

**INFLUENCE OF ACCESS TO FINANCIAL CREDIT ON MODERN BANANA
FARMING TECHNIQUES AMONG RURAL WOMEN IN KISII COUNTY,
KENYA**

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DECLARATION

I declare that this project 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

To my late father and my mother Pacifica

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LIST OF ABBREVIATIONS AND ACRONYMS

MFIs	Micro Finance Institutions
NGOs	Non-Governmental Institutions
KUC	Kisii University College
GIT	Gusii institute of Technology
ROSCAs	Rotating Savings and Credits Association
GDP	Gross Domestic Product
ILO	International Labor Organization
TC	Tissue Culture
ERSWC	Economic Recovery Strategy for Wealth and Employment Creation
SRA	Strategy for Revitalizing Agriculture
UAE	United Arabs Emirates

ABSTRACT

Agriculture in Kenya continues to dominate Kenya's economy, with women playing a significant role in the sector. Rural women farmers have for a long period of time participated in banana trade, though not as the sole income generating activity. However, rural women banana farmers in Kisii County benefit minimally from their banana farming business due to lack of awareness, adequate farming space and finances for acquisition and implementation of modern banana farming techniques. As such, the purpose of the study is to assess the influence of access to credit on the adoption of modern banana farming techniques among rural women in Kisii County in Kenya. The objectives of this study were to identify the influence of collaterals to access to credit on the adoption of modern banana farming techniques among rural women farmers; determine the effects of interest rates on adoption of modern banana farming techniques among rural women farmers; investigate the effect of cultural beliefs on the adoption of modern banana farming techniques among rural women farmers and; establish the effects of credit awareness on the adoption of modern banana farming techniques among rural women farmers in Kisii County. This study was guided by the Social Capital Theory where Norman (1941) argues that aggregate support is needed for optimal accomplishment of tasks. The research design for the study was descriptive as it highlighted the challenges rural women banana farmers in Kisii County were facing while accessing credit and other related forms of support. The target population was the rural women banana farmers, the MFIs agricultural institutions and agencies in Kisii County. The sample size was determined from the Morgan and Krejcie table as 380 rural women banana farmers and 9 officers from the three MFIs in the region. The data collection instruments were questionnaires and interview schedules. There were 2 rural women banana farmers from each division of the 3 randomly selected divisions and 3 MFI officers who were randomly selected to participated in the study through interview sessions. Data was collected and coded and entered into SPSS program for analysis where quantitative analysis was done through descriptive statistics while qualitative data was arranged into categories and analyzed through inferential statistics. The findings of the study established that access to credit by rural women banana farmers was a problem as they did not have matching collaterals for them to secure loans; the size of farming land for bananas is small hence low yields; their cultural barriers hindered their full participation in the farming business and; they were inadequately informed about the modern banana farming techniques hence adoption was a challenge. The study recommends that the rural women banana farmers be sensitized about the various savings and lending available; the MFIs revise their lending strategies so as to accommodate even those with assets that are not documented but are credit worthy; the communities within Kisii County be informed of the importance of allowing women own property as well as participate in business activities. The study suggested that the impact of culture on the on rural women farming practices be carried out to establish what role culture plays in determining the farming practices rural women engage in.

CHAPTER ONE INTRODUCTION

1.1 Introduction

This chapter will introduce the study by highlighting the background to the issue under study. The statement of the problem and the purpose of the study will be stated. Objectives, research questions, significance and assumptions of the study will be discussed. Equally, limitations and delimitations of the study will be stated. The study will also define the significant terms of the study as well as give the organization of the study.

1.2 Background of the study

Agriculture in Kenya 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 percent can be classified as first-class land. In 2006, almost 75 percent of working Kenyans made their living by farming, compared with 80 percent in 1980. Of this 75%, an estimate of 97.6% is women of various calibers. Further, 78.9% of these women 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. 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 percent of the GDP, as well as for 18 percent of wage employment and 50 percent of revenue from exports. As such, farming is the most important economic sector in Kenya, although less than 8 percent of the land is used for crop and feed production, and less than 20 percent is suitable for cultivation. Kenya is a leading producer of tea and coffee, as well as the third-leading exporter of fresh produce, such as cabbages, onions and mangoes. Small farms grow most of the corn and also produce potatoes, bananas, beans and peas. Of interest to this study are the bananas which account for about 24% of the Agricultural output and staple food number five among the Kenyan communities.

Bananas are known to be water demanding plants 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 100 inches or more of 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. An average temperature of 81⁰F and full sun is also ideal. With this high rainfall/water demand, a sustainable Rainwater Harvesting Technology, coupled with the use of organic soil enrichments, rural farmers can manage to produce more and healthy bananas. Executed under special farming programme, this 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.

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 as the technology can be applied to other food crops such as cassava, cocoyam and yam. In this technology, Tissue Culture is used for the multiplication of the suckers. The method involves culturing or growing the tissue or part of the plant in a special medium with hormones that induce the multiplication of the suckers after three weeks instead of a year's duration under natural conditions. The seedlings, after attaining a level of growth in the laboratory and gaining roots, are then transferred to the nursery where conditions are carefully created to facilitate their gradual acclimatization to the natural environment. On attaining a level of growth, they are then bagged in soil and later given out to farmers on demand. Depending on the species that are cultivated, farmers get a particular number of suckers. Since the process is controlled, the farmer has the advantage of planning his/her production. Considering the cost of Tissue Cultured banana seedling of between

KShs.200 - 250, most rural small scale farmers opt not to buy the modern banana seedlings but rather buy the traditional banana plants at a far much cheaper cost of about KShs.30 – 50. This, over a long period of time, has had a negative impact on the production volumes and quality. In the long run, most of these farmers do not reap the maximum profits from the small pieces of land they own. Moreover, TC bananas require changes in traditional crop management practices, and they are also more sensitive to the implementation and timing of certain maintenance operations (Vuylsteke, 1998).

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. For instance, in Africa, as much as 400kg of plantain are consumed per year as a main source of calories. 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 year round, where it provides key foodstuffs between seasonal harvests of other staple crops.

In Kenya, bananas are grown in the highlands of Central, Rift Valley, Nyanza and some parts of Eastern provinces. Kisii County is geographically located in Nyanza province but found on the highland part of this province. 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). Kisii region is known to have rainfall all round the year with a reliable annual average rainfall of 1850mm. Although this is about 72inches of rainfall annually, the rain is all year round therefore making banana farming favorable. However, the poor quality of banana seedlings that are susceptible to perennial diseases result in poor harvest and poor quality of banana fruits. As such, most rural small scale farmers do not benefit much from the banana farming business.

Rural women farmers are increasingly recognized as an important driver of economic growth, productivity, innovation and employment, and it are widely accepted as a key aspect of economic dynamism (ILO, 2006). Transforming ideas into economic

opportunities is the decisive issue of entrepreneurship as these rural women farmers are regarded. Hisrich (2005) elaborates that economic progress among the rural people has been significantly advanced by pragmatic people who are entrepreneurial and innovative, able to exploit opportunities and willing to take risks. Analyses of factors affecting access to credit by rural women farmers have included the effect of collateral 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 women are poorly managed, 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.

There has been contrasting opinions on the effect of interest rates on access to credit by rural women farmers. A similar study in Ghana by Amanoo (2003) proposes that the debate on whether high interest rate affects demand for credit is inconclusive. He argues that high interest rates encourage adverse selection of loan seekers especially among rural women farmers. Those who take high risk and get their loans approved are those with high default rates. In his opinion, though, these high risk enterprises may not include small scale farming as a business because they cannot afford risky and high cost investment. He acknowledges that borrowing costs strongly affect the willingness of small scale women farmers to seek loans from formal lenders. Therefore it can be concluded that high interest rates constrain the demand for credit. While Amanoo (2003) proposes that interest rate affects access to credit in Ghana, Aryeetey (2004) carries a differing opinion from his study in Brazil. He argues that interest rates do not affect the demand for credit. Aryeetey's study indicated that the high interest rate was not a major concern for rural women farmers. Rural women farmers considered other factors other than interest rates while sourcing credit. Rural women farmers considered an average annual interest rate of 19.5% to be fair and reasonable, and this fell below the minimum market rate at that time by seven percentage points.

Culture has also been observed to have an effect in women participation in farming as a business and access to credit. Ukpore (2009) postulates that culture can constraint the opportunities rural women farmers pursue in pursuing credit. Rural women farmers can face additional barriers related to customs, have less time available due to the prevailing

gender division of labor, or have lower intra-household bargaining position and consequently less control over their earnings. Nevertheless, the significant numbers of farming businesses were owned by men (ILO, 2006). In other words, it was not common to see women-owned farming enterprises worldwide including even developed countries like the America and Britain. However, this trend is long gone in these developed countries (ILO, 2006). However, it is still rare to find women owning major farming businesses in third world countries such as Kenya.

In developed countries such as America and Britain, access to credit is based on the annual income from business enterprises (Ansoglenang, 2006). Issues such as gender and social status of individuals do not interfere with the ability of one being able to access credit. However, in Kenya, this is still a challenge. Solutions such as MFIs have been developed to address these challenges among others. MFIs provide their members, especially the rural women farmers, with financial and social intermediation services to help improve their farming businesses (Lakwo, 2006). Despite a multitude of studies devoted to the topic, the challenges affecting rural women borrowers who engage in farming businesses have never been critically highlighted and their impact on women farming businesses. This remains largely unexplored in Kenya.

The idea and practice of rural women farming is a recent phenomenon in Kenya. Until the 1980's little was known about rural women farming entrepreneurship both in practice and research, which made its focus entirely on men. Scientific discourse about rural women's farming entrepreneurship is just the development of 1980s (ILO, 2006) and late 1990s and early 2000s in Eastern Africa especially Kenya (Mwobobia, 2012). Rural small scale women farmers have for a long period of time participated in banana trade, though not as the sole income generating activity. In most cases, these women 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 rural women 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, they have developed a new demand for the modern banana seedlings that would yield the required quality for the market.

As discussed earlier, the cost of acquiring these seedlings is considerably high considering that most of the rural women experience financial challenges right from the type of business they engage in to the number of responsibilities they have at the household level. Again, it is imperative to note that most rural women farmers do not own farms but rather utilize very small sections that have been allocated to them by their husbands for cultivation of crops such as vegetables, onions, tomatoes etc for daily use. This limits the level of production for these women. Hence, adoption or acquisition of these modern banana seedlings is equally limited since they have no space to plant more seedlings that the household requirements for the household food security.

Another challenge that these women experience is lack of awareness in the sense that most are not aware of the existence of modern banana plants, rather, they tend to believe that the best product or plants come from specific regions hence tend to acquire seedlings from these regions without knowing that: (i) the seedlings they are acquiring are specific to that particular region due to the differences in soil composition and; (ii) these seedlings are Tissue Cultured and they, too, can easily get seedlings of their own that are tissue cultured and tailored to do well in their farms. This ignorance, minimal farming space, lack of awareness and lack of finances has hampered the acquisition of modern banana seedlings that do better than the indigenous as well the adoption of modern banana farming techniques.

1.3 Statement of the problem

Rural women banana farmers in Kisii County benefit minimally from their banana farming business due to lack of awareness on modern banana farming techniques, lack of finances for acquisition of modern tissue cultured banana seedlings, lack of adequate farming space and poor access to credit institutions for financial aid in acquisition of the tissue cultured banana seedlings. Similarly, they also are affected by other cultural issues that limit them in engaging in income generating activities and land ownership, which further hinders their active participation in this business.

1.4 Purpose of the study

The purpose of the study is to assess the influence of access to credit on modern banana farming techniques among rural women in Kisii County in Kenya.

1.5 Objectives of the study

The objectives of the study were:

1. To identify the influence of collaterals to access to credit on the adoption of modern banana farming techniques among rural women farmers in Kisii County
2. To determine the effects of interest rates on adoption of modern banana farming techniques among rural women farmers in Kisii County
3. To investigate the effect of cultural beliefs on the adoption of modern banana farming techniques among rural women farmers in Kisii County
4. To establish the effects of credit awareness on the adoption of modern banana farming techniques among rural women farmers in Kisii County

1.6 Research questions

The research questions for the study were:

1. What is the influence of collaterals on the adoption of modern banana farming techniques among rural women farmers in Kisii County?
2. What are the effects of interest rates on adoption of modern banana farming techniques among rural women farmers in Kisii County?
3. What is the effect of low cultural beliefs on the adoption of modern banana farming techniques among rural women farmers in Kisii County?
4. What are the effects of credit awareness on modern banana farming techniques among rural women farmers in Kisii County?

1.7 Significance of the study

The study highlighted the various effects of access to credit on modern banana farming techniques among rural women farmers in Kisii County. As such, the study established the positive effects of availability of credit services to rural women banana farmers as well as establishing that if well equipped with seed capital, funding for expansion and training on modern banana farming techniques, rural women in Kisii South and Kenya as a whole can actively contribute to food security through enhanced production of bananas. Similarly, the study established that banana farming among rural women farmers in Kisii was on the decline due to over-use of the small tracts of land and as such established that modern banana farming techniques were much needed so as to

enable these farmers produce more. It was also established that the farmers had little knowledge on the type of soil their farms had and therefore knew very little about the types of banana varieties to use. This information is useful to the relevant stakeholders in that they are able to step in and enlighten the farmers on what varieties to plant, what techniques to use on the small pieces of land as well as help them access credit for meaningful use.

1.8 Assumptions of the study

The study assumed that rural women in Kisii County allowed to engage farming activities that were meant to sustain their families through cultivation of crops that were meant for domestic use. It was also assumed that most rural women banana farmers in Kisii County acquire their trade plantains from their male counterparts who, culturally, are the owners of the land. Likewise, it was assumed that rural women banana farmers have no or minimal access to credit facilities and with several limitations. The study also assumed that the banana varieties that were grown in Kisii County were the indigenous type and were susceptible to perennial diseases hence yield a poor quality banana fruits.

1.9 Limitations of the study

There were various limitations during the study. Language barriers was one of the limitations in that most rural women banana farmers knew little Swahili or English languages hence communication was a problem. To mitigate this, the study employed use of translators to interpret to the women as well as to the researcher. Accessibility to the farms was also an issue as most roads were poorly maintained. To counter this, the study hired motorbikes that could easily navigate through the poor roads so as to access the farms. Lastly, the study encountered a cultural barrier in that the interviewer could not collect data from women first before agreeing with their husbands. This interfered with the correctness of the data collected as most women feared to talk ill of their husbands. To counter this, the husbands were consulted in advance and asked to kindly allow their wives alone participate in the study, in their absence.

1.10 Delimitations of the Study

The study delimited itself to the rural women banana farmers in Kisii County. The study similarly delimited itself to those rural women banana farmers in Kisii County who either had utilized credit or were in a position but had not accessed credit for whatever reasons.

1.11 Definition of Significant Terms

Term	Definition
Credit	According to the Online Business Dictionary, this is the Purchasing power created by banks through lending based on fractional reserve system. It is also an agreement based largely on trust under which goods, services, or money is exchanged against a promise to pay later. Also called commercial credit. In this study, credit means the money a rural woman small scale banana farmer is advanced to acquire modern banana seedlings.
Collateral	Specific asset (such as land or building) pledged as a secondary (and subordinate) security by a borrower or guarantor. In this study, it is the insurance, either in form of asset or otherwise, against money advanced to a rural woman small scale banana farmer
Tissue Culture	Tissue culture is a process that involves exposing plant tissue to a specific regimen of nutrients, hormones, and light under sterile, in vitro conditions to produce many new plants, each a clone of the original mother plant, over a very short period of time. This study adopted this definition
Modern Banana Farming Techniques	Includes Tissue Culture for banana seedlings production and Rainwater Harvesting Technology.

CHAPTER TWO LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature related to access to credit and modern banana farming techniques. Specifically, the literature reviewed covered the impact of access to credit on modern banana farming techniques among rural women farmers; the influence of access to credit on the levels of banana production among rural women farmers and; the influence of access to credit on access to banana markets for rural women farmers. This chapter also briefly gives the theoretical framework, conceptual framework and the gap 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 still 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. 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 productivity enhancing inputs such as good quality seeds, fertilizers and chemicals.

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

2.3 Challenges facing rural women banana farmers on access to credit

Smith (1997) gives evidence from the UK that although the actual financial barriers faced by women entrepreneurs have been extensively studied, this is one of the first studies to focus on the concept of perceived financial constraints faced by potential rural women small scale banana farmers. Women were found to have the perception that they were disadvantaged due to their gender and could not easily manage farming businesses as opposed to their male counterparts. Policy makers in the UK were found to have ignored the gender issue while designing and implementing policies with regards to credit facilities for small scale farmers. Walsh & Likinski (2009) notes that more women need to participate in farming education addressing farming business growth, technology, revenue models, and securing correct types of finance. She notes that globally, women-led farming businesses receive less than 5 percent of venture capital.

Women-owned farming businesses in the UK also seek less bank loans and overdraft facilities. In America, IDB (2011) states that women 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 women 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 women farming entrepreneurs, because savings are the main source of start-up credit for 73 percent of businesses globally. However, a majority of women who own farming

businesses in the US also face challenges of access to credit IDB (2011). Women 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 women are faced with some obstacles before reaching their goals such as their financial and psychological independence.

Female farming entrepreneurs 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 women 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).

2.4 Influence of collaterals on the adoption of modern banana farming techniques among rural women farmers

Cuevas et al. (1993) indicates that access to bank credit by rural women farmers has been an issue repeatedly raised by numerous studies as a major constraint to economic growth of this group. A common explanation for the alleged lack of access to credit by rural women 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 extent 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. Aryeetey et al. (1993) supported the view of Cuevas et al. (1993) that from the view point of private sector, problems related to finance dominate all other constraint to expansion.

They 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 rural women farmers that need loans under a study, which they conducted on

the demand supply of finance for rural women small scale farming enterprises. The study also indicated that 65 percent of the total sample of rural women farmers had at various times applied for bank loans for their farming businesses. Nevertheless a large proportion of the firm 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 rural women 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. Aryeetey et al. (1994) suggest that banks can offer alternative to property as collateral such as guarantors, sales contract and liens on equipment financed.

2.5 Effects of interest rates on adoption of modern banana farming techniques among rural women farmers

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 women farming entrepreneurs 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 women farming entrepreneurs 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 women farming entrepreneurs 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 women farming enterprises in Côte d'Ivoire, Kenya, Nigeria, and Senegal finds that the share of rural women farming entrepreneurs is 50 percent higher in the informal sector, with 18.1 percent of the registered firms run by women entrepreneurs, 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 women farming entrepreneurs (Nyamu, 1999).

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 women farming entrepreneurs (Government of Kenya, 1999). Where accessible, the cost of credit was found to be expensive for most rural women farming entrepreneurs; 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 women farming entrepreneurs 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).

2.6 Effect of cultural beliefs on the adoption of modern banana farming techniques among rural women farmers

Cultures can constraint the opportunities rural women farming entrepreneurs pursue. Rural women farming entrepreneurs can face additional barriers related to custom, have less time available due to the prevailing gender division of labor, or have lower intra-household bargaining position and consequently less control over their earnings. For the rural women farming entrepreneurs who are looking to achieve scale and further develop their enterprises, such constraints may reduce the incentive to grow businesses and thus their ability to access financial services. (Njeru & Njoka, 1999)

2.6.1 Lack of rights to ownership of property by women

According to Mutuku (2006), property or other assets that a borrower offers a lender to secure a loan. If the borrower stops making the promised loan payments, the lender can seize the collateral to recoup its losses. Because collateral offers some security to the lender in case the borrower fails to pay back the loan, loans that are secured by collateral typically have lower interest rates than unsecured loans.

In some studies collateral seems to play a disciplinary role in the behavior of the borrower solving the moral hazard problem (Clever, (2005); CSS, (1998); Dovi (2006)). However, other empirical studies suggest a signaling value of collateral solving the adverse selection problem (Jalbert, (2007) and Kiraguri, (2006)).

In addition, rural women farming entrepreneurs' access to land, which they can use as collateral for expensive loans, has been limited by traditional institutions such as the chieftaincy and the belief that men are superior and hence only they can claim land and not women. The ever-increasing centrality of the market to the government's land reform program is set to reproduce these patterns, as poor women lack the necessary resources to set up as independent business enterprises such as farming (Ukpore, 2009).

Access to finance is a key issue for rural women farming entrepreneurs. Accessing credit, particularly for starting an enterprise, is one of the major constraints faced by rural women farming entrepreneurs. Rural women often have fewer opportunities than men to gain access to credit for various reasons, including lack of collateral, an unwillingness to accept household assets as collateral and negative perceptions of rural female farming entrepreneurs by loan officers. In South Asia, rural women farming entrepreneurs are almost invisible to formal financial institutions – they receive less than 10 per cent of commercial credits (Mahbub ul Haq human Development Center, 2000).

When rural women farming entrepreneurs do have access to credit it is often in small amounts, whether this suits their needs or not. Differential access to credit may of course be a reflection of differences in the choice of sector, educational level or the amount of loan requested. However, as sector choice and educational levels tend to be limited or influenced by gender, one could say that any differential access based on this motive is indirectly caused by gender perceptions. In addition to this, rural women farming

entrepreneurs in developing countries continue to suffer from poor overall assets, poor enforcement of financial rights and the existence of unequal inheritance rights and consequently poor access to community and social resources. Gender-based obstacles – conventional thinking, cultural and social values, and lack of collateral – all aggravate the difficulties faced by rural women farming entrepreneurs. High transaction costs, the rigidity of collateral requirements and heavy paperwork are further impediments to rural women farming entrepreneurs (Karani, 2012).

The greatest barrier facing rural women farming entrepreneurs in Kenya is access to finance is an issue because of requirements of collateral. In Kenya only 0.48% of rural women farming entrepreneurs own property and that makes it very difficult for them to provide collateral for banks. Most rural women who venture into farming in the rural areas and need financing lack the needed collateral to enable them secure bank loans. Responsibility of rural women farming entrepreneurs for dependants has limited opportunities to make savings or undertake business expansion and diversification.(Amu, 2004) The financial aspects of setting up a business are without doubt the biggest obstacles to rural women farming entrepreneurs.

Rural women farming entrepreneurs often lack information about how to get a loan, lack the necessary collateral to obtain one and /or face discriminatory laws or practices related to finance and credit Common wealth secretariat (2002). Finding the finance to get a new farming business going, or to grow an existing one is a difficult challenge. Makokha (2006) adds that rural women farming entrepreneurs have financial social demands that compete with business capital, leading to a diversion of capital away from business needs. Kinyanjui (2006) records that some entrepreneurs felt that it was difficult to obtain loans as they had to show credit records and they did not fully understand the requirements getting and paying loans. Loans from Kenyan microfinance institutions tend to be limited in amount, have no grace period, are short term in design and carry very high interest rates. Consequently, most rural women farming entrepreneurs are likely to have multiple short-term loans to cater for both farming businesses and social needs. Studies have shown that loans to MSE rural women farming entrepreneurs only satisfy a fraction of their financial needs (Women Entrepreneurs in Kenya, 2008).

2.6.2 Effect of culture on women participation in business

Besides the policy environment, rural women farming entrepreneurs have also been constrained by existing socio-cultural norms through which they are perceived as inferior or second class citizens in most countries of the world. Although the positions of African women in traditional societies remain undocumented, there has been a tendency to use culture and tradition to undermine that position. This has had a negative impact in promoting sustainable development (Namusonge, 2006). Culture has been used to justify the subordinate position of rural women farming entrepreneurs in the household, a factor which excludes them from property ownership. Culture has also been used to justify the existing unequal division of labor where some of the cultural norms concerning age of marriage and marriage rights have also limited women's participation in formal schooling (Coles & Mitchell, 2011). Yet, African countries claim that African culture is dynamic and change-oriented. When it comes to issues of gender inequity, African culture seems to be protecting the culture of oppression

For culture to play that dynamic role, rural women farming entrepreneurs themselves have to create an alternative culture that challenges the one endorsed by African countries. This is the context in which rural women farming entrepreneurs' initiatives have to be analyzed. Poverty is a leading factor and an enabling environment for HIV/AIDS. Conversely, HIV/AIDS can as well aggravate poverty particularly among women. Due to limited access to productive resources especially land and credit by rural women farming entrepreneurs in agriculture, they could hardly cope with the impact of HIV/AIDS. Rural women farming entrepreneurs running small scale farming businesses are disadvantaged with lack of information on HIV/AIDS prevention, care and support strategies (Jamali, 2009).

The perceptions of the traditional roles of the women in Kenya such as in firewood collection, peasant farming, child bearing and raising are slowly being overtaken by new lifestyles, such as formal and informal education which introduces them to alternative income generating activities. In the rural informal sector, rural women farming entrepreneurs have dominated in some income generating activities such as planting and selling of agricultural products (Jamali, 2009).

Forces that have made women living in the rural areas to embark in farming entrepreneurship are varied. Some join as a result of job losses in the formal sector or as a result of lack of employment in the formal sector. Others are forced to engage in rural farming entrepreneurship due to death of the breadwinners in the family e.g. spouses or close relatives. Others are drawn by the successes of those already operating in sector while family influence also brings some to the informal sector industry. Due to increased population, the sizes of agricultural farms are becoming small and unproductive. As a coping strategy it has become extremely necessary for women to work in the informal sector to supplement most family's limited sources of income.

Women farming entrepreneurs especially those living in the rural communities and the urban poor in Kenya still face daunting challenges (Kiraguri, 2012). It has been noted that rural women farming entrepreneurs are smaller, less likely to grow, less profitable and begin less capital investment than those owned by men. Despite the absolute increase in number of rural women farming entrepreneurs in recent years, there still exist significant differences in the level of new firm creation across gender and the number of rural women involved in starting businesses is significantly and systematically lower than that of men (Karani, 2012). In Kenya, rural women farming entrepreneurs are not yet exploiting existing entrepreneurship opportunities to contribute towards economic development due to socio-cultural constraints. Another reason for this might be the education gap of rural women farming entrepreneurs in entrepreneurship that also arises as a result of socio-cultural constraints. This forces rural women farming entrepreneurs in entrepreneurship not to contribute a lot to the poverty reduction of the town, region and the country as a whole (Kiraguri, 2012). A number of initiatives have been taken by Government, donors and Non-Governmental organizations both local and international to increase the start-up rates and performance of rural women farming entrepreneurs in Kenya. Nevertheless, rural women farming entrepreneurs in the sector are still found predominantly in low-performance rates, earning lower revenues than their male counterparts (Karani, 2012).

2.6.3 Support from male family members in business operation

According to Coles and Mitchell (2011) in their discussion on rural women farming entrepreneurs in India, family support ,or the lack of it, is of crucial importance in the

decision making process for the rural women farming entrepreneurs and, depending on the response from the family ,the rural women farming entrepreneur can either be highly motivated in her new venture or completely demotivated. Since orthodox society has demarcated the boundaries of economic activity for men and women, the entry of rural women in the sphere of entrepreneurship may be discouraged. The family may be neither appreciative of this independent decision, nor show any trust in the potential entrepreneur's ability to start an enterprise. This discouragement from the home, coupled with opposition from society at large creates emotional and physical barriers.

Ajare (2004) categorically states that “there is lack of family support to rural women farming entrepreneurs and access to peer support. “This is confirmed by Gupta (1996) who, through a Bombay based pilot study found that one out of every five business woman faced active resistance from family members in the initial stages. A comparative study of male and female farming entrepreneurs in rural Uttar Pradesh, India came up with the extreme finding that 95% of the rural women farming entrepreneurs faced “family problems” in the start up phase, as compared to only 16% males.

Lack of support from the family or husband can and does stop rural women farming entrepreneurs from going out of the house to generate an income. If economic necessities are overriding concerns a woman's income may be tolerated, but it could still lead to tension between husband and wife. (Sanya, 2013).Conversely a research study revealed that the reason why 50% of the respondents (irrespective of economic status) chose to become entrepreneurs was because their husband /family supported them in this decision. A study conducted by Voulgaris (2003) revealed that of the rural women farming entrepreneurs surveyed, 70% said that their family members were a major source of inspiration.

2.6.4 Sharing of household responsibilities between women entrepreneurs and their spouses

Family structure in the context of the particular role played by the rural woman entrepreneur, e.g., husband or wife, father or mother, exposes critical familial and societal variables that may explain the different forces that are exerted on women and men to form independent organizations. Rural women farming entrepreneurs in transition economies have suffered from traditional perceptions about women's role in society, and

these attitudes persist. In the early 1900s, “work” became differentiated from “housework”, with women excluded from the ranks of productive enterprise and confined to “supportive” domestic roles for the male head-of-household. And still today, among students and professionals alike, when given a forced choice of advancing their own careers or following their husbands (or would-be husbands), women will usually subjugate their own careers to that of their spouse, rather than the other way around, despite the fact that on self-report questionnaires women in professional schools or in early stages of their careers will expound on their independence and the importance of their career.

While career opportunities for women have changed, family role models typically have not. While the percentage of stay-at-home dads has soared, their numbers are still few. Most young men and women see their mother doing the lion’s share of home chores. The father’s job is still seen as more important in terms of both money and prestige. rural women farming entrepreneurs are not prepared for business-related pressures that impinge on their role in the family (the role that they were taught to play). Sanya (2013) found that even among those who were career-oriented from an early age, many successful rural women farming entrepreneurs undergo “role conflicts which may lead to an extended period of identity ‘diffusion’” and missed opportunities (1997: 31). Rural women farming entrepreneurs burdened with family responsibilities have less time for learning and/or exploring new farming business prospects.

Even in the most liberal of households, boys and girls are presented with different views of the world. From an early age men expect to work to support themselves or their families and are encouraged to achieve; women have been socialized to nurture and to find someone to support them. Two-career households reinforce these stereotypes when the mother attends to mundane household duties after work—”the second shift”—as the father either relaxes or attends to more “important matters,” such as finances or home improvement projects (Scot & Roper, 1991). Even in the 2000s, few men buy their children’s clothes or school supplies or volunteer at their children’s school. In two-career families, the man’s job is still viewed as more important or prestigious. For married women, especially those with children, farming business ownership takes its toll in stress and, in many cases, divorce (Winn, 2004). Even with a stable marital relationship to

mitigate risk and provide a financial safety net and moral support, child-rearing responsibilities can interfere with the best of intentions. Children do not plan their illnesses or school schedules with their parents' needs in mind. While it is often permissible to miss a day at the office to tend to family problems, small farming businesses have less slack than large companies and small farming business women owners have less flexibility than their employees. Owners of new farming businesses find that they have more time constraints and less discretion than they anticipated in the planning stages of their farming business. For women, this is particularly troublesome.

While many mothers become successful business-owners, the difficulties of balancing their families with their business obligations cannot be overemphasized. While self-employed rural women farming entrepreneurs may put in fewer hours per week at their jobs than the average full-time worker (OECD, 1991), rural women farming entrepreneurs too often underestimate the extent to which their own businesses will interfere with their family (Longstreth, Stafford, & Mauldin, 1987), or to the extent that their family will encumber the business (Winn, 2004). Rural women farming entrepreneurs have been criticized for limiting the growth of their businesses (Armstrong, 2002; Carter, 2003; Brush, 2004) but the combination of undercapitalization and family obligations conspire to keep their businesses small. Entrepreneurship requires complex and acute demands on one's time, and men and women prioritize their time differently. Research by Flinders University of South Australia (1996) acknowledges that rural women farming entrepreneurs with dependent children are typically the primary caregivers, regardless of their professional status. Even in Western Europe, only two percent of men take on household responsibilities such as washing and cleaning (Armstrong, 2002). In transition countries, in particular, household chores are seen as humiliating (Maríková, 1999). In many countries, part-time work is rarely available, and childcare and domestic services are scarce and expensive (Open Society Institute, 2002; Marksová-Tominová, 2003). Rural women who choose self-employment or entrepreneurship forego healthcare benefits, maternity leave, and pension plans (Ruminska-Zimney, 2002).

Family obligations do not always lessen as children get older. Day-care is easier to find for young children. Older children pose more logistical problems, and when left

to their own devices are not always trustworthy. Even when husbands are willing to share in the household and child rearing duties, rural women farming entrepreneurs tend to suffer tremendous guilt and anxiety when their businesses require long hours away from home. The farming businesses of women who lack non-financial help from their husbands or “significant others,” are often doomed to failure (Winn, 2004).

Work-home conflict is evident even for rural women farming entrepreneurs who do not have children. Like the rural women farming entrepreneurs in the study by Stoner, Hartman, and Arora (1990), Winn (2004) found that the demands of their farming business affected their ability to relax at home, causing marital unhappiness and work-home conflict. Even rural women farming entrepreneurs who are encouraged by their husbands report that the time and stress of the farming businesses strained their marriages. Goffee and Scase (1985) point out that while “the wives of small businessmen are often subordinated to the needs of their husbands,” the reverse is seldom true (1985: 5). Even entrepreneurial couples, husband-wife teams who work closely together, “are often trapped by a gender-based division of responsibilities and authority” typically resulting in “the wife acquiescing to (the husband’s) benevolent authority” (Marschak, 1998: 169).

2.6.5 Failure to access credit due to cultural barriers

Traditionally, rural women are associated either with the home or hearth. They are primarily seen as providers within the confines of the home, perceived both by themselves and society at large, as wives, mothers or daughters. The potential roles of wives and mothers keep them from formal schools or advanced education, especially in poor households where parents have to make the choices of educating their male children as a security for their old age. The absence of basic literacy and numeracy skills can prove to be major barriers to the establishment of a successful enterprise, and lack of proper education and training make for huge gaps in women’s knowledge and skill levels.

It has been observed that the traditional role perceptions of males and females have undergone very little change over the years. Despite the increase in the number of legal and social safeguards, increased enrolment of rural women in the educational institutions and entry of women into varied and diversified occupations, the institution of the family

remains virtually untouched in Africa. The rigid hierarchical structure within the family and society re-emphasized the role stereotypes. The appropriate traits of conformity, obedience, modesty, dependence, submissiveness, self denial and adaptability are ingrained in the girl child within the rigid hierarchical structure of the family and get reaffirmed by various other institutions like school, marriage *et cetera* in her later life. This results in the girl developing a low self image and sacrificing her self esteem to conform to the prescribed role of dutiful daughter and good mother.

Various psycho-social and socio-cultural factors act as barriers to rural women's entry into entrepreneurship. It is then natural that rural women are in a more disadvantaged position than men when they take to entrepreneurship for they have only a limited idea of business opportunities, no exposure to industry or business, and are unaware of sources of support and assistance. This apart, they often start out with low self-esteem, low confidence and less support from the family. It is against this backdrop that rural women farming entrepreneurs make an entry in the business world, survive, operate or exit.

2.7 Effects of awareness on the adoption of modern banana farming techniques among rural women farmers

Boom et al (1983) and Longenecker et al (1994), like most writers on the subject of SME financing, describe two basic types of financing, namely debt and equity. Most financial institutions, however, have been found to prefer equity type of financing over debt. On the other hand, most rural farmers have been found to be aware of only one form of credit: equity. This has hampered most rural farmers with regular income from accessing credit as they lack awareness of the alternative form of credit.

2.7.1 Types of financing available to rural women farmers

Hisrich and Peters (1995) and Anderson and Dunkelberg (1993) describe 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. Hisrich and Peters (1995) 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.

2.7.2 Effects of availability of credit institutions on adoption of modern banana farming techniques among rural women farmers

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. 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. While it is observed that there are financial institutions within Kisii 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.

2.8 Theoretical Framework

This study adopts the theoretical lens of social capital as postulated by Norman T. Uphoff. Social capital is subject to a variety of interpretations, which often confuse the application of the concept. Often, the concept refers to the links between people and how individuals take advantage of these links to access certain desirable resources.

2.8.1 Social Capital Theory

Social capital is most often understood as the source through which individuals can take advantage of social relations, networks or other structures to obtain certain benefits (Portes, 1998). The conceptualization of social capital dates back to Marx and Durkheim, but in the 1970's Pierre Bourdieu provided one of the most theoretical and instrumental contemporary interpretations of the concept. Economist Glenn Loury's work on the effect of social connections on access to employment inspired sociologist James S. Coleman to investigate the role of social capital on human capital. In the 1990's Robert Putman advocated for social capital as a means for collective action for mutual benefit, through trust and norms of reciprocity. Putman is also known for his distinction between 'bonding' and bridging' social capital, which refers, firstly, to the social connections between a homogeneous group of people and, secondly to the relations beyond and between differing groups. (Karlan , 2006)

Social capital has also gained steady ground within development literature. Michael Woolcock was the first to provide a unified conceptual framework for the concept of social capital in an economic development perspective (Piazza-Georgi, 2002; Woolcock, 1998). It has however, received much criticism mainly due to the variety of interpretations and thus confusion regarding its applicability (Lakwo, 2006). In a development context it is attacked for being used as a means to avoid inequality issues as power relations are accounted for without looking at the negative consequences of social life. Others disagree with the assumption that actors are social entrepreneurs and actively invest in relationships of trust. Yet others view social capital as embedded social resources, dynamic and negotiated but not easily stored and thus both constrain and enable individual action, as well as reproduce structural inequalities (Clever, 2005).

This study is inspired by the approach developed by social scientist Norman T. Uphoff (1941). Uphoff is a professor at the Cornell University, New York with a main research focus on the field of rural and agricultural development (cornell.edu, 2012). He bases his work on social capital on practical development projects (Krishna & Uphoff, 1999 and Uphoff & Wijayaranta, 2000), and his conceptualization of social capital is commonly employed in contemporary research and practice within fields as diverse as mental health and rural development (Islam, 2006; Pronyk, 2008).

2.9 Conceptual Framework

From the above discussion, the study develops a conceptual framework where the independent variable is Access to credit and it has a direct influence on the adoption of modern banana farming techniques. However, for this to be fully realized, there should be awareness about credit facilities among rural women farmers, family support, reasonable interest rates, minimal cultural barriers and availability of collaterals to enable rural women banana farmers access credit. This is show in figure 2.1

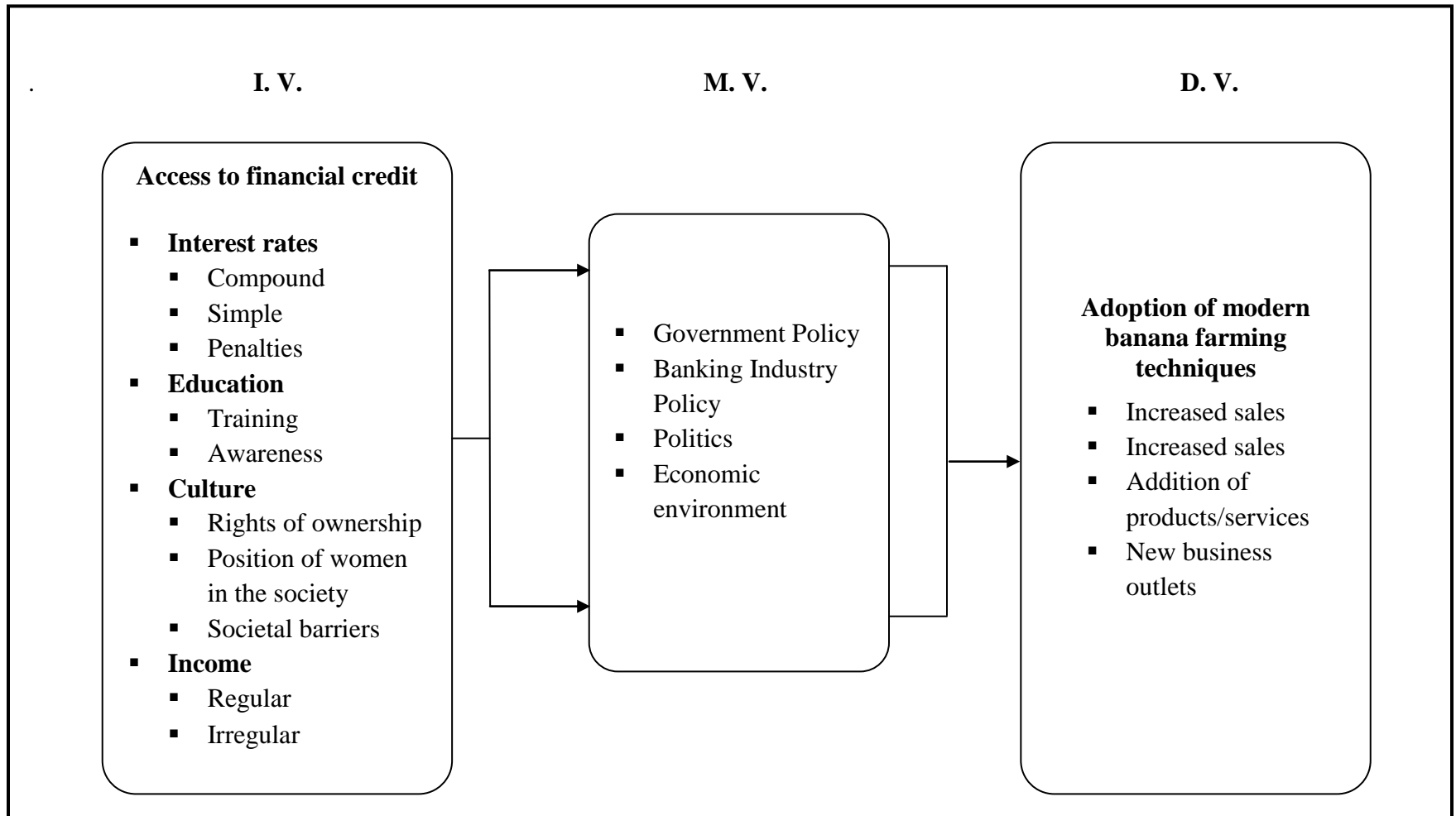


Fig. 2.1: Conceptual Framework

Where I.V is the Independent Variable, M.V. is the Moderating/Intervening Variables and D.V is the Dependent Variables

2.10 Gap in Literature Review

From the reviewed literature, it is apparent that the factors affecting access to credit by women entrepreneurs has been extensively covered. However, with the country (Kenya) seeking to achieve food security in its Vision 2030 and MDGs, the banana has received immense research and support as an alternative to the traditional food crops that most communities in Kenya are used to. However, adoption of the modern banana farming techniques among rural women banana farmers with regards to availability to credit has not been studied, especially when statistics indicate that the rural women farmers contribute greatly to the stability of the economy as well as food security. It is against this backdrop that this study seeks to understand the influence access to credit has on the adoption of modern banana farming techniques among rural women in Kisii County, as one of the counties that grow bananas in large quantities.

CHAPTER THREE RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents the research design, target population, sample selection procedure and the sample size, data collection instruments and data collection procedure. It also presents how data was analyzed and the various ethical considerations in the study.

3.2 Research Design

The study sought to identify the influence of access to credit on the adoption of modern banana farming techniques among rural women in Kisii County, Kenya. As such, the study adopted the descriptive research design. Weiss (1998) argues that descriptive survey research design allows the collection of quantitative and qualitative data that can be used for establishing causes of specific events or happenings. The survey research design emphasizes that subjects most suited to survey research are those which can be accurately measured by subject response.

3.3 Study Area and Target Population

The area of study was Kisii County which has six administrative divisions as shown in Table 3.1.

Table 3.1: Administrative Divisions of Kisii County

Division	Population	Urban Population	Headquarters
Keumbu	109,837	8,843	Keumbu
Kisii Town	183,000	83,000	Kisii
Marani	89,215	0	Marani
Masaba	105,926	908	Masimba
Mosocho	63,247	0	Nyakoe
Suneka	86,030	3,723	Suneka

Source: KNBS, 2010

The study targeted rural women banana farmers in the Kisii County and the management of various MFIs in the region. Likewise, the study targeted the agricultural research institutions that produce Tissue Cultured banana seedlings and advocate for modern rainwater harvesting technologies within Kisii County. This target population was selected because this is the group that is easily accessible to the researcher and had

the right information about the influence of access to credit to adoption of modern banana farming techniques.

3.4 Sample Selection and Sample size

The study randomly selected three divisions namely Keumbu, Marani and Suneka which were relatively easier to navigate and whose rural population was locally known to produce plantains in large quantities. Among the selected divisions, the number of rural homesteads was as follows.

Table 3.2: The randomly selected sample divisions

Division	Population	Rural Homesteads
Keumbu	109,837	14,428
Marani	89,215	12,745
Suneka	86,030	11,758
Total	285,082	38,931

Source: KNBS 2010

The Morgan and Krejcie (1970) table (Appendix v) was used to determine the sample size for this study. Given the total target population of 38, 931 rural homesteads, the corresponding sample size was 380 rural homesteads. The respondents were distributed in Table 3.3 according to their ratio of representation.

Table 3.3: Sample Size

Division	Rural Homesteads	%age of total	# of respondent homesteads
Keumbu	14,428	37	141
Marani	12,745	33	124
Suneka	11,758	30	115
Total	38,931	100	380

Source: Field Data

There were two interviewees from each division that were randomly selected from the rural banana women farmers to participate in the study. The study also issued 6 questionnaires to the existing microfinance institutions in Kisii County namely Kenya Women Finance Trust (3 questionnaires) and KADET (3 questionnaires).

3.5 Data Collection Instruments

Mugenda and Mugenda (2003) define data collection instruments as tools used to collect data from respondents (Dwivedi, 2006). This study collected both primary and

secondary data and as such used Questionnaires and Interviews to collect primary data while document reviews enabled the researcher collect secondary data.

Dwivedi (2006) defines a questionnaire as a device for securing answers to questions by using a set of questions. The use of questionnaires offers considerable advantages in management as it presents an even stimulus to a large number of people simultaneously and provide investigator with a relatively easy accumulation of data, further the use of questionnaires allows the respondents time on questions that would require reflections on to avoid nasty responses, however they require a lot of time in traveling hence a lot of expenses that inflate research cost, and some respondents do not answer all the questions. The researcher prepared questionnaires for the rural women farming entrepreneurs the study area.

Dwivedi (2006) defines interview as face to face interpersonal role situation in which one individual (interviewer) asks the other individual (respondent) questions designed to obtain answers relevant to the research problem. The study used the interview schedule for gathering data because it permits much greater depth than other methods of data collection. It also provides a true picture of opinions and feelings; however they are time consuming, expensive to conduct and sincere answers to please the interviewer. The research used open-ended questions to elicit verbal responses from knowledgeable individuals within institutions in Kisii County that engage in research related to modern banana farming techniques.

3.5.1 Pilot testing of the instruments

The study first constructed the research instruments. The research instruments were pre-tested first to make appropriate modifications before embarking on the main study. The pilot study was conducted in Mosoch Division of Kisii County. During piloting, the study familiarized itself with the nature of expected respondents during the main study. The pilot study was conducted in two phases, two to three weeks after the others and after correcting some of the issues found to be of concern among the tools used. Due diligence was taken to ensure that the questions asked in the questionnaires and interview schedules were not too lengthy or so worded that would have made respondents unable to follow them also considering that we were enquiring on respondents with special needs.

Moreover, after vigorous assessment of the study instrument after first pre – test, the instruments was amended and the adjusted interview schedule and questionnaires was put to test again. Modification was also done on the sampling, population, hypothesis and even research objectives.

3.5.2 Validity of the instruments

Validity is the accuracy and meaningfulness of inferences which are based on the research results (Mugenda & Mugenda, 2003). The methods of determining validity of research instruments are: content, construct and criterion. The study will utilized content validation measure to determine the validity of the research instruments. For this study, the supervisor also assisted in assessing the validity of the research instruments to be used in the study. The advantage of using content validation measure is that it is usually subjective, thorough and representative of the wider body of material that the research is trying to assess. In order to establish content validity for quantitative data, results from the ratings were computed using the following formula.

$$\text{CVI} = \frac{\text{number of items rated as relevant (per objective)}}{\text{Total number of items in the questionnaire}} * 100\%$$

The end product gave the content validity of the research instrument. If CVI was more than 50% then the instrument was valid and if the instrument was less than 50% the instrument was not valid. Qualitative validity of instruments was ensured by processing data into manageable proportions through editing, coding, and tabulation methods. Data collected was checked while still in the field to ensure that all questions were answered. Contradictory information was removed if found infective. By coding, an answer to each item on the questionnaire was classified into meaning full categories. Tabulation was used to obtain frequencies and percentages of each item.

3.5.3 Reliability of the instruments

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Mugenda and Mugenda (2003) state that reliability inresearch is influenced by random error. As random error increases, reliability decreases. Weiss (2008) explained although all measures contain error, the more reliable the method or instrument, the less likely it is that these influences will affect the accuracy of the

measurement. Test – retest technique was used to determine the reliability of the research instruments to be used by the study as opposed to other reliability measurement methods like; split half technique and interpreter reliability. This also involved administering the same measure of the variable on two separate occasions 2 weeks apart is an example of this type of reliability in a different environment Mosoch Division in Kisii County. The interval of time between administrations should be considered with this form of reliability because test-retest correlations tend to decrease as the time interval increases (Robson, 2002). Therefore the period of two weeks interval will increase the correlation value as opposed to a longer period of time. Thereafter, Cronbach Alpha coefficient will be obtained and according to Creswell (2008), a reliability coefficient of 0.7 or more implies that there is a high degree of reliability of the data.

3.6 Data Collection procedures

To implement the general objectives plans of a research study, methods of data collection must always be used. Kerlinger, (1978) further says that problems dictate methods to a considerate extent, but methods, their availability, feasibility and relevance influence problems. McMillan and Schumacher (1993) argues that in order to begin the research, the researcher should formally acquire an introduction letter from the university identifying who he/she is, stating the intent of the student to conduct a research, the purpose and within what period. This enables the student secure a research permit from the relevant ministry, upon which the student provides the same to the local authorities during data collection.

The interviews were conducted in pre-arranged dates while the questionnaires were administered and collected with the assistance of a research assistant who was hired and trained on the expected tasks to be carried out. The issues covered during training were ethical guidelines in conducting research. After receiving the research permit and letter of authority from relevant institutions, research instruments were ready for field studies. The interview sessions were conducted while the interview questions were recorded on a sheet of paper. The interviews were thought out beforehand and standardized so that all participants were asked the same questions in the same order. Appointments were also made with the relevant respondents for the interview session before carrying out the interview.

3.7 Data Analysis techniques

Yin (2003) pointed out that analysis of data involves examining, categorizing, tabulating or otherwise combining the evidence to address the initial propositions of a study. Before data entry, screening was done. (Leary, 2004) stated that Data screening ensures that responses are legible and understandable and that responses are within an acceptable range and are complete, and all of the necessary information has been included. Collected data were coded and entered into the SPSS program for analysis. The analysis of the data was conducted using descriptive and inferential statistical analysis. Descriptive statistics allowed the researcher to describe the data and examine relationships between variables, while inferential statistics allowed the researcher to examine causal relationships between qualitative and quantitative data (Leary, 2004). In many cases, inferential statistics allow researchers to go beyond the parameters of their study sample and draw conclusions about the population from which the sample was drawn. The qualitative analysis involves the idea of using themes and categories as advised by Charmaz (1983) who purported that categories serve to pull together and give meaning to a series of otherwise discreet events, statements, and observations in the data. Analyzed data was presented using tables, charts and narrations.

3.8 Ethical Considerations

Ethics has been defined as that branch of philosophy which deals with one's conduct and serves as a guide to one's behavior (Mugenda & Mugenda, 2003). Moreover, these principles are intended to protect research participants from harm (Sieber & Stanley, 1988). Volunteer participation was clearly explained to the participants before they sign in their consent forms. Participants had the freedom to withdraw from the study at any stage. Cohen and Manion (1994) suggested that informed consent is an important issue that one has to consider. The purpose of the study was explained to the participants so that they could make their own informed choices. The study promised full disclosure of the findings of the study to the participants. Additionally, the study guaranteed confidentiality and anonymity to the participants. Since the respondents were aware of the cultural norms of my study arena, the study made sure that words and language that seemed to be sensitive were avoided. The names of all informants were coded to conceal their identity and to maintain confidentiality.

CHAPTER FOUR
DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents, analyzes and interprets the data collected through questionnaires and interviews schedules. The qualitative data was organized in broad themes that answered research objectives. Quantitative data was organized in frequency counts and converted to percentage for clear presentations. A total of 380 questionnaires were issued to the rural women banana farmers in 3 divisions in Kisii County and a response rate of 93.84% was recorded where 357 filled questionnaires were returned.

4.2 Missing Responses analysis

Given the freedom the respondents had to respond to questions at will, some key objective questions in the questionnaire were not answered. Table 4.1 presents this analysis

Table 4.1: Univariate Analysis of missing values from key objective questions

	N	Mean	Std. Deviation	Missing	
				Count	Percent
Division	357	1.9244	.81929	0	.0
Other Businesses Owned	351			6	1.7
Sufficiency of banana supply	357			0	.0
Banana Diseases	354			3	.8
Agency Visits	342			15	4.2
Land Ownership	345			12	3.4
Presence of MFIs	357			0	.0
Credit Access Limitations	355			2	.6
Repayment Periods	355			2	.6
Default Charges	352			5	1.4
Interest Rates	335			22	6.2
Types of Security for Loans	351			6	1.7
Other Responsibilities	356			1	.3
Operating Capital	347			10	2.8
Source of Capital	357			0	.0

4.3 Demographic Information

This section presents the demographic information for the study. A cross-tabulation against the Division and various attributes of the respondents are presented in Table 4.2 as shown.

Table 4.2: Demographic Information Case Processing Summary

	Case Processing Summary					
	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
Division by Age	347	97.2%	10	2.8%	357	100.0%
Division by Marital Status	353	98.9%	4	1.1%	357	100.0%
Division by Level of Education	347	97.2%	10	2.8%	357	100.0%
Division by Time in Business	347	97.2%	10	2.8%	357	100.0%

During the study, it was established that there were only 14 respondents who were aged between 18 and 20, representing 4.03% of the valid respondents. There were 79 (22.76%) of the respondents aged between 21 and 25 years, 98 respondents aged between 26 and 30 years, 53 respondents aged between 31 and 35 years and 103 aged over 35 years.

Table 4.3: Division and Respondents' Age Cross-tabulation

		Age					Total
		18-20	21-25	26-30	31-35	Over 35	
Division	Keumbu	5	31	38	17	39	130
	Marani	5	22	29	17	40	113
	Suneka	4	26	31	19	24	104
Total		14	79	98	53	103	347

From the above findings, it is established that the majority of rural women banana farmers were aged over 35 years. This probably was due to the fact that most of them had more family responsibilities that made them engage in income generating activities.

The study also sought to establish the marital status of the rural women banana farmers and only 4 were single. 260 were married while 65 were widowed and only 24 were separated from their husbands.

Table 4.4: Division and Marital Status Cross-tabulation

		Marital Status				Total
		Single	Married	Widowed	Separated /Divorced	
Division	Keumbu	4	98	22	8	132
	Marani	0	85	22	8	115
	Suneka	0	77	21	8	106
Total		4	260	65	24	353

These findings imply that most rural women banana farmers were stable in their marriages or had been stable until their husbands passed on. The number of responsibilities and financial obligations these women banana farmers had was enormous and as such had to engage in business activities such as banana farming.

The study also established that most of the rural women banana farmers had primary level education (195, %). 120 has secondary education while only 10 had post secondary certificates. It is also important to note that some women had no formal education at all as 22 had never attended any school. Table 4.5 presents this information.

Table 4.5: Division and Level of Education Cross-tabulation

		Level of Education				Total
		None	Primary	Secondary	PSC*	
Division	Keumbu	8	72	46	4	130
	Marani	7	64	39	3	113
	Suneka	7	59	35	3	104
Total		22	195	120	10	347

**PSC: Post Secondary Certificate*

The above findings indicate that a majority of the rural women banana farmers have basic education. This low academic achievement affects their level of banana business participation in terms of scope of banana varieties and approach to the dynamic banana market.

The study also sought to establish the length of time the respondents had been in the banana farming business. It was established that most of the respondents had been in the business for between 4 and 6 years. However, there are those who had been in the business for less than 1 year. 96 had been in the business for 1 – 3 years while 46 had been in the business for 7 to 10 years. There were 38 respondents who had been in the business for over 10 years.

Table 4.6: Division by Time in Business Cross-tabulation

		Time in Business					Total
		< 1yr	1-3yrs	4-6yrs	7-10yrs	> 10yrs	
Division	Keumbu	21	38	41	18	13	131
	Marani	18	30	37	16	12	113
	Suneka	18	28	32	12	13	103
Total		57	96	110	46	38	347

From the above, it is concluded that most rural women banana farmers had been in the business for an average of 3 to 10 years. It is also concluded that given this period in this kind of business, they had acquired vast skills in this activity and were best suited to learn new techniques relating to modern banana farming.

4.4 Rural Women Participation in Banana Farming Business

The study sought to establish whether rural women were allowed to participate in banana farming business and to what extent they were participating in it. This section gives the case summary of the key objective questions weighted against the administrative divisions where they hailed from.

Particularly, the study sought to know whether the rural women were allowed to operate businesses by their husbands. From the cross-tabulations, 342 (95.8%) respondents responded to this question while 15 chose not to. The average operating capital for the businesses was sought and 347 (97.2%) responded to this question. The

study also sought to know the source of the business capital and all the respondents (357) gave their opinions. Table 4.7 gives this summary below.

Table 4.7: Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Division by Permission to operate business	342	95.8%	15	4.2%	357	100.0%
Division by Average Operating Capital	347	97.2%	10	2.8%	357	100.0%
Division by Source of Operating Capital	357	100.0%	0	0.0%	357	100.0%

Of the 95.8% of the respondents who responded to whether they were allowed to operate businesses or not, 134 (100%) from Keumbu division agreed that they were allowed to operate businesses by their husbands. Similarly, 107 respondents from Marani division were allowed to operate businesses while 2 respondents did not know whether they were allowed or not. From Suneka division, 95 respondents were allowed while 2 were not allowed and 1 did not know whether she was allowed or not. Table 4.8 presents a summary of this information.

Table 4.8: Division by Permission to operate businesses cross-tabulation

		Allowing Operation of Businesses by Women			Total
		Yes	No	Don't Know	
Division	Keumbu	134	0	0	134
	Marani	107	1	2	110
	Suneka	95	2	1	98
Total		336	3	3	342

From the above, it is evident that rural women are allowed to operate businesses by their husbands. This is encouraging, particularly for a region that is heavily dependent

on agriculture during this hard economic times when women are being economically empowered.

Asked about the average operating capital for their businesses, a majority (101 respondents) had a capital of less than KShs.5,000 followed by those (93 respondents) who had a capital base of over KShs.20,000. The third category (70 respondents) had a capital base of between KShs.5,000 and KShs.10,000 while the fourth category (52 respondents) had a capital base between KShs.15,000 and KShs.20,000. The last category (31 respondents) had a capital of between KShs. 10,000 and KShs. 15,000. Table 4.9 gives this summary.

Table 4.9: Division by Average Operating Capital Cross-tabulation

		Average Operating Capital					Total
		< 5K	5K– 10K	10K– 15K	15K- 20K	>20K	
Division	Keumbu	40	28	11	18	33	130
	Marani	32	23	10	17	30	112
	Suneka	29	19	10	17	30	105
Total		101	70	31	52	93	347

From the above findings, it was established that most respondents operated on an average of between KShs.5,000 and KShs.20,000.

Most respondents, asked about the source of their operating capital, used money from ROSCAs as the starting capital for the banana farming business. 106 of the respondents said that they started their banana farming business using their savings while 40 had their husband’s support as starting capital. 28 had taken loans to start the businesses while 32 had sold assets such as domestic animals to get the starting capital. Table 4.10 presents this summary.

Table 4.10: Division by Source of Operating Capital Cross-tabulation

	Source of Operating Capital						Total
	Savings	ROSCA	Sale of Assets	Husband support	Loan	Other	
Keumbu	43	47	13	18	12	1	134
Marani	33	49	11	12	9	2	116
Suneka	30	51	8	10	7	1	107
Total	106	147	32	40	28	4	357

From the findings, it is concluded that credit, in this case from the ROSCAs, was the most preferred source of capital followed by savings. While it is evident from the previous section that husbands allowed their wives to operate businesses, very few went further to provide the capital needed to start businesses. A few other women had also taken loans to start off their businesses.

4.5 Challenges facing rural women banana farmers

The study also sought to establish the challenges facing rural women banana farmers and got responses based on the objective questions that were asked. Table 4.11 presents the summary of each question and the response rate for each question.

Table 4.11: Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
Division by Sufficiency	357	100.0%	0	0.0%	357	100.0%
Division by Diseases	354	99.2%	3	0.8%	357	100.0%
Division by Solutions offered for banana diseases	353	98.9%	4	1.1%	357	100.0%
Division by Cost of Water Solution Offered	357	100.0%	0	0.0%	357	100.0%
Division by Women Responsibilities hampering business	356	99.7%	1	0.3%	357	100.0%
Division by Financial Obligations for only women	355	99.4%	2	0.6%	357	100.0%
Division by Level of Education	347	97.2%	10	2.8%	357	100.0%

From the study, 207 respondents said that the current banana supply was not sufficient while 150 said otherwise. Table 4.12 presents this information.

Table 4.12: Division by Sufficiency Cross-tabulation

		Sufficiency		Total
		Yes	No	
Division	Keumbu	54	80	134
	Marani	54	62	116
	Suneka	42	65	107
Total		150	207	357

From the above findings, it is evident that rural women banana farmers agreed that their supply to the market was not sufficient.

Asked whether banana diseases were a common feature in their farms, only 103 respondents reported a less frequent attack/infection rate in their farms. 163 respondents had frequent infections while 77 respondents had very frequent cases of infections. 11 respondents always had their plantains infected by diseases.

Table 4.13: Division by Diseases Cross-tabulation

		Diseases				Total
		Less frequently	Frequently	Very Frequently	Always	
Division	Keumbu	36	61	30	4	131
	Marani	34	54	24	4	116
	Suneka	33	48	23	3	107
Total		103	163	77	11	354

From the above, the rural women banana farmers had a challenge as a result of the diseases that infected their plantains hence affecting their yield and quality. It could also be the cause for the insufficiency stated above.

Asked whether there were solutions that were offered for these diseases, 139 reported pesticides as having been suggested to them while 78 had been asked to use fungicides. 73 respondents had been asked to adopt Tissue Cultured banana seedlings while 35 had been asked to consult with relevant professionals in that particular field. However, 28 were not aware of any solutions at all. Table 4.14 shows the solutions offered as presented.

Table 4.14: Division by Solutions offered for banana diseases Cross-tabulation

	Solutions offered for banana diseases					Total
	TC	Pesticides	Fungicides	Consultation	None	
Keumbu	30	49	30	14	11	134
Marani	21	50	25	10	9	115
Suneka	22	40	23	11	8	104
Total	73	139	78	35	28	353

From the above, it is obvious that most rural women banana farmers were being advised to use pesticides and fungicides for their infected plantains. However, some had been asked to adopt TC as a solution. This implies that very few were aware of TC as a simpler solution to their diseases problems hence why a majority had a problem with banana diseases.

The study also sought to establish whether the domestic responsibilities facing women were a challenge and it was established that most women viewed their responsibility of child bearing and rearing as a challenge to their farming business. Only 59 viewed the responsibility of being a housewife as a challenge as 8 were faced with bread winning as a challenge.

Table 4.15: Division by Women Responsibilities hampering business Cross-tabulation

	Women Responsibilities hampering business				Total
	Housewives	Child Bearing	Child rearing	Bread winners	
Keumbu	22	68	40	3	133
Marani	19	59	35	3	116
Suneka	18	55	32	2	107
Total	59	182	107	8	356

From the above, all these challenges affected the productivity of the rural women banana farmers in one way or another. These, coupled with the fact that their husbands allow them to operate businesses but do not provide the startup capital is a challenge in itself. On the other hand, these responsibilities can further hinder them from accessing loans as seen earlier that only a few of them access loans or other forms of lending.

4.6 Availability of Credit Institutions, Access to credit and Interest Rates

The study also sought to establish whether the rural women banana farmers had access to credit institutions. The objective questions asked were responded to as shown in Table 4.16.

Table 4.16: Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Division by Availability of Credit Institutions	357	100.0%	0	0.0%	357	100.0%
Division by Credit Access Limitations	355	99.4%	2	0.6%	357	100.0%
Division by Interest Rates	335	93.8%	22	6.2%	357	100.0%
Division by Default Penalties	352	98.6%	5	1.4%	357	100.0%

A majority (306) of the respondents were aware of the availability of credit institutions. Only 21 did not know whether credit institutions existed or not. 30 respondents disagreed about the existence of credit institutions.

Table 4.17: Division by Availability of Credit Institutions Cross-tabulation

		Availability of Credit Institutions			Total
		Yes	No	Don't Know	
Division	Keumbu	117	11	6	134
	Marani	100	10	6	116
	Suneka	89	9	9	107
Total		306	30	21	357

It was established that rural women banana farmers were aware of the availability of credit institutions. However, it has been previously established that very few of them borrow from these credit institutions for seed capital.

Table 4.18 presents the limitations to credit access by rural women banana farmers. It was established that high interest rates hindered access to credit while 82 respondents did cited lack of information as inhibitive. 77 respondents said that their husbands would not allow them borrow from credit institutions while 71 could not provide security for the loans.

Similarly, from the interview sessions with managers of the few MFIs that were selected for the study within Kisii County, the study established that most MFI clients

who had sought credit for purposes of starting or expanding their farming activities had lacked matching collateral. Others had failed to secure guarantors while some had no proof of asset ownership such as title deeds or car log books.

Table 4.18: Division by Credit Access Limitations Cross-tabulation

	Credit Access Limitations						Total
	No Credit Inst.	No Collateral	Lack of Info.	Husband wont allow	Interest Rates	Other	
Keumbu	1	29	32	28	42	2	134
Marani	0	30	22	22	39	2	115
Suneka	1	12	28	27	36	2	106
Total	2	71	82	77	117	6	355

It can be concluded that lack of security is the major challenge for credit access as most rural women banana farmers were denied loans due to lack of matching collateral and higher interest rates. The interview sessions with MFI managers also prove that most rural women banana farmers lacked matching securities and in most cases also lacked guarantors. In interview sessions with one rural woman banana farmer from each division, it was established that most MFIs required a security that either equivalent or higher in terms of value than the amount that one was lending. So, for instance if one was borrowing KShs.15,000, then the collateral should be valued higher than this amount or same as the amount borrowed, as one is quoted herein:

“...ile kitu italingana nah ii pesa ni ngombe, kama ni mnyama au makaratasi ya kuonyesha shamba ni yangupewa hiyo makaratasi kutoka kwa serikali...lakini sasa, ni nini ninayo ya kuonyesha kuwa hii ngombe ni yangu sababu ngombe si kama gari serikali inapeana kitu ya kutambua ni ya nani... kwa hivyo hivyo hiyo ni mabo ngumu kwetu kama wamama wa ndizi”

“...tena hata kama angekuwa na hiyo makaratasi, mzee hawezi kubali mimi nichukue shilingi elfu kumi na tano halafu nipeane makaratasi ya shamba! ...hiyo ni ngumu kabisa!”

However, the managers advised that the women banana farmers would be better off if they formed and registered groups; and saved and borrowed as groups. This would distribute the liability to the group level as most group members would know how to handle defaulters as opposed to the MFIs which could not be in a position to know much about the borrowers.

Table 4.19 presents a cross-tabulation of the division of the respondents and their opinion about interest rates. 260 respondents were of the opinion that the interest rates charged by MFIs were high while 33 felt that they were exorbitant. 21 said they were minimal and average each.

From the farmers' interview session, they argued that the interest rate charged was high and in most cases they ended up paying double the amount they borrowed. One respondent was cited saying:

“Hiyo interest ya mkopo iko juu. Hata kabla hujachukua pesa, ile pesa yenye unakatwa ndiyo upewe ile imebaki kama mkopo iko juu sana. ...hakuna haja mimi nikopeshe pesa kwa mfano elfu ishirini halafu napewa elfu kumi na saba, labda ikizidi na mia tano eti nilipe kwa miezi 9 au mwaka.”

Another from another division added:

“...ukipiga hesabu kila mwezi unalipa kama shilingi elfu mbili na mia tano kama ni mwaka au shilingi elfu tatu na mia mbili kama ni miezi 9. Mwishowe utapata umelipa zaidi ya mara mbili ya ile pesa ulipewa kwa mkono... kwa hivyo wawache kutuambia ati interest ni 16% ama 14% kama vile wengine walikuwa wanasema juzi... watuambie tutalipa mara mbili ya ile tutaomba halafu mwenye anahitaji sana achukue...”

Interview sessions with managers defended the MFIs by arguing that most financial institutions would charge a certain amount as “...credit processing fees, just like when you receive payment via cheque or salary processing fees... ...these are administrative charges that cannot be done away with, they can only be revised...” argued one of the MFI officers. Further, one from another MFI argued that:

“...the problem with most borrowers is that they rarely read the terms and conditions of borrowing as they are usually in a hurry to get the money and sort out their problems. However, after getting the money and their problem is

sorted, that's when they ask themselves question like how much they received and why, what were the reasons for some charges, where were they stated and so on..., it's really a challenge”

Table 4.19: Division by Interest Rates Cross-tabulation

		Interest Rates				Total
		Minimal	Average	High	Exorbitant	
Division	Keumbu	8	8	98	12	126
	Marani	7	7	84	12	110
	Suneka	6	6	78	9	99
Total		21	21	260	33	335

This is an indicator that most rural women banana farmers deem the interest rates charged as high and unaffordable to them. On the other hand, the MFIs should also consider the average academic levels for their clients as most are not highly learned. These “hidden cost of credit” act as “scares” for most borrowers. It is important that MFIs set their rules clear and transparent to minimize dissatisfaction and contempt from rural women banana farmers.

Coupled with interest rates, the penalties charged for defaulting a monthly payment were sought to be understood and, just like the interest rates, 166 respondents were recorded saying it was high while 93 said the penalties were exorbitant. 74 respondents on the other hand were cited as saying that the charges were average and 17 said they were minimal.

Interview sessions with the rural women banana farmers yielded similar results in that all of them stated that they feared borrowing any default would amount to penalties that are not realistic. One cited a particular MFI that would accept household assets as security but would proceed to auction them the next after defaulting.

“...hawa watu wa... (MFI’s name withheld) ...hawatakangi kujua hata labda ni matanga mtu umekuwa nayo. Hao wakiona umekosa tu hivi, wametuma wamama wenzako kuchukua vitu za nyumba. ...halafu mzee akikuja jioni apate vitu hakuna, utafute mahali utaenda sababu hata kama si yeye alinunua yeye anajua kila kitu iko kwa hii nyumba ni yake! ...sasa

hakuna haja ya mimi kuchukua pesa ya wenyewe halafu biashara ikikuwa mbaya siku moja wakuje kuleta shida kwangu...”

On interviewing one of the MFI officials, they stated that the act of imposing a penalty on a loan defaulter was a policy issue and was meant to regulate borrowing in the industry by giving the borrower something to constantly remind him/her that he has a debt that must be paid. However, the official noted that the approach taken by some financial institutions in recovering their money was to a greater extent harmful to them and the client. As such, the official recommends a situation where the security given for the loan should be from another person (guarantor) rather than the same borrower. That way, the borrower will be put to task to pay the loan promptly by the guarantor, which is a better model than the previous one.

Table 4.20: Division by Default Penalties Cross-tabulation

		Default Penalties					Total
		None	Minimal	Average	High	Exorbitant	
Division	Keumbu	0	8	27	56	26	117
	Marani	1	2	24	49	38	114
	Suneka	1	7	23	61	29	121
Total		2	17	74	166	93	352

From the above, it is apparent that most rural women banana farmers have shied away from borrowing due to the fear of the repercussions should they default. MFIs and other financing institutions are encouraged to find alternate ways of recovering their money should one default rather than use the approaches such as the one discussed above. Similarly, the MFIs should also ensure that the circumstances surrounding the defaulting individual should be understood first and should factor in a grace period within which one should recover from the causative factor and continue to repay the loan.

4.7 Cultural dimensions affecting participation in banana business hence access to credit

The study also sought to understand the cultural dimensions that affected rural women banana farmers and Table 4.21 below gives a summary of the objective questions asked and their response rates.

Table 4.21: Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Division by Ownership of Land by Women	345	96.6%	12	3.4%	357	100.0%
Division by Size of farming land	357	100.0%	0	0.0%	357	100.0%

It is observed that most women in the region were not allowed to own land and as such 250 respondents said that they were not allowed to own land while 95 said they were allowed to own land by their respective communities.

On interviewing the rural women banana farmers, all the respondents to the interview shared the opinion that they were not allowed to own land as an asset.

“...mimi kwa hii boma siwezi sema ati hii shamba ni yangu, shamba ni ya bwana yangu na mimi nasaidia yeye kuchunga. ...hata mimi ni kama mali yake kwa sababu alilipia mimi ngombe kwa wazazi wangu. ...na kule nilitoka niliacha shamba yenye baba yangu alikuwa nayo na sasa ni ya mandugu zangu... sasa mimi siwezi kuja kwa boma ya bwana yangu halafu nianze kusema nataka shamba... hapana, hiyo haiwezekani... hata wazee wengine wakisikia hiyo maneno watasema nimevunja mila na watalaani mimi au nitarudishwa kwetu mahali nilitoka...”

Asked about the constitution and the articles of the constitution empowering women, one respondent replied:

“...hii maneno ya katiba mnasema si mzuri kabisa. ...inawezekana aje mtoto wangu msichana aolewe mbali halafu apewe shamba kwao? ...si basi apewe huko mahali ameolewa kwa sababu katiba inasema hivyo? ...si hata hao kulingana na biblia ni wazazi wake, si wapee yeye shamba basi!? Hii maneno ni ya kuvunja familia za watu, mchungu vile mnasema na kufanya maneno watoto wasikose boma zao... labda niende ninunue ingine mahali ingine ndio niseme ni yangu, na hata hivyo bado siwezi sema ni yangu kabisa!”

Table 4.22: Division by Ownership of Land by Women Cross-tabulation

		Ownership of Land by Women		Total
		Yes	No	
Division	Keumbu	33	97	130
	Marani	31	81	112
	Suneka	31	72	103
Total		95	250	345

From the above, it is apparent that most rural women banana farmers are negatively affected by culture in as far as land ownership is concerned. This seriously affects the approach to banana farming business as they believe that the land in which they carry out the business is not theirs. The earlier stated issue about asset ownership seemingly is limited to specific assets which still the husbands have a greater control over. This means that if the woman has bananas planted on the land and the husband, without notice, decides to do something else on the land, he will have an upper hand on the land and this may end up affecting the banana farming business. Purchasing another piece of land elsewhere may not solve the problem as they still believe that they are a property owned by their husbands and so whatever they own by extension belongs to their husbands.

On the other hand, the women responsibilities stated earlier also give another cultural dimension about the perception of women and their roles in the community. With the above findings, it is apparent that while most women are allowed to own assets, operate businesses and even access for expanding and starting off their businesses, it is the prerogative of the husband to allow the wife participate in the business. The situation changes as soon as the husband feels otherwise about the business and the wife has to comply. This affects the sustainability of the business as well as the ability for the woman banana farmer to access credit from financial institutions. In situations where the farmer is able to access credit, it becomes harder for her to get a guarantor since the position of the woman in the society is known.

A majority of the respondents said that the size of land where they have planted the bananas was smaller than a plot (230 respondents) while 127 respondents were carrying out their banana farming business on land that was less than acre but bigger than a plot of 50'x100'.

As verified from the interviews, the farming land was dictated by their husbands who usually allocate a section of the land towards vegetable farming so as to minimize daily expenses towards food. As such, the women eventually ended planting bananas so as to improve the quality of soils for that particular area.

Table 4.23: Division by Size of banana farming land Cross-tabulation

		Size of farming land		Total
		<Plot	<Acre	
Division	Keumbu	86	48	134
	Marani	75	41	116
	Suneka	69	38	107
Total		230	127	357

This implies that the number of banana plantains produced is well below the capacity. Coupled with poor techniques, poor seedling quality and smaller farm sizes, the insufficiency alluded to earlier on is understood and can be practically solved.

4.8 Awareness about agricultural institutions and agencies

The study also sought to know whether there were agricultural institutions operating in the region and whether the rural women banana farmers were aware of their presence. Key objective questions were asked and responded to as shown in Table 4.24 below.

Table 4.24: Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Division by Frequency of Min. of Agric Visit	342	95.8%	15	4.2%	357	100%
Division by KUC Visits	342	95.8%	15	4.2%	357	100%
Division by GIT Visit	342	95.8%	15	4.2%	357	100%

From the responses, it was apparent that the relevant agricultural agencies and institutions were available and accessible to the banana farmers.

From the study, 207 respondents disagreed with the opinion that they were visited by officials from agricultural institutions and agencies. 120 respondents said that they were visited though less frequently while only 15 said they had the privilege of frequent visits

by the agricultural officers from the agencies and institutions. Table 4.25 presents the summary of this information.

In an interview session with officers from the Ministry of Agriculture in Kisii County, they attributed the few visits to the number of officers who were few and could not cover all the farms. They also argued that they only visited farms that the owners had requested them to visit. However, it was also clear from the interview with the farmers that they were never made to be aware that they were meant to request them to visit their farms. Likewise, the officers claimed that they were particularly interested in better farming techniques that would minimize soil erosion since Kisii County was a hilly region with regular rainfall hence prone to erosion if not taken care of. As such, most of the farms they visited were visited with an aim of imparting knowledge relating to soil erosion prevention.

Table 4.25: Division by Frequency of Ministry of Agriculture Visits Cross-tabulation

		Frequency of Min. of Agric Visit			Total
		Not at all	Less frequently	Frequently	
Division	Keumbu	78	46	5	129
	Marani	67	39	5	111
	Suneka	62	35	5	102
Total		207	120	15	342

It is clear from the above findings that there are very few visits by the agricultural officers to the banana farms, especially those owned by rural women. As such, it can be concluded that the poor yield and poor seedlings can be attributed to lack of information that otherwise should be disseminated by officers from these agencies.

On the other hand, officers responsible for research and extension at Kisii University College and Gusii Institute of technology were sought but were unable to schedule an interview with the researcher. However, 207 respondents from the farms denied having ever been visited by officers or students from either Kisii University College or Gusii Institute of Technology. 120 said they were visited less frequently while 15 were frequently visited.

Table 4.26: Division by KUC Visits Cross-tabulation

		KUC Visits			Total
		Not at all	Less frequently	Frequently	
Division	Keumbu	78	46	5	129
	Marani	67	39	5	111
	Suneka	62	35	5	102
Total		207	120	15	342

Table 4.27: Division by GIT Visit Cross-tabulation

		GIT Visit			Total
		Not at all	Less frequently	Frequently	
Division	Keumbu	78	46	5	129
	Marani	67	39	5	111
	Suneka	62	35	5	102
Total		207	120	15	342

From the above findings, it is clear that officers from the two learning institutions in the region rarely visits farmers in the region to either see how they carry out farming or advice them on better farming techniques for quality production.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, draws conclusions based on the findings, makes recommendations on how to solve the problem and also suggests areas that need further research.

5.2 Summary of findings

From the study, it was established that a majority of developed countries and those that have embraced modern banana farming techniques have experienced improved yields unlike in Kenya. Most rural women banana farmers in Kisii County are yet to embrace the new techniques.

It was also established that these new techniques are not cheap to acquire but need a financial investment. This financial investment is not available as most farmers in the study area operate with a capital base of between KShs.5000 and KShs.15000. While it was established that these new and modern technologies may cost a fortune, this capital may not be adequate to raise the money needed for adoption of the modern techniques and equipment.

Access to credit remains a challenge as most rural women banana farmers do not have matching collaterals for them to secure loans. This hinders their operations as they cannot expand beyond the current level. Similarly, lack of information relating to better farming techniques remains a challenge as they are not informed by the relevant agencies and officers about these technologies and techniques. Most farmers still use the old traditional methods to cultivate bananas which are not as productive as the modern ones.

On the other hand, the size of farming land for bananas is small hence may not yield much for the farmers. Most rural women banana farmers do not own land and depend on their husbands to allocate them more land. This still remains a prerogative of their husbands. It affects the quantity of bananas yielded hence the deficiency discussed in previous chapter. To solve this, the farmers need to be allocated more land so as to produce more.

The farmers also were faced with other challenges such as domestic responsibilities that included child bearing and rearing. Most rural women banana farmers believed that it was their sole responsibility and therefore all other responsibilities were secondary. As such, these responsibilities were given first priority as compared to the banana farming business. As such, this perception affected production as most were not committed to this business.

It is perceived that if the rural women banana farmers were adequately informed about the modern banana farming techniques and were adequately financed, their businesses would improve and they would be able to produce more quality bananas and reduce the deficiency in the market that they regularly experience.

5.3 Conclusion

The study concluded that access to credit affects the quality and quantity of banana production and that it generally affects level of business that the rural women banana farmers engage in. As such, the following were the conclusions drawn from the study.

1. Collaterals have limited access to credit on the adoption of modern banana farming techniques among rural women farmers in Kisii County in that the rural women banana farmers have no collaterals or have some whose value does not match the amount of funding they are after.
2. Similarly, high interest rates hamper on adoption of modern banana farming techniques among rural women farmers in Kisii County in that the interest rates discourage the farmers from applying for the loans for fear of heavier obligations, especially during the low season when sales are poor.
3. Cultural beliefs affect the adoption of modern banana farming techniques among rural women farmers in Kisii County when the farmers are not able to own land hence cannot carry out adequate farming that would have better paybacks. Similarly, the belief that women are meant to participate in household responsibilities among other beliefs further hamper their adoption of modern banana farming techniques.
4. Lack of credit availability awareness also affects the adoption of modern banana farming techniques among rural women farmers in Kisii County since they will

not be in a position to know whether they have alternative sources of funding when needed.

5.4 Recommendations

The study recommends the following:

1. That the rural women banana farmers be sensitized about the various savings and lending options at their disposal
2. That the MFIs revise their lending strategies so as to accommodate even those with assets that are not documented but are credit worthy
3. That rural women banana farmers be regularly visited by officers from the ministry of agriculture, with or without visitation requests, and be provided with better banana seedlings. Similarly, they should be taught how to handle banana diseases for better quality banana fruits.
4. That the institutions of higher learning supplement the works of the ministry of agriculture by planning field trips for their agriculture students who should liaise with officials from the ministry of agriculture and other NGOs to offer sustainable services and advice to the rural women banana farmers.

5.5 Suggestions for further reading

The study suggests that a study on the impact of culture on rural women farming practices be carried out to establish what role culture plays in determining the farming practices rural women engage in.

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APPENDICES

Appendix i: Questionnaire for rural women banana farmers

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.

Name of Division: _____

SECTION A: BACKGROUND INFORMATION				
1	Age bracket	18 – 20 21 – 25 26 – 30 >30	[] [] [] []	Select the most appropriate
2	How long have you been in this type of banana farming business?	< 1yr 1-2yrs 2-4yrs >4yrs	[] [] [] []	Select the most appropriate
3	Highest academic level attained	Primary O-Level Certificate Diploma Degree Masters PhD	[] [] [] [] [] [] []	Select one
4	Type of other farming business	Vegetables Maize Beans Sugarcane Others	[] [] [] [] []	Select one
5	Source of capital	Savings Loans Sale of asset other	[] [] [] []	Select one
6	Current capital base	< 5000	[]	Select one

		5000 – 10000	[]	
		10001 – 15000	[]	
		15001 – 20000	[]	
		>20000	[]	
7	Have ever applied for a loan from any Financial Institution?	Yes	[]	Select one
		No	[]	
8	What were the acceptable forms of loan collateral?	Title deeds	[]	Select one
		Income statements	[]	
		Car logbooks	[]	
		Others	[]	
SECTION B: EFFECTS OF EDUCATION LEVELS ON ACCESS TO CREDIT				
1	What is the effect of women education on farming business management?	Very Significant	[]	Select the most appropriate
		Fairly Significant	[]	
		Significant	[]	
		No Impact	[]	
2	Learned women who own farming businesses can easily get access to credit than unlearned women	True	[]	Select the most appropriate
		False	[]	
		Don't know	[]	
3	Learned women can easily form groups and manage to secure loans from MFIs	True	[]	Select the most appropriate
		False	[]	
		Don't know	[]	
4	Most women in the region have very little education background hence issuing loans to them is risky	True	[]	Select the most appropriate
		False	[]	
		Don't know	[]	
5	Women have no time for extra business training hence they cannot grow a business	True	[]	Select the most appropriate
		False	[]	
		Don't know	[]	
SECTION C: EFFECTS OF LOW INCOME ON ACCESS TO CREDIT				
1	What is the average amount of income generated from your farming business monthly?	< 5000	[]	Select one
		5000 – 10000	[]	
		10001 – 15000	[]	
		15001 – 20000	[]	

		20001 – 25000 >25000	[] []	
2	Do you save with the bank you applied for a loan from (If yes to question 7, Section Above)?	Yes No	[] []	Select one
3	What was the influence of your farming business income statement on the acquisition of the loan?	Very Significant Fairly Significant Significant No influence	[] [] [] []	Select the most appropriate
4	What impact does the Income statement play depicting your loan repayment ability?	Very Significant Fairly Significant Significant No influence	[] [] [] []	Select the most appropriate
5	What challenges would you face if your monthly income was affected while still repaying a loan?	Defaulting Repossession Collapsing of farming business Recovery from guarantors	[] [] [] []	Select the most appropriate
SECTION D: EFFECTS OF INTEREST RATES ON ACCESS TO CREDIT				
1	What is the influence of interest rates towards acquisition of credit?	Very Significant Fairly Significant Significant No influence	[] [] [] []	Select the most appropriate
2	How often do you consider the interest rate before applying for a loan?	Always Very Often Fairly often Rarely Never	[] [] [] []	Select the most appropriate
3	What challenge would higher interest rates pose to your farming business?	Reduced farming activity Collapsing of farming business Suspension of farming business	[] [] [] []	Select the most appropriate
4	High interest rates contribute to reluctance to pursue credit by women who own farming businesses	True False Don't know	[] [] []	Select the most appropriate
SECTION E: EFFECTS OF CULTURE ON ACCESS TO CREDIT				
1	Are you allowed to own land or other assets?	Yes No	[] []	Select one
2	Are women allowed to engage	Yes	[]	Select the

	in farming business activities in your community?	No	[]	most appropriate
3	Do women who own farming businesses get support from their husbands?	Yes No	[] []	Select the most appropriate
4	Do husbands share household responsibilities with their wives?	Yes No	[] []	Select the most appropriate
5	Do husbands allow their wives to apply for credit for farming business start-off capital or for farming business expansion?	Yes No	[] []	Select the most appropriate

SECTION F: EFFECTS OF ACCESS TO CREDIT ON FARMING BUSINESS GROWTH

1	How many types of farm product (product lines) does your farming business offer to customers?	Single 2-3 4-5 6-7 Above 7	[] [] [] [] []	Select the most appropriate
2	How many farming business outlets (including branches & dealerships) does your enterprise have?	1 2-4 5-7 Above 7	[] [] [] []	Select the most appropriate
3	Approximately by how much do you expect your monthly sales to increase if you were to acquire credit?	0-10,000 10,000-15,000 15,000-20,000 20,000-25,000 Above 25,000	[] [] [] [] []	Select the most appropriate
4	How many employees does your enterprise have?	Self run 1-5 6-10 11-15 Above 15	[] [] [] [] []	Select the most appropriate
5	What is the most prevalent obstacle that your fellow women entrepreneurs face while accessing credit?	Lack of collateral Poor credit history Poor income statement High interest rates Lack of guarantors	[] [] [] [] []	Select the most appropriate

Thank you for participating in this study

Appendix ii: Questionnaire for MFIs operating in Kisii County

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.

Name of MFI: _____

SECTION A: BACKGROUND INFORMATION				
1	Gender	Male Female	[] []	Select the most appropriate
2	Age bracket	18 – 20 21 – 25 26 – 30 >30	[] [] [] []	Select the most appropriate
3	How long have you been in this type of organization?	< 1yr 1-2yrs 2-4yrs >4yrs	[] [] [] []	Select the most appropriate
4	Position Held			Fill in
5	Type of credit products available	_____ _____		Fill in
6	Common collateral items	Savings Income statements Asset Title deeds Others	[] [] [] [] []	Select all
7	What is the common lending value for most rural women farmers	< 5000 5000 – 10000 10001 – 15000 15001 – 20000 >20000	[] [] [] [] []	Select one
SECTION B: EFFECTS OF EDUCATION LEVELS ON ACCESS TO CREDIT				
1	How educated, in your opinion, do you think the rural women farmers are?	Very Educated Fairly Educated Educated Not Educated	[] [] [] []	Select the most appropriate
2	Learned women who own farming businesses can easily	True False	[] []	Select the most

	get access to credit than unlearned women	Don't know	[]	appropriate
3	MFI's prefer group lending than individual lending	True False Don't know	[] [] []	Select the most appropriate
4	The MFI frequently conducts awareness campaigns to notify rural women farmers of availability of credit	True False Don't know	[] [] []	Select the most appropriate
5	Women have no time for extra business training hence they cannot grow a business	True False Don't know	[] [] []	Select the most appropriate

SECTION C: EFFECTS OF LOW INCOME ON ACCESS TO CREDIT

1	What is the average amount of income generated from most businesses owned by rural women?	< 5000 5000 – 10000 10001 – 15000 15001 – 20000 20001 – 25000 >25000	[] [] [] [] [] []	Select one
2	Do you only offer loans to clients who bank with your MFI?	Yes No	[] []	Select one
3	What was the influence of the income statement on the acquisition of the loan?	Very Significant Fairly Significant Significant No influence	[] [] [] []	Select the most appropriate
4	What impact does the Income statement play depicting one's loan repayment ability?	Very Significant Fairly Significant Significant No influence	[] [] [] []	Select the most appropriate
5	What challenges would rural women farmers face if their monthly income was affected while still repaying a loan?	Defaulting Repossession Collapsing of farming business Recovery from guarantors	[] [] [] []	Select the most appropriate

SECTION D: EFFECTS OF INTEREST RATES ON ACCESS TO CREDIT

1	What is the influence of interest rates towards acquisition of credit?	Very Significant Fairly Significant Significant No influence	[] [] [] []	Select the most appropriate
2	How often do rural women inquire about the interest rate	Always Very Often Fairly often	[] [] []	Select the most

	before applying for a loan?	Rarely Never	[] []	appropriate
3	What challenge would higher interest rates pose to most farming business?	Reduced farming activity Collapsing of farming business Suspension of farming business	[] [] []	Select the most appropriate
4	High interest rates contribute to reluctance to pursue credit by women who own farming businesses	True False Don't know	[] [] []	Select the most appropriate
SECTION E: EFFECTS OF CULTURE ON ACCESS TO CREDIT				
1	Are women allowed to own land or other assets?	Yes No	[] []	Select the most appropriate
2	Are women allowed to engage in farming business activities in your community?	Yes No	[] []	Select the most appropriate
3	Do women who own farming businesses get support from their husbands?	Yes No	[] []	Select the most appropriate
4	Do husbands share household responsibilities with their wives?	Yes No	[] []	Select the most appropriate
5	Do husbands allow their wives to apply for credit for farming business start-off capital or for farming business expansion?	Yes No	[] []	Select the most appropriate
SECTION F: EFFECTS OF ACCESS TO CREDIT ON FARMING BUSINESS GROWTH				
1	Approximately how many types of farm product (product lines) do rural women farmers offer?	Single 2-3 4-5 6-7 Above 7	[] [] [] [] []	Select the most appropriate
2	How many farming business outlets (including branches & dealerships) do rural women farmers have?	1 2-4 5-7 Above 7	[] [] [] []	Select the most appropriate

3	Approximately by how much does the monthly income for most of these rural women farmers increase after being given loans?	0-10,000 10,000-15,000 15,000-20,000 20,000-25,000 Above 25,000	[] [] [] [] []	Select the most appropriate
4	How many employees do these rural women farmers employ in their farms?	Self run 1-5 6-10 11-15 Above 15	[] [] [] [] []	Select the most appropriate
5	What is the most prevalent obstacle that your fellow women entrepreneurs face while accessing credit?	Lack of collateral Poor credit history Poor income statement High interest rates Lack of guarantors	[] [] [] [] []	Select the most appropriate
6	What indicators are monitored to measure growth of rural women farming businesses?	_____ _____ _____		State all

Thank you for participating in this study

Appendix iii: Interview Schedule for MFIs (KWFT and KADET)

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.

Questions

1. How frequently do you receive rural women banana farmers in need of loans to expand their businesses?
2. Approximately what proportion of rural women banana farmers seeking credit do so for
 - i) Seed capital?
 - ii) Business expansion?
3. In your opinion, are what factors are likely to hinder acquisition of credit by rural women banana farmers?
4. Are there cases in which rural women banana farmers fail to take credit citing high lending interest rates?
5. Are the collaterals owned by the women or by their husbands?
6. Roughly, what are the approximate values of these collaterals?

Appendix iv: Interview Schedule for rural women banana farmers

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.

Questions

1. Briefly introduce yourself and tell us which division is this
2. Kindly share with us the type of farming activities you engage in
3. With regards to banana farming, how long have you been in this business?
4. What challenges do you commonly encounter?
5. With regards to technology, what technology do you use to harvest water for use during the dry season in your banana farm?
6. What types of bananas do you plant in your farm?
7. Are there specific varieties of these bananas?
8. How frequently do they get infected by diseases?
9. What solutions are offered for the diseases?
10. What modern banana seedlings exist in the market?
11. How affordable are these modern banana seedlings?
12. Which FIs operate in the region?
13. How frequently do they inform you of new financial products?
14. What form of security is preferred by the FIs in the regions?
15. How are their interest rates, if you have taken a loan with them before?
16. Have ever defaulted in loan repayment?
17. What was the reaction of the FI towards you? Were there penalties?
18. What kind of support do you get from your husband in this banana farming business?
19. During seasons when the demand is high, how do you source the deficit in the market?
20. Does your husband assist you in household chores as you attend to your farming business?
21. Are you allowed to own land in your community?
22. What are the examples of assets you can own in the homestead?

Appendix v: Morgan and Krejcie Table for Determining Sample Size

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.