale and already established businesses. The financial intermediary and financial inclusion theories revealed that effective financial intermediation and total financial inclusive markets by financial institutions can affect production growth. Therefore, if these institutions carry out their functions effectively among which is provision of credit to small scale banana farmers, then, there could be a notable increase in agricultural productivity.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The basis for planning, selecting and developing the instruments which are to be used in the study is laid out in this chapter. It also describes the series of steps that are used for the application of the research instruments. Research methodology deals with data collection concepts (Kothari, 2008). A quantitative research methodology was used to collect data because the study sought to confirm a hypothesis about the influence of credit accessibility on the performance of banana farming and also, the data collected was in the form of numbers and statistical results.

3.2 Research Design

A research design is a roadmap of carrying out a research study (Kothari, 2008). A descriptive survey design was adopted since it sought opinions of respondents regarding study constructs. The research design was also appropriate since it sought to investigate the associations within which certain occurrences and outcomes prevail. The study sought to confirm a hypothesis about the influence of credit accessibility on the performance of banana farming and also, the data collected was in the form of numbers and statistical results. The study was conducted over a particular period of time.

3.3 Target Population

This comprises of subjects sharing similar characteristics. In this case, the banana farmers in Kanyakine Ward, South Imenti Sub-county constituted the target population. Kanyakine ward has a total population of 11,758 people. Approximately 400 of these practice small scale mixed farming. However, 114 farmers grow bananas exclusively as their main source of livelihood. From this number, is the accessible population to which the study was delimited and from which the sample was derived. The target population that was selected was the 114 banana farmers and they were distributed across 3 villages i.e. Kaira village, Kiungani village and Kirimani village.

Table 3.1: Population Distribution

Villages	Gender distribution		Population
	Male	**Female**	
Kaira village	21	24	45
Kiungani village	14	19	33
Kirimani village	20	16	36
Total	**55**	**59**	**114**

Source: Meru banana farmers' union, 2019

3.4 Sample Size Determination

A sample according to Kothari (2008) is a subset of the study population. This implies that a well-structured sample should act as a representative of the study population. The study employed a formula from Nassiuma (2000) using the coefficient of variation. The standard error should lie between 2% and 5%. In this study, the coefficient of variation was set at 30% while the standard error was assumed to be 5%.

$$n = \frac{NC^2}{C^2} + [N-1]e^2$$

Where:

n = sample size,

N = total population,

C = coefficient of variation, (which was taken to be 30%)

e = standard error, (which should lie between 2% and 5%)

Thus,

$$n = \frac{114[0.3^2]}{0.3^2} + [114-1]0.05^2 = 54$$

The size of the sample was therefore 54 and it was allocated proportionately among the strata. The sample distribution is revealed on Table 3.2.

Table 3.2: Sample Distribution

Villages	Gender distribution		Sample
	Male	Female	
Kaira village	11	10	21
Kiungani village	12	7	19
Kirimani village	7	7	14
Total	**30**	**24**	**54**

3.5. Sampling Techniques

Sampling technique refers to the line of action that is followed to draw the sampled respondents from the study population. Since the study focused on 3 villages in Kanyakine ward (the villages) stratified random sampling method was adopted. The sample of 54 respondents was proportionately distributed across the villages to ensure equitable representation of population. (Kothari, 2008).

3.6 Data Collection Instruments

This study used a structured-questionnaire to collect data. It is noted that questionnaires are the most ideal data collection tools in survey studies due to their ease of administration and also, the data collected using them is easy to interpret (Mugenda & Mugenda, 2009). The questionnaire used in this study contained closed-ended questions on a 5-point Likert-scale that addressed respondents' background information and more importantly, study objectives.

3.7 Pilot Testing

In order to pin down probable defects in the data collection instrument precedence to the main study, a pilot test is done. As such, the research questionnaire was subjected to a pilot test. The pilot study was conducted at Mbeti-North ward in Embu North sub- county, Embu County. Mbeti-North exhibits the same characteristics in terms of banana farming activities as Kanyakine ward. Randomly selected banana farmers were involved in the pilot study. The data collected was analyzed to find out validity and reliability of the questionnaire. Necessary adjustments were

then made on the instrument in order to make it more appropriate before the actual study commenced.

3.7.1 Validity of the Instrument

To determine the efficiency of the research instrument, a validity test is done through the opinion of an expert. In this study, my supervisor validated the research instrument. To ascertain whether the instrument is clearly representative of the variables under study, the expert checked on face, construct and content validity. Matching of the questions to the study objectives was also done to test validity of the instruments. The final instrument was then revised according to the results. For an instrument to be valid, it must first pass the reliability test (Kimberlin & Winterstein, 2008). Internal check-ups were used to prove the face, construct and content validity of the instrument.

3.7.2 Reliability of the Instrument

This is the level of consistency of data collection instruments. After the pilot test, the internal consistency procedure was used to work out reliability of the instrument. Given that external consistency was beyond the control of the researcher, internal consistency of the research instrument was assessed using the Cronbach alpha coefficient. According to Kimberlin and Winterstein (2008) this is the most widely and recommended test for an instrument's reliability. Only those constructs (variables) that returned alpha coefficients of at least 0.7 ($\alpha \geq 0.7$) were viewed as reliable. To measure the reliability and internal consistency, the following formula for Cronbach's alpha was used.

$$\alpha = \frac{K\bar{c}}{\bar{v} + (K - 1)\bar{c}}$$

Where:

$K=$ no. of test items

$\bar{v} =$ average variance

$\bar{c} =$ average of all co-variance between components across the current sample

Table 3.3 shows results of the reliability test.

Table 3.3: Reliability Test Results

Variables	Test Items	Alpha Values
Collateral Requirements	5	0.77
Cost of Credit	6	0.79
Availability of credit services	6	0.75
Performance of Banana Farming	6	0.81

As shown in Table 3.3, the four study variables returned alpha values greater than the reliability threshold of 0.7. The instrument was therefore considered reliable for data collection.

3.8 Data Collection Procedures

Questionnaires were issued to respondents in a self-administered manner using the drop and pick later method. The sampled banana farmers were given three days to fill in the questionnaires before being collected. These questions helped to elicit the relevant evidential information for analysis upon which the conclusions were drawn.

3.9 Data Analysis and Presentation

Before embarking on data analysis, the researcher carried out data cleaning. The researcher then coded the questionnaires before keying them in version 23 software of Statistical Package for Social Sciences (SPSS). SPSS facilitated data processing and analysis. In analysis, inferential and descriptive statistics were used. To guide this study, the following regression function was used.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y= Productivity of banana farming.

X1= Collateral requirements

X2= Cost of credit

X3= Availability of credit services.

ε = Error term.

$\beta_0, \beta_1, \beta_2, \beta_3$ =Regression Coefficients.

Correlation coefficients can provide for the degree and direction of relationships. It measures the association, or co-variation of two or more dependent variables. The statistical calculation of such correlation was done and expressed in terms of correlation coefficients. The Pearson product Moment Correlation Coefficient (γ) was used for this purpose. The γ provided information on the direction and magnitude of an observed correlation between two variables (X and Y). In this method, the scores obtained regarding one variable were correlated with the scores of another variable. The interpretation was given at 0.05 level of significance or 95% confidence level. These two values represent the two extremes of perfect relationship: a value of γ = 0.00 represents the absence of any relationship (Moore, 1983). If the value of γ is -0.05, this indicates a perfect negative relationship and if the value of γ is +0.05, this indicates a perfect positive relationship. The values in between were interpreted accordingly. The existence of a relationship between two variables implies that the scores obtained within a certain range on one measure are associated with the scores within a certain range on another measure. Outcome of the analysis was presented in tables**.**

3.10 Ethical Considerations

Ethical considerations refer to the integrity that governs researchers' conduct in any form of research (Saunders, Lewis & Thornhill, 2012). This study collected information that was considered confidential but fit for public consumption. This included age and highest level of education attained by respondents. The study was therefore, compiled with great care and no identities of respondents were directly referred to in the research. The rights of the respondents to privacy were put into consideration by not asking them unnecessary and irrelevant information. Respondents were also not forced to participate and they were made to understand the intentions of this study and the information received was not used for any other purposes apart from this research.

DATA ANALYSIS AND INTERPRETATIONS

4.1 Introduction.

This chapter discusses the interpretation and presentation of the findings. This chapter presents analysis of the data on the influence of credit accessibility on the performance of banana farming in Kanyakine ward, South Imenti Sub- County. The chapter also provides the major findings and results of the case study and discusses those findings and results against the literature review chapter.

4.2 Response Rate

Response rate is the percentage of individuals who respond to questions in a survey. A high response rate facilitates in ensuring that results in a survey are representative of study population. According to Nulty (2008), 50% (or more) response rate is regarded as acceptable in social research survey studies. 54 questionnaires were issued to respondents whereby 41 were filled and duly collected. This represented an acceptable 75.93% response rate.

4.3 Reliability Analysis

Prior to the actual study, the researcher carried out a pilot study at Mbeti- North ward in Embu County to pretest the validity and reliability of data collected using the questionnaire. The pilot study allowed for pre-testing of the research instrument.

Table 4.1: Reliability Coefficient

Scale	Cronbach's Alpha	Number of Items
Collateral Requirements	0.894	17
Cost of credit	0.909	7
Availability of Credit Services	0.725	5

The reliability of the questionnaire was evaluated through Cronbach's Alpha which measures the internal consistency. The Alpha measures internal consistency by establishing if a certain item measures the same construct. Cronbach's Alpha was established for every objective in order to determine if each scale (objective) would produce consistent results should the research be done

later on. The findings of the pilot study show that all the three scales were reliable as their reliability values exceeded the prescribed threshold of 0.7 (Mugenda and Mugenda, 2003).

4.4 Demographic Information

Respondents' demographic information in regard to their gender, age, number of years they have been in banana farming and their highest level of education was sought.

4.4.1 Respondents' Gender Distribution

The study categorized respondents in terms of their gender. The pertinent findings are shown in Table 4.2.

Table 4.2: Respondents' Gender Distribution

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

As table 4.2 shows, the majority (51.2%) of the banana farmers were male while their female counterparts were (48.8 %.). This could have been due to the fact that most land in Kanyakine ward was owned by men due to the patriarchal system of land inheritance. The issue of gender in relation to accessing credit was raised in the study, whereby most women were required to have the approval of their male counterparts in order to access credit.

4.4.2 Respondents' Age Distribution

The study further examined respondents' distribution according to age categories. Table 4.3 shows the pertinent findings.

Table 4.3: Respondents' Age Distribution

	Frequency	Percentage
Less than 21 years	2	4.9
21 - 30 years	21	51.2
31 - 40 years	10	24.4
41 - 50 years	6	14.6
More than 50 years	2	4.9
Total	**41**	**100.0**

As Table 4.3 shows, majority (51.2%) of respondents were aged between 21 - 30 years. Those between 31 - 40 years were 24.4% while 14.6% were between 41 - 50 years. A marginal (4.9%) number of respondents were aged below 21 years and above 50 years. The findings indicated that Kanyakine ward had majority of banana farmers in youth and middle-age categories. There is also a likelihood that either many banana farmers do not actively participate in farming activities after the retirement age mostly due to the inheritance of land which ensures the responsibilities are passed down to the younger generation

4.4.3 Respondents' Distribution by the number of years they have been in banana farming.

In addition, the study examined the number of years which respondents had participated in banana farming up to the time the study was conducted. Table 4.4 indicates the findings.

Table 4.4: Respondents' Distribution by Number of Years in banana farming

	Frequency	Percentage
Less than 3 years	10	24.4
3 to 5 years	13	31.7
More than 5 years	18	43.9
Total	**41**	**100.0**

The study found that most (43.9%) of the respondents had been in banana farming for more than 5 years. In addition, 24.4% respondents had less than 3 years in banana farming while (31.7%) had

been farming bananas for 3 to 5 years. The results implied that banana farming was usually a long term commitment.

4.4.4 Respondents' Distribution by the Highest Education Level

Findings in relation to the highest education level attained by banana farmers in Kanyakine ward are illustrated in Table 4.5

Table 4.5: Respondents' Distribution by Highest Education Level

	Frequency	**Percentage**
Certificate	8	19.5
Diploma	20	48.8
Bachelor's Degree	12	29.3
Post-graduate Degree	1	2.4
Total	**41**	**100.0**

It was noted that most (48.8%) of the banana farmers in Kanyakine were diploma holders. While, first degree holders 29.3% of the sampled respondents. Those with certificate qualifications and post-graduate degree were 19.5% and 2.4% respectively. The findings implied that a certain level of education was required for one to be a successful banana farmer.

4.5 Descriptive Findings of the Study Variables

The descriptive findings in relation to collateral requirements, cost of credit, availability of credit services and performance of banana farming are outlined in this section. The findings are presented in form of measures of central tendencies and variation, i.e., means and standard deviations respectively.

4.5.1 Descriptive Statistics for Collateral Requirements.

The study examined the views of banana farmers in Kanyakine ward pertaining collateral requirements. Table 4.6 shows the findings in relation to collateral requirements as provided by the respondents.

Table 4.6: Descriptive Statistics for Collateral Requirements

	n	Min	Max	Mean	Std. Dev
The ability of a farmer to produce a valid collateral affects their access to credit	41	1	5	4.02	1.151
The availability of guarantors influenced a farmers access to credit.	41	1	5	3.49	1.165
The value of a banana farm influenced the amount of credit received	41	1	5	3.17	1.116
The size of a banana farm influenced a farmer's access to credit	41	1	5	2.95	1.431
The amount of the income from the farm's records influenced access to credit.	41	1	5	3.07	1.081

The findings revealed that many respondents (mean = 4.02; std. dev. = 1.151) felt that the ability of a farmer to produce a valid collateral influenced their access to credit. A number of them (mean = 3.49; std. dev= 1.165) also felt that the having guarantors influenced their ability to access a loan or credit from a financial organization This number was closely followed by those who agreed that the amount of income projected from a farms' records influenced access to credit (mean = 3.07; std. dev. = 1.018) and lastly (mean = 2.95; std. dev. = 1.431) agreed that the size of a banana farm influenced access to credit.

4.5.2 Descriptive Statistics for Cost of Credit

The opinions of respondents concerning cost of credit were sought. The findings are illustrated in Table 4.7

Table 4.7: Descriptive Statistics for Cost of Credit

	n	Min	Max	Mean	Std. Dev
Interest rates is a significant influences during acquisition of credit	41	1	5	4.15	1.085
The amount charged in for loan processing significantly influences acquisition of credit.	41	1	5	3.37	1.240
Insurance fees charged significantly influences acquisition of credit	41	1	5	3.49	1.143
Asset valuation fees charged significantly influences acquisition of credit	41	1	5	3.41	1.466
Account maintenance fees charged significantly influences acquisition of credit	41	1	5	3.34	1.063

Respondents agreed (mean = 4.15; std. dev. = 1.085) that interest rates significantly influenced acquisition of credit. This was followed by insurance fees (mean = 3.49; std. dev. = 1.143) as the next significant influence to credit access according to the respondents. Another factor asset valuation fees received a (mean = 3.41; std. dev. = 1.466) as a factor that influenced credit access. This was closely followed by the amount charged in for loan processing (mean = 3.37; std. dev. = 1.240) and lastly the least number of respondents felt that account maintenance fees significantly affected access to credit (mean = 3.34; std. dev. = 1.063)

4.5.3 Descriptive Statistics for Availability of Credit Services

Further, the study checked out respondents' views relating to the availability of credit services. Table 4.8 shows the results.

Table 4.8: Descriptive Statistics for Availability of Credit Services

	n	Min	Max	Mean	Std. Dev
Credit Services are readily available to banana farmers in the Kanyakine	41	1	5	2.95	1.244
Short processing periods for loans significantly influence banana farming performance.	41	1	5	3.46	1.398
The amount of credit disbursed to a farmer significantly influences the farm performance	41	1	5	3.83	1.181
The payment period given significantly influences credit accessibility	41	1	5	3.05	1.161
The simplicity of the loan application process significantly influences the credit acquisition	41	1	5	3.10	1.428

Respondents felt (mean = 2.95; std. dev. = 1.244) that credit services were readily available for banana framers in the area. Compared to others factors investigated, this was relatively low. Regarding the amount of credit disbursed, a large no. of respondents agreed that it was one of the main factors that influenced credit accessibility for them and hence the performance of their banana farms (mean = 3.83; std. dev. = 1.181). This was closely followed by the period of loan processing (mean = 3.46; std. dev. = 1.398) as the next significant influence to credit access according to the respondents. The other factors influencing performance of banana farming were simplicity of the loan application process and payment period respectively.

4.5.4 Descriptive Statistics for Performance of Banana Farming

Lastly, the study analyzed the respondents' opinions regarding the Performance of banana farming at Kanyakine ward. Table 4.9 shows the findings.

Table 4.9: Descriptive Statistics for Performance of banana farming

	n	Min	Max	Mean	Std. Dev
Access to farm inputs significantly influence the performance of banana farming	41	1	5	3.49	1.267
Access to quality banana seedlings significantly influence the performance of banana farming	41	1	4	2.90	1.136
Access to agricultural extension officer services significantly influence the performance of banana farming	41	1	5	3.54	1.027
Ability of farmers to expand their banana farming activities significantly influence the performance of banana farming	41	1	5	3.63	1.135

The findings revealed that respondents admitted that the ability of farmers to access farm inputs significantly influenced the performance of their banana farms (mean = 3.49; std. dev. > 1.267). The respondents were also in agreement that the expansion of banana farming activities (mean = 3.63; std. dev. > 1.135) and access to services of agricultural extension officers (mean=3.54; std. dev. > 1.027) significantly influenced the performance of banana farming. There was however a less agreement on the influence of quality banana seedling (mean ≈ 3.00; std. dev. > 1.000) on the performance of banana farming. This is likely because most of the banana farmers cultivated the indigenous seedlings therefore they did not fully appreciate tissue culture.

4.6 Inferential Findings and Discussions.

In this part, the findings in respect to the established relationship between the independent variables and dependent variable are outlined. These are the findings in regard to the relationship between collateral requirements, cost of credit availability of credit services and performance of

banana farming at Kanyakine ward in Imenti South Sub-County in Meru County. In addition, the study examined the overall effect of the three variables on the performance of banana farming at the aforesaid area.

4.6.1 Relationship Between Collateral Requirements and Performance of Banana Farming

The relationship between collateral requirements and performance of banana farming was sought. Table 4.10 indicates the correlation between recruitment outsourcing and organizational performance.

Table 4.10: Relationship between collateral requirements and performance of banana farming

		Performance of Banana Farming
Collateral Requirements	Pearson Correlation	-.517**
	Sig. (2-tailed)	.000
	n	41

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

The study found that there was a negative, relatively weak and statistically significant relationship between collateral requirements and performance of banana farming (r = -0.517: p < 0.05). Collateral requirements placed on banana farmers negatively influenced credit accessibility and hence performance of banana farming. The more the importance of collateral requirements were emphasized on by financial providers, the less the likelihood of farmers to access credit and the reverse was true. This implied that though the financial providers were able to bring on-board motivated and dedicated banana farmers able to blend and fit well in the dynamics of the institutions collateral requirements, most of the banana farmers still felt disenfranchised by the entire process.

4.6.2 Relationship Between Cost of Credit and Performance of Banana Farming

Relationship between cost of credit and performance of banana farming was determined.
Table 4.11 shows the Pearson correlation results.

Table 4.11: Relationship between Cost of Credit and Performance of Banana Farming

		Performance of Banana Farming
Cost of		
Credit	Pearson Correlation	-.623**
	Sig. (2-tailed)	.000
	n	41

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

The results indicated that relationship between cost of credit and performance of banana farming was negative, strong and statistically significant ($r = -0.623$; $p < 0.05$). This indicated that the costs of credit placed on banana farmers by the financial institutions negatively affected the performance of banana farming. The more importance was placed on these costs and the higher the costs got especially interest rates, the less likely the farmers were to seek credit and this meant they could not improve on their farming businesses hence poor performance.

4.6.3 Relationship Between Availability of Credit Services and Performance of Banana Farming

The study further ascertained whether there existed a relationship between availability of credit services and performance of banana farming. The analysis outcome is shown in Table 4.12.

Table 4.12: Relationship between Availability of Credit Services and performance of banana farming

		Performance of banana farming
Availability of Credit		
Services	Pearson Correlation	.672**
	Sig. (2-tailed)	.000
	n	41

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

Availability of credit services and performance of banana farming had a positive, strong and statistically significant relationship ($r = 0.672$; $p < 0.05$). The availability of credit services in the area was therefore likely to result in increased performance in banana farming. As such, it was concluded that, the more the number of financial providers and the more the financial services offered to the farmers the more banana farming performed. By credit services being available, it meant that the farmers received adequate amounts of credit, at the right time or season in their farming calendars and they were given ample time to payback the loans.

4.6.4 Influence of Credit Accessibility on the Performance of Banana Farming

In addition, the study investigated the overall effect of credit accessibility based on the three variables that are mentioned in this study, on the performance of banana farming. Further, the study established the extent to the three variables (Collateral requirements, cost of credit and availability of credit services) affected performance of banana farming. Tables 4.13, 4.14 and 4.15 illustrate the pertinent results.

Table 4.13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.701a	.492	.451	.66754

a. Predictors: (Constant): Collateral requirements, Cost of credit and Availability of Credit services.

The study ascertained that 49.2% of the performance of banana farming at Kanyakine ward could be explained by Collateral requirements, Cost of credit and Availability of Credit services. ($r^2 = 0.451$). This implied that, 50.8% of the performance of banana farming was as a result of other factors not investigated by the present study. It was also established that the relationship between credit accessibility (Collateral requirements, cost of credit and Availability of Credit services) and the performance of banana farming was positive and strong ($R = .701$). The aforementioned relationship was statistically significant as shown in Table 4.14 ($F = 11.938$: $p < 0.05$).

Table 4.14: ANOVA

Model	Sum of Squares	df	Mean Square	F	p-value
1 Regression	15.959	3	5.320	11.938	.000a
Residual	16.488	37	.446		
Total	**32.447**	**40**			

a. Predictors: (Constant): Collateral requirements Cost of credit and Availability of Credit services.

b. Dependent Variable: Performance of Banana Framing

Moreover, the study examined the influence of each of the independent variables on performance. of banana farming Further their combined effect was also determined. The pertinent results are captured in Table 4.15.

Table 4.15: Coefficients

Model	Non-standardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	p-value
1 (Constant)	1.018	.457		2.225	.032
Collateral Requirements	-.101	.189	-.105	-.533	.597
Cost of Credit	-.360	.215	-.334	-.673	.103
Availability of Credit Services	.483	.179	.503	2.699	.010

a. Dependent Variable: Performance of Banana Farming

The interpretation of the results shown in Table 4.1.5 follows the following regression model.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y	=	Performance of Banana Farming (Dependent Variable)
X_1	=	Collateral Requirements
X_2	=	Cost of Credit
X_3	=	Availability of Credit Services
E	=	Error Term
$\beta_0, \beta_1, \beta_2, \beta_3$	=	Regression Coefficients

Therefore, $Y = 1.018 - 0.101 X_1 - 0.360 X_2 + 0.483 X_3$

The findings as shown in Table 4.1.5 indicated that Collateral requirements, Cost of Credit and Availability of Credit Services had varied influences on the performance of banana farming. As indicated by the beta coefficients, for every unit increase in the Performance of banana farming, there should be a 0.101unit decrease in Collateral requirements, 0.360-unit decrease in cost of credit, and 0.483-unit increase in availability of credit services while holding 1.018 constant. It is noted that the effect of Collateral requirements on the performance of banana farming ($t = -0.533$; $p > 0.05$), cost of credit on the performance of banana farming ($t = -0.673$; $p > 0.05$) and availability of credit services was statistically significant ($t = 2.699$; $p < 0.05$). It was further observed that the three variables had a general significant implication on the performance of banana farming ($t = 2.225$; $p < 0.05$) at Kanyakine ward in South Imenti Sub-County, Meru County.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study's findings are presented in a summarized form in this chapter. Pertinent conclusions drawn from the findings are also outlined. This chapter further shows the recommendations suggested to financial services provider as well as those in the agricultural sector especially farmers on how credit accessibility influences the performance of farming. Further research areas are also recommended.

5.2 Summary of the Result Findings

The study investigated the influence credit accessibility on the performance of farming in Kanyakine ward, Imenti South Sub- County in Meru County. In this part, a summary of study findings is presented in accordance with the study objectives.

5.2.1 Collateral Requirements and Performance of Banana Farming

In respect to collateral requirements, it was established that farmers were required to produce valid collaterals in order to access credit from financial institutions. It was also established that having guarantors influenced their ability to access a loan or credit from a financial organization The number was closely followed by those who agreed that the amount of income projected from a farms' records as well as the size of a banana farm influenced access to credit. Further, the study found a negative and statistically significant relationship between collateral requirements and the performance of banana farming ($r = -0.517$: $p < 0.05$).

5.2.2 Cost of Credit and Performance of Banana Farming

The study noted that Interest rates significantly influenced the ability of farmers to access credit. The respondents also felt that the other fees placed on credit like insurance fees, Asset valuation fees and Loan processing fees significantly influenced credit accessibility. On the issue of account maintenance fees respondents felt that it least significantly affected access to credit The relationship between Cost of Credit and Performance of Banana Farming was negative and statistically significant ($r = -0.623$; $p < 0.05$).

5.2.3 Availability of Credit Services and Performance of Banana Farming

Respondents strongly felt that credit services were readily available for banana framers in the area. Compared to others factors investigated. Regarding the amount of credit disbursed, a large no. of respondents agreed that it was one of the main factors that influenced credit accessibility for them and hence the performance of their banana farms. Moreover, it was clear the period of loan processing a significant influence to credit access according to the respondents. The other factors influencing performance of banana farming were simplicity of the loan application process and payment period respectively. Statistically It was determined that availability of credit services and performance of banana farming had a positive and statistically significant ($r = 0.672$; $p < 0.05$) relationship.

5.3 Conclusions

A number of conclusions based on the findings and discussions were made. The conclusions are presented in line with this study's objectives.

5.3.1 Collateral Requirements and Performance of Banana Farming

It was concluded that financial service providers placed collateral requirements on banana farmers in Kanyakine ward. Collateral requirements placed on banana farmers negatively influenced credit accessibility and hence performance of banana farming. The more the importance of collateral requirements were emphasized on by financial providers, the less the likelihood of farmers to access credit and the reverse was true. This implied that if the burden of collateral requirements was lifted, more banana farmers would have sort credit services which would have in turn improved the performance of banana farming.

5.3.2 Cost of Credit and Performance of Banana Farming

It was concluded that there were a number of costs placed on banana farmers in the process of credit acquisition among them interest rates and insurance fees. These costs of credit placed on banana farmers by the financial institutions negatively affected the performance of banana farming. The more importance was placed on these costs the less likely the farmers were to seek credit and this meant they could not improve on their farming businesses hence poor performance.

5.3.3 Availability of Credit Services and Performance of Banana Farming

The study concluded that availability of credit services had a significant influence on the performance of banana farming. The relationship established was positive, strong and statistically significant. The availability of credit services in the area was therefore likely to result in increased performance in banana farming. As such, it was concluded that, the more the number of financial providers and the more the financial services offered to the farmers the more banana farming performed. This meant that the farmers would be able to receive adequate amounts of credit, at the right time and they would be given ample time to payback the loans.

5.4 Recommendations

A number of recommendations based on the research findings were made. The recommendations are presented in line with this study's objectives.

5.4.1 Collateral Requirements and Performance of Banana Farming

The study recommended that financial service providers should lower their collateral requirements or tailor make them to suite the situations of small scale farmers who can barely meet the existing requirements. In turn, farmers should be well prepared with documentation regarding their land and property ownership and records from their farm incomes projections so as to reduce the stress that comes about when one requires credit. Policy makers in the financial sector should also put into consideration small earners when coming up with policies that govern the financial sector especially credit facilities.

5.4.2 Cost of Credit and Performance of Banana Farming

The study concluded that costs placed on the banana farmers were high and thus discouraged many of them from acquiring credit. It is, therefore, recommended that policies guiding borrowing and paying among the small scale farmers and business be revised so as to open up opportunities for them to access credit therefore improving the quality of their lives. It is recommended too that credit providers come up with tailor made solutions on how to reduce or do away with a number of the costs. Farmers in turn are advised to seek in-depth information regarding the costs required of them before acquiring credit to prevent over burdening themselves due to lack of knowledge.

5.4.3 Availability of Credit Services and Performance of Banana Farming

The study recommends that financial service providers should have agricultural desks where farmers are received and effectively taken through the credit acquisition process so as to ensure that they receive adequate amounts of credit and within the appropriate time so that they can reap the full potential of their farms. It is also recommended that farmers seek adequate information about the credit providers so as to avoid conflict that may arise from issues like late payment.

5.5 Suggestions for Further Research

This study suggests various areas that should be investigated in relation to credit accessibility and performance of banana farming. It is suggested that a study on the role of credit in the expansion of banana farming especially in the adoption of value addition measures carried out. It is also suggested that the role of total financially inclusive markets be carried out especially in relation to the performance of small scale agricultural ventures. Those in the financial sector especially in the formulation of policies governing the financial sector should come up with measures to develop policies that favor the small scale farmer in the aspect of borrowing and paying. In addition to these, this study suggests that studies on farmers' groups, cooperatives and unions regarding their role on the access to credit by small scale farmers be studied.

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APPENDICES

Appendix I: Letter Transmittal for Respondents

Winnie Maitha Mbogo,

P.O BOX 500- 60100,

Embu, Kenya.

30th April, 2019

Dear Respondent,

RE: LETTER OF TRANSIMITAL FOR DATA COLLECTION INSTRUMENTS

I am pursuing a Master of Arts in Project Planning and Management at the University of Nairobi. I am conducting a study on the influence of credit accessibility on the performance of banana farming within Meru Banana Farmers' Co-operative Society. For this reason, I would appreciate if you would to the best of your knowledge; spare some little time to fill in the questionnaire. The information obtained will be purely for academic purposes and the findings of the research shall be made available to you upon request. Thanks for your cooperation.

Yours faithfully,

Signature…………………………………

WINNIE MAITHA MBOGO.

Appendix II: Questionnaire for Respondents

Dear Respondent,

Dear respondent, you are kindly requested to fill the questionnaire below with utmost honesty. Information provided herein will not be used against you under whatsoever circumstances. Please do not provide any form of identity on this questionnaire. Thank you.

SECTION I: DEMOGRAPHIC INFORMATION

Please tick (√) or fill as appropriate

Gender		Age	No. of Years as a banana farmer	Highest Level of Education			
Male	**Female**			**Post-graduate**	**Bachelor**	**Diploma**	**Certificate**

In the following sections (from section II to V), kindly indicate your level of agreement with each of the following propositions by ticking (√) in the appropriate box (from 1 to 5); where: 1 = Strongly Disagree (SD); 2 = Disagree (D); 3 = Neutral (N); 4 = Agree (A); 5 = Strongly Agree (SA)

	SA 5	A 4	N 3	D 2	SD 1
SECTION II: COLLATERAL REQUIREMENTS **Collateral requirements refer to specific asset or insurance either in form of an asset or otherwise, pledged against money advanced to a small scale banana farmer**					
1. Ability to produce a valid collateral significantly influences access to credit					
2. Ability of a farmer to produce guarantors significantly influences access to credit					
3. The value of your banana farm significantly influences the amount of credit you receive					
4. The size of your banana farm significantly influences the amount of credit you receive					
5. The amount of income projected from your farm records significantly influences your ability to access credit					
SECTION III: COST OF CREDIT **Cost of credit refers to any additional amount, over and above the amount borrowed that a borrower has to pay to the creditor.**					
1. Interest rates significantly influence credit accessibility					
2. Loan processing fees significantly influence credit accessibility					
3. Insurance fees significantly influence credit accessibility					
4. Asset valuation fees significantly influence credit accessibility					
5. Account maintenance fees significantly influence credit accessibility					

	SECTION IV: AVAILABILITY OF CREDIT SERVICES **Availability of credit services refers to the amount to which a borrower has access to at a given time.**					
1.	Credit services are readily available in Kanyakine ward					
2.	The loan processing duration significantly influences the performance of your banana farm					
3.	The amount of credit disbursed significantly influences the performance of your banana farm					
4.	The loan payment period given significantly influences the performance of your banana farm					
5.	The simplicity of the loan application process significantly influences credit accessibility					
	SECTION V: PERFORMANCE OF BANANA FARMING **Performance of banana farming refers to the measurable output that a banana farmer receives from banana farming**					
1.	Access to farm inputs significantly influence the performance of banana farming					
2.	Access to quality banana seedlings significantly influence the performance of banana farming					
3.	Access to agricultural extension officer services significantly influence the performance of banana farming					
4.	Ability to expand your banana farming activities significantly influence the performance of banana farming					

THANK YOU AND GOD BLESS YOU.