

**INFLUENCE OF MICROFINANCE SERVICES ON FINANCIAL
SUSTAINABILITY OF TEA FARMERS: A CASE OF
GREENLAND MICROFINANCE IN EMBU EAST
SUB-COUNTY, EMBU COUNTY, KENYA**

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**A Research Project Report Submitted in Partial Fulfillment for the Requirements
of the Degree of Master of Arts in Project Planning and Management at the
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DECLARATION

This research project report is my original work and has not been presented for a degree or other award in any other University.

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DEDICATION

I dedicate this research project work to my family especially to my parents Johnson Kinyua Ileri and Florence Njoki for the constant support and encouragement throughout my study.

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ABSTRACT

The purpose of this study was to investigate the influence of microfinances on Financial Sustainability of tea farmers in Kenya; a case of Greenland Fedha microfinance in Embu East sub county. The study was guided by the following objectives; to determine how savings mobilization, influence Financial Sustainability of tea farmers in Embu East Sub County; to establish the influence of farmer's financial education on Financial Sustainability of tea farmers in Embu East Sub County; to assess the influence provision of loans on Financial Sustainability of tea farmers in Embu East Sub county and to examine how adoption of Mobile Banking services influence Financial Sustainability of tea farmers in in Embu East sub county. The study utilized a descriptive- survey research design and the target population were 1405 respondents, where 1400 respondents were small scale farmers and 5 employees. Since the targeted population of small-scale farmers was large the researcher used 10% of the total population of small scale farmers to get a sample size of 140 small scale farmers hence a total sample size of 145 respondents as the sample. Primary data was collected through the use of a questionnaire. Data was then cleaned, tabulated and analyzed with the aid of Statistical Package for Social Sciences (SPSS 21.0). The collected data was analyzed quantitatively using descriptive techniques of mean and standard deviation and presented in tables and cross tabulation form. Qualitative data was chronologically arranged with respect to the questionnaire outline to ensure that the correct code was entered for the correct variable. The data was presented using tables. The study found out that is a positive relationship between Savings Mobilization; Farmers Financial Education; Provision of loans; adoption of mobile banking and Financial Sustainability of tea farmers in Kenya. It was then concluded that; Savings Mobilization; Farmers Financial Education; Provision of loans; adoption of mobile banking and Financial Sustainability was a good facet to realizing financial sustainability of the tea sector especially the targeted small scale farmers. Based on the findings of the study, the following recommendations were made; There should be concerted efforts by the management of MFIs in place to put in adequate measures through training and recruitment to enhance the competence and performance of its employees at the human and conceptual level of organization, as the best policies will be harnessed through a high competency and great intellectual ability. Microfinance Institutions of top management should embrace a culture of self-sustenance through exploring on ways to generate their own income and extending the same to farmers through the concept of saving mobilization. High levels of accountability should be put in place by the MFIs and the government in place to ensure the budgetary allocation of credit facilities to farmers is concomitant with income available and priorities should be given in terms of the needs on the ground at the local level. Research on how to get collaboration and joint ventures for funding and mobilization of resources should be done between the microfinance institutions and farmers aimed at curbing financial constraints witnessed through fully utilizing the mobile banking platforms available.

ABBREVIATIONS AND ACRONYMS

- ASCU** : Agricultural Sector Co-ordination Unit
- ERSWC** : Economic Recovery Strategy for Wealth and Employment Creation
- GDP** : Gross Domestic Product
- GOK** : Government of Kenya
- KTDA** : Kenya Tea Development Agency
- MFI**s : Micro-finance Institutions
- OECD** : Organization for Economic Cooperation and Development
- UN** : United Nation
- SME**s : Small and Medium Enterprises

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Microfinance is the practice of providing financial services such as access to credit, micro saving or financial literacy to poor or disadvantaged individuals (Omunjalu & Fondo, 2014). They go further to elaborate their definition by referring to microfinance as an institution that provide financial services to low income households, micro and small enterprises. According to Oware (2012), some of the key features associated with microfinance include: small loans for small scale farming activities; collateral free loans; group lending; target poor clients and provision of services in underserved communities.

Microfinance is based on the premise that the poor has the capability to repay the loans, pay the real cost of the loans and generate savings. Micro finance clients are typically self-employed, low income small scale farmers in both rural and urban areas. The clients are often traders, street vendors, small farmers, service providers, artisans, and small producers such as blacksmith (Kyale, 2013). The origin of microfinance can be traced back to 1976 in Bangladesh when the Grameen bank was set up by Mohammad Yunus. During the last two decades, several arguments exist that microfinance has increasingly been an effective tool for poverty eradication and improvement of social economic status of rural poor people (Kimanjara, 2013).

A report by Simpson and Buckland (2009), noted that microfinance address the issue of financial exclusion where people do not have sufficient financial services and cannot either sustain retirement savings or collect lending products to create productivity and wealth. Financial Sustainability describes the condition where the financial intermediation process functions smoothly and there is confidence in the operation of key financial institutions and markets within the economy. Meehan (2001) reported that the provision of financial services to the poor has a crucial role to play in providing household food security and alleviating poverty. If the credit is found to be adequate and productive, it will positively influence the optimum use of resources and enables the full application of technology (Vasthoff, 1968). It is usually considered as an essential input to increase agricultural productivity mainly that of land and labour, to boost food output

and income levels, to encourage employment and thereof to alleviate poverty. This is because smallholder farmers cannot implement improved agricultural technologies out of their own limited funds. Credit may provide them an opportunity to earn more money and improve their standard of living. Generally, farm credit is provided for relief of distress and for purchasing seed, fertiliser, cattle, farm implement and among other things. Agriculture has been the main contribution to Kenya's development process. It has been contributing to employment and foreign exchange, markets for the growing economy, raw materials and food, and capital for investment in other sectors. Generally, agriculture has contributed 25% of Kenya's Gross Domestic Product (GDP). The small scale farms which are also referred to as smallholdings, are equally important because they are known to create 60% of the labour force (GoK 2002), they also produce about 70% of marketed output (GoK, Republic of Kenya Statistical Abstract, 2005), and produce their own food. The growth of an economy in any developing country is greatly contributed by the agricultural sector. Kenya being in the category of the developing countries it is predominantly characterized by agricultural activities among them tea farming.

In Africa, Kenya is leading tea producer and fourth in the world behind India, China and Sri Lanka. Black tea is the country's leading agricultural foreign exchange earner. Kenya is a major producer of the best tea in the world. It has more than 110,000 hectares of land under tea. Tea is grown in the highlands where there is adequate rainfall and low temperatures. The tea industry is divided between small farms and large estates. The small – scale sector, with more than 260,000 farmers, is controlled by the Kenya Tea Development Agency (KTDA).KTDA manages all smallholding tea factories and is the largest single producer in the world. The agency manages more than 60 per cent of Kenya's production.

The industry supports directly and indirectly approximately five million people, making it one of the leading sources of livelihoods in Kenya. KTDA manages processing factories located across all tea growing counties. These factories are owned by tea factory companies; whose shareholders are the more than 260,000 small scale tea farmers who also supply leaf. Kenya tea is free of pests or diseases, so the farms are not sprayed with any chemical except fertilizer application to replenish soil nutrients. Tea growing areas receive 12 hours of sunlight daily and between 1,200-1,400 mm of rainfall spread throughout the year. This ensures that the supply of tea, both in quality and

quantity, is consistent throughout the year. Kenya development efforts since independence have emphasized Financial Sustainability of farmers through economic growth employment creation and provision of basic social services. Despite the efforts, the results are yet to be achieved (Kebubo and Mariara, 2007) with 50% of the population still mired in poverty with women and rural dwellers being particularly affected. This is despite the huge potential to reverse the trend through microfinance. According to Daley Harris (2009), Asia has the highest percentage of women clients, 86%, followed by Sub-Saharan Africa at 83% and Latin America at 80%.

In Kenya the Small and Medium Enterprise (SME) sector accounted for 74.2 percent of the population engaged in employment (Government of Kenya Economic Survey, 2003). The government has emphasized the importance of this sector by committing to develop five small and medium enterprise industrial parks in the key urban centers as outlined in Kenya's Vision 2030. Most Commercial Banks usually refuse to serve small scale tea farmers and micro-enterprises because of the high cost of small transactions lack of traditional collateral, lack of basic requirements for financing and geographic isolation. By doing so, these institutions ignore the enormous potential in talents and entrepreneurship of this stratum of society (Bhattacharjee, 2012). Providing access to financial services stimulate the independence and self-development of Small Scale Tea famers. This will help not only to improve small scale tea famers financially, but also will provide a way to maintain or improve their quality of life in the face of uncertainty. Microfinance institutions have tried to develop products and services that are responsive to cash flow cycles among tea famers. Also they have made considerable efforts in ensuring that the number of small scale famers who are limited to credit access has reduced globally (North, 2012).

Greenland Fedha Ltd was set up as a micro finance institution, in a breakaway from its traditional role of processing and marketing of the small holder tea farming in the country. Greenland offers loans at an interest rate of 8.31 per cent per annum to an estimated half a million small holder farmers through its nationwide network of 62 tea factories. The formation of Greenland Fedha comes as relief to the many farmers who grappling with finance problems. There has a bit of improvement made in the agricultural sector over the years, but the sector's performance has been going down due to the lack of funds. This calls for a lot to be done in order to raise credit access which is a vital component in the modernization of agricultural activities and increase in

productivity. Microfinances consist in lending funds to farmers in this case tea farmers for the purpose of using it to start or improve their tea farming activities and other businesses.

Due to the changing of the country's economic activities and banking systems it would be of great importance to provide the tea farmers with education on Financial Sustainability of tea farmers, encourage the tea farmers in Embu Sub County to invest more in savings and adopt the aspect of mobile banking services. This will help to ameliorate the Embu East sub county tea farmers to ameliorate their lives. Going by the above the microfinance organizations in Embu will have helped Embu East Sub county tea farmers to contribute to the Kenya's first Medium Term Plan of Kenya's vision 2030, the government plans at changing the agriculture sector into a vibrant modern sector, supporting value-addition through scientific and technological innovation, and most importantly access to finances and financial stability. Farmers face different challenges in raising capital, business management and planning which are the key ingredients in the survival of a small business therefore there is need to investigate influence of microfinances on Financial Sustainability of tea farmers in Kenya.

1.2 Statement of the Problem

The concern of this study is the overall aspect of microfinance and Financial Sustainability of Tea famers in Kenya, specifically Embu East Sub County which is the highest tea growing region in the county. The main cash crops in Embu County, are Tea and Coffee, but due to the recent poor pay of coffee farmers, people have cut off their coffee plantations and preferred tea farming. Embu East Sub County has the majority small scale tea famers and majority of people do farming as their main source of income. Most Microfinance institutions have gradually increased over the last years in Kenya and more specifically in most rural areas. Greenland Fedha Microfinance is based in the core area of Embu East County tea farmers rural are and 95% of the member of the microfinance are tea farmers. Despite their increase in numbers, there is no evidence regarding the ability of micro credit to sustainably increase Financial Sustainability among small scale famers especially the Tea Farmers. It is against this backdrop that the study intends to investigate the influence of microfinance on Financial Sustainability of tea farmers in Embu East sub county, Kenya.

1.3 Purpose of the study

The purpose of this study was to investigate the influence of microfinance services on Financial Sustainability of tea farmers in Kenya; a case of Greenland Fedha microfinance in Embu East sub county.

1.4 Research Objectives

The study was guided by the following objectives;

- i. To assess how savings mobilization, influence Financial Sustainability of tea farmers in Embu East sub county.
- ii. To establish the influence of farmer's financial education on Financial Sustainability of tea farmers in Embu East sub county.
- iii. To determine the influence provision of loans on Financial Sustainability of tea farmers in Embu East sub county.
- iv. To examine how adoption of Mobile Banking services influence Financial Sustainability of tea farmers in in Embu East sub county.

1.5 Research Questions

The study was guided by the following research questions;

- i. To what extent did savings mobilization influence Financial Sustainability of tea farmers in Embu East Sub County?
- ii. In what ways does farmer's financial education influence Financial Sustainability of tea farmers in in Embu east Sub County?
- iii. To what extent does provision of micro loan influence Financial Sustainability of tea farmers in Embu East Sub County?
- iv. How does adoption of Mobile Banking services influence Financial Sustainability of tea farmers in Embu East Sub County?

1.6 Significance of the study

This study was important to the stakeholders in Greenland Fedha microfinance, Sacco's, Commercial banks and the SME sector to properly understand the influence of microfinances on Financial Sustainability in Kenya. The findings were also be important to financial institutions on how to adjust to meet the need of Tea farmers through policy adjustments. The Study will also provide Insights to the government on the role of

Microfinance services in the success of Financial Sustainability of Tea Farmers towards the economic growth of Kenya.

The findings of the research would be of great use to policy makers and add value in decision making. In this case the results would help them revise the current or come up with new policies and guidelines that promote Tea Farmers. The study results would also add to the body of knowledge on issues related to tea farming. In this case, future researchers and academicians may use the results as a foundation of the research works in the same field

1.7 Assumptions of the Study

The study assumed that the data collection instrument has validity and reliability and is measuring the desired constructs respondents will give honest answers. It also assumed that some respondents were biased based on the questions. It also assumed that Green Land Fedha microfinance was to give their full cooperation and that the gaps and challenges to be highlighted was cause for review on plans and policies as well as the implementation process.

1.8 Delimitation of the Study

The study was carried out in Kianjokoma which is in Embu East Sub- County, a case of Greenland Fedha microfinance which is under KTDA. This study only focused on the following variables; saving mobilization, farmers' financial education, provision of loans and Adoption of mobile banking. The study targeted 1400 registered Tea farmers under Greenland Fedha and 5 employees.

1.9 Limitations of the study

The researcher encountered the following challenge, full disclosure of information from Greenland Fedha employees and tea farmers on the questionnaire administered was a challenge, this was solved by assuring the respondents the research is for academic and researcher will not disclose any names of the respondents.

1.10 Definition of significant terms

Financial Sustainability: The difference of wealth increase before and after saving which has the ability of meeting the needs of the future without negatively affecting the present.

Financial Management Education: The ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being

Loans: It is an amount of money that is borrowed, often from a bank, and has to be paid back, usually together with an extra amount of money that you have to pay as a charge for borrowing.

Microfinance: Financial services especially in the form of microloans provided to impoverished individuals and groups in poor and developing regions.

Mobile Banking: A service provided by a bank or other financial institution that allows its customers to conduct transactions remotely using a mobile device

Saving mobilization: It is a way of encouraging farmers to have adequate resources through a well channeled method of pooling resources together for future use.

1.11 Organization of the Study

This study is organized into five chapters. Chapter One is introduction covering the background to the study, statement of the problem and purpose of the study, research objectives, research questions, significance of the study, assumption of the study, limitation of the study, delimitation of the study and definition of significant terms Chapter Two covers literature review from various sources to establish work done by other researchers, their findings, conclusions and identification of knowledge gaps which forms the basis of setting objectives and research questions of the study. Theoretical, conceptual frameworks, research gap and summary of literature are also explained.

Chapter Three covered research methodology, research design, target population of the study, sample size and sampling procedures, data collection procedures, data collection instruments, validity of instruments, reliability of instrument, data analysis methods, ethical considerations and concludes with operational definition of variables.

The fourth chapter covers data analysis, presentation and interpretation, while chapter five; covers summary of findings of the study based on the four objectives, discussion of the findings, conclusion and recommendations for the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covered relevant literature on the influence of microfinance on Financial Sustainability of tea farmers in Kenya. The chapter also offers a global, regional and local review of the topic of the study, theoretical framework, conceptual framework, conceptual framework, research gap and a summary of literature review on which the study is based.

2.2 Concept of Microfinance

The practice of micro-credit dates back to as early as 1700 and can be traced to Irish Loan Fund System which provided small loans to rural poor with no collateral. Over the years, the concept of micro-finance spread to Latin America, then to Asia and later to Africa. The today use of the expression micro-financing has its roots in the 1970s when organizations, such as Grameen Bank of Bangladesh with the micro-finance pioneer Mohammad Yunus, were starting and shaping the modern industry of micro-financing. The term microfinance is provision of financial services to low income clients. Financial services generally include savings and credit; however some finance organizations also provide insurance and payment services. In addition to financial intermediation, many MFIs provide social intermediation services such as group formation, development of self-confidence and training in financial literacy and management capabilities among members of a group.

In Kenya, micro-finance movement gained momentum in the late 1980s as a result of exclusion of large proportion of the population from the formal financial institution mainly banks. Micro-finance emerged with the aim of filling the gap left by banks in providing credit to individuals, micro, small and medium enterprises which were on the rise during this period. Ogindo (2006). In the early 1990s with the opening up of political space and ensuing economic disturbances, the need for credit by individuals, micro, small and medium enterprises increased and this led to the recognition of micro-finance institutions in Kenya. Among the pioneer MFIs in Kenya are Equity Building Society

(currently Equity Bank), Family Building Society (currently Family Bank) (Mwangi, 2011).

MFIs have been important sources of credit for a large number of low income households and MSEs in the rural and urban areas of Kenya, Wambugu (2007). MFIs gained prominence in Kenya due to the fact that the formal banking sector since independence up to late 2000 regarded the informal sector as risky and not commercially viable. Ogindo (2006). The MFIs developed and offered new, innovative and pro-poor modes of financing low-income households and MSEs based on sound operating principles. Since their inception, MFIs have greatly contributed to social economic empowerment to the beneficiaries and their dependants. Kamau (2010).

2.3 Financial Sustainability of Farmers

Financial Sustainability is one of the key characteristics of economic entity's financial condition, as it reflects degree of its stability, independence from unexpected changes in market environment and, therefore, the security of investing in the given company. According to Kreynina (2005) Financial Sustainability lies in the stable financial position of the enterprise and is ensured by a sufficient degree of equity in the composition of the sources of its financing. This means that the borrowed funding sources are used now only to the extent that can be provided with complete and timely return, and therefore, the amount of short-term liabilities of the company shall not exceed the value of liquid assets.

Long-term survival and sustainability is critical for an MFI in being able to reach its target clientele and cover administrative and other costs. While social goals of reaching the poorest and poverty alleviation are valid, sustainable standing on one's own feet is as true for low income households receiving microfinance as for microfinance itself. Sustainability for the microfinance has internal and external implications. Internal in terms of deposit and savings mobilization, financial performance, staff motivation, loan administrative costs. While external in terms of availability of funds for loan disbursement, grant for community organizing (Morduch, 2007). The agriculture industry is no different, especially farm businesses.

Microcredit in Bangladesh lifts 5% of its borrower out of poverty each year. Pitt and Khandker (1998) and Khandker (2005) prominently reinforced the finding that

microcredit is effective in reducing poverty. (Boone 1996) Microfinance approach allows for banks and NGOs to flourish even when effectiveness of foreign aid to ease burdens of the world poor is facing criticism for being corrupt. Odel (2010) Microfinance promotes assets growth, consumption smoothing and occupational mobility. Cheston and Kuhn (2002) MFIs intervention has resulted to improved decision making, improved self-esteem and self-confidence and expanded social networks enabling women to participate in areas traditionally dominated by men.

The Organization for Economic Cooperation and Development's (OECD) landmark study, *Improving Financial Literacy*, concluded that financial understanding is low among consumers across their 30 member countries and that consumers, among other things, feel that they know more about financial matters than is actually the case. The surveys also reported that consumers believe that financial information is difficult to find and understand (OECD 2005: 98). Hilgert et al. (2003) formed a "Financial Practices Index" based upon (self-benefiting) behavior in cash-flow management, credit management, saving and investment practices. When they compared the results of this index with scores on a financial literacy quiz, they found a positive relation between financial literacy scores and Financial Practices Index scores. Their results suggest that financial knowledge is related to financial practices. Although financial behavior seems to be positively affected by financial literacy, the long-term effects of financial education on financial behavior are less certain.

Agriculture has been the main contribution to Kenya's development process. It has been contributing to employment and foreign exchange, markets for the growing economy, raw materials and food, and capital for investment in other sectors. Generally, agriculture has contributed 25% of Kenya's Gross Domestic Product (GDP). The small scale farms which are also referred to as smallholdings, are equally important because they are known to create 60% of the labour force (GoK 2002), they also produce about 70% of marketed output (GoK, Republic of Kenya Statistical Abstract, 2005), and produce their own food. The growth of an economy in any developing country is greatly contributed by the agricultural sector. Kenya being in the category of the developing countries it is predominantly characterized by agricultural activities among them tea farming. (CSA, 2007) argue that many African countries are dominated by traditional micro holdings of the subsistence agrarian type, with less than two hectares of land being average holdings.

The main component of the output on those farms is food crops, livestock and livestock products. Some recent agricultural growth accelerations notwithstanding, the sector's growth remained insufficient to adequately address poverty, attain food security, and lead to sustained GDP growth on the continent (Nyoro, 2002).

For the longest time agriculture has been the main contributor of the Kenyan economy hence, it is very vital to the Kenyan society. It has helped to raise many people from absolute poverty, it has also helped to contribute in providing food security and economic growth. Apart from Kenya, agriculture is also the backbone of many African countries (World Development Report, 2008). About 86% of the poor and the rural folks is estimated to depend on agriculture for their livelihoods and also provide jobs close to 1.3 billion smallholder farmers (Tita, 2009). World Bank Report (2008), states that agriculture in developing countries contribute an average of 29% to Gross Domestic Product (GDP) and also employs about 65% of the economically active labour force of the population, from production to marketing of various agricultural produce (World Bank, 2008).

Ogundeji (1998), stated that agricultural business can be financed just like any other business activity through microcredit personal savings, hire purchase and cooperatives societies, private placements, partnership and friends or family assistance. Microcredit acts as an important source of funds to farmers which can be used in the production process. The success or otherwise of every farming system to a large extent, depends on getting a good farmland, workforce, capital, managerial acumen and dexterity (Awotodunbo, 2008). There has a bit of improvement made in the agricultural sector over the years, but the sector's performance has been going down due to the lack of funds. This calls for a lot to be done in order to raise credit access which is a vital component in the modernization of agricultural activities and increase in productivity.

An often-mentioned impediment to agricultural productivity in Kenya especially among small-scale farmers is the lack of credit. It can be argued on the basis of the above mentioned findings that increased access to credit can positively influence productivity by increasing the farm's capital base. More directly, access to credit enables farmers to purchase farm materials such as fertilizers, access extension services, improved technology, improved seeds and herbicides that are important for enhancing productivity.

Lack of working capital and low liquidity limit the farmer's ability to purchase productivity enhancing inputs like seeds, fertilizers and pesticide. In spite of the relatively high adoption rates of inputs like fertilizers, the quantities used are low and therefore, hybrid variety crops that are dependent on fertilizers may not attain their potential production (NyoroJ, 2002). The average production efficiency levels are higher among producers who have access to formal credit, (Awudu, 2000). Access to credit resulted to higher technical efficiency in maize production in Kenya, (Kibaara, 2005). 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, Deposit Taking Micro Finance Bill 2005 and the SACCO Societies Regulatory bill, 2004.

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 microfinance 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). As a follow up on SRA, the Agricultural Sector Co-ordination Unit (ASCU) has fast tracked the rural financial services by establishing a thematic group on inputs and rural financial services with an overall objective of developing an Integrated Farm Input Strategy.

2.2 Saving Mobilization and Financial Sustainability

Saving mobilization done by the financial system is crucial to the provision of financial resources for investment. The savings that are done by households provides a low cost, stable, and low risk source of financing compared to, other capital flows like, international private capital flows (African Development Bank, 2009). A key component of stable and efficient financial sector development in savings mobilization have been created because of these advantages. African Development Bank, (2009) states that in relation to financial access, mobilization of saving has a role within the economy is a

clear theoretical and policy goal. For instance, the African Development Bank states that improving “mobilization of domestic resource... will require deepening domestic financial intermediation to mobilize savings” and that “Domestic savings may turn out to be significant and, possibly, a cheaper alternative to external sources of financing than bond financing.”

However, there have been concerns raised on whether such savings mobilization is achievable for the reason that, poor households are seen to have very limited surplus funds for savings. Keynes (1936) first raised the dynamic of savings as being constrained by income at a macroeconomic level which can also be considered at a microeconomic level. Microfinance has researched and found out that poor households with subsistence incomes had no savable surpluses and that this has led to the reason for them having no savings (Bhaduri, 1977). Financial Sector Deepening Program, 2009; African Development Bank, 2012, found out that in the recent household survey, that the most frequently cited reason for not having a formal savings account is a lack of income. Consultative Group to Assist the Poor, (2009), acknowledges that some indication shows that formal savings can be pro-cyclical when related to deposit bases because withdrawals are made rapidly in response to negative shocks to households. The Consultative Group to Assist the Poor also found out that “under normal circumstances” aggregate balances for low-income savings accounts are stable.

Despite this, a number of challenges have been experienced; savings is a very common goal in the informal sector, including, for example, savings clubs or rotating lending organizations, and poor households actively use them to accumulate savings, especially for lump sum needs such as education, health care or life events, such as marriages or funerals (Collins et al., 2009). Studies of microeconomic financial behavior argue that, within the formal and informal sector poor households have a savings capacity which enables them to provide for non-subsistence expenditure (Patten and Rosengard, 1991; Rutherford, 2000; Banerjee & Duflo, 2007; Collins et al., 2009). Majority of microfinance-orientated institutions offer savings accounts. 92% of these microfinance-orientated institutions in the year 2008 had saving accounts, which was a rise from 41% in 2003, and studies have found out that, where specific and structured products are offered, these assist in helping the farmers to achieve Financial Sustainability and savings (Ashraf et al., 2006b; Collins et al., 2009; Duflo et al., 2006).

This has led some researchers to have suggestions that savings from farmers can be able to contribute to savings mobilization and increases in Financial Sustainability (Karlan, 2009a; Central Bank of Kenya, 2010a; African Development Bank, 2009). Still, these studies only solve the short-term savings, and do not solve for long-term savings and asset accumulation. Collins et al., (2009), used “financial diaries” and found out that whilst poor households can save for short-term lump sums, which make them, remain very constrained in their ability to save long-term. This shows that the basic challenges of savings are limited by income and consumption over the long run remains relevant.

According to (Loayza et al., 2000) it is further supported by macroeconomic level findings that savings measured by, savings as a percentage of GDP are strongly correlated with increased income at both an individual and national level. For developing countries it is estimated that, with a doubling of income per capita, there is an increase in the long-run private savings rate of 10% points of disposable income. However (African Development Bank, 2012), in developing economies, the use of formal financial services is correlated with income, with adults in the top income quintile being five times more likely to save formally than the median household. In addition, (Loayza et al., 2000) found out that recent savings rates have high serial related to past saving, this suggests that savings are not only a function of disposable income, but also a habit which has to be established in order for people to acquire financial stability. Poor households’ savings currently remain largely outside of the formal banking system. Informal savings clubs have exceeded the formal savings accounts by far, with 34% of savers making only informal savings and 100 million adults using them in sub-Saharan Africa and (African Development Bank, 2012). This has continued dominance of informal savings amongst poor households means that intermediation and pooling of funds from them through the formal financial system remains limited.

Generally, it is possible that financial access could mobilize savings which requires a shift of savings from informal to formal institutions. Until now a shift like this has been limited in sub-Saharan Africa. In addition, income is a crucial barrier to formal savings by poor households and this is a problem that can only be solved by broader economic development.

2.3 Farmers' financial education and Financial Sustainability

Levels of financial literacy across the world remain very low, although there is not much literature to support this assertion. Connolly and Hajaj (2001) state that low levels of financial literacy have been closely linked with financial and social exclusion, resulting in increasing levels of wealth inequality in society. Bernheim and Garrett (2003) established that high percent of consumer financial literacy programs started in the late 1990s or 2000. Lack of financial literacy and capability has particularly serious consequences for those on low incomes, for whom costly mistakes can have grave consequences. Hilgert, et al. (2003) found a very strong and significant link between knowledge and behavior across the range of personal finance activities. Further, the most effective ways to learn personal financial management skills were identified to be the media and video presentations, while informational seminars and formal courses were rated lowest. Personal experience, friends and family were the main sources of knowledge while formal education like high school education and educational sessions either to the job or outside of a school environment was rated lower across all financial practices and skill levels. Unfortunately, the study does not provide conclusive evidence that financial literacy leads to sound personal finance.

Moore (2003) also shows that borrowers who took out high-cost mortgages display little financial literacy. Financial literacy is positively related to investment behaviour. Individuals who answer all three financial literacy questions correctly are more likely to have an investment related custody account and a voluntary retirement savings account. Financial literacy also relates positively to the incidence of a mortgage while we find no such relationship for consumer debt. Dixon (2006) identifies two main approaches in motivating financial capability. The first and most common approach is financial education, advice and guidance. The second relates to infrastructure, which involves „providing the best possible structures to make it easier for people to act in more financially capable ways, thereby [enabling them to become] more engaged and interested in improving their financially capability“ (Dixon, 2006).

Lusardi & Tufano (2008) find that those who severely underestimate the power of interest compounding are more likely to experience difficulties repaying debt. Cohen et al (2008) showed that financial mistakes are most prevalent among the young and the

elderly demographic groups that display the lowest levels of financial knowledge and cognitive ability.

Financial capability, which is as a result of financial literacy, has featured increasingly in both academic and policy debates over the past 5 to 10 years. In the United States, it has been part of the policy agenda for longer, although it has tended to deal with the much narrower concept of financial literacy, focusing on knowledge and skills rather than behaviour (Dixon, 2006). O'Donnell and Keeney (2009) on the study carried out in late 2007 and early 2008 revealed that people are generally competent in managing their money on a day-to-day basis. However, almost half the population exhibits some weaknesses in relation to financial capability, particularly with regard to planning ahead, choosing financial products, and staying informed. Among the most vulnerable groups were those on lower incomes and those with lower levels of education. A look at the Kenyan context shows that there are a lot of other issues that may appear insignificant when the business is starting which can bring down the business at the end. Also, there is a lot that needs to be done in all fields that may prevent the loss of jobs, revenue and increase of poverty in the communities by preventing failure in the businesses. Apart from the financial problems that may affect the businesses, the input of the owner and the business skills (Smith and Perks, 2006) are very important in keeping the business afloat.

2.4 Access of loans and Financial Sustainability

Several commitments have been recorded in favor of promoting microfinance in the least developed countries as an intervention to alleviate poverty and especially the farmers. The UN report (2005) has stressed the importance of private enterprise as an elevator of development, it has also highlighted the Africa's need to improve its investment climate and promised to support the region by promoting increased access to finance with strong support for the development of microfinance in Africa included. The UN also promised that through deeds by African Governments and the relevant international financial institutions they would increase the availability to financial services through increased partnerships between commercial banks and microfinance institutions, and also through support of diversification so that financial services are available to the members of the microfinances and effective use of remittances (United Nations, 2005).

Microfinance programmes play the role of providing small amounts of capital to entrepreneurs for many years. Microfinance sustainability may be a main component in creating sound financial sustainability structures in the world's poorest countries. It is often the first step in launching Small Micro Enterprises, which is the start of what should be a continuous sequence of credit access necessary to support the Financial Sustainability of farmers in developing countries (United Nations, 2005). Developing a sustainable microfinance industry (2005) stated that Ugandan Government has far much established an outreach program to support Microfinances than the Kenyan government. The government of Uganda has established and designed a multi donor, private sector driven microfinance outreach plan to spread sustainable microfinance services to undeserved areas in Uganda.

This microfinance outreach is aimed to benefiting as many active rural poor as possible, in support of the government's objective of eliminating poverty and building a prosperous and stable nation (Developing a sustainable microfinance industry 2005). The vision of this microfinance outreach plan is to develop a coordinated, professionally efficient and sustainable microfinance industry providing affordable financial services especially to the rural Ugandans. The objectives of this microfinance outreach plan have been identified as increasing savings mobilization, assisting microfinance apex institution to support and build capacity of their member institutions, developing and building capacity in the microfinance training market and enhancing the rural population's capacity and business orientation to access financial services for income generation (Developing a sustainable microfinance industry, 2005).

The lack of funds sets SMEs back by limiting their growth and sustainability (Cook, 2001). UNIDO (2003) also argues that the growth and the competitiveness of women entrepreneurs have been hampered by the lack of funds, training skills and weak government infrastructure in promoting entrepreneurship projects. While the lack of the necessary training and education to seriously affect the efficiency of entrepreneurs, Boter and Lundstrom (2005) explains that unstable political and economic environment, complex taxation, corruption, poor laws, long waiting times for approval of licenses and 21 registrations are common problems faced by entrepreneurs in most developing countries such as Kenya.

Luyirika (2010) carried out a study on the role of microfinance in the socio-economic development. As one of the ways of improving the financial assistance towards SMEs growth, the findings revealed that microfinance institutions could increase the money given to their clients so as to allow them expand and diversify their investment opportunities, reduce the interest rates so that all the profits realized do not go towards paying the interest and also increase the grace period to allow the growth of the enterprise. Luyirika (2010) explains that small amounts of money given at a time affect the growth of the enterprises. It was also noted that there were too many deductions from the money disbursed initially yet the whole amount was paid back. The respondents reported that they paid even for what they had not received and what was annoying was the deductions made from the small amount given, thus the money given was lowered even more.

2.6 Mobile banking and Financial Sustainability

Mobile banking has been defined differently by different authors. George (2005) stated that mobile banking as the carrying out of banking business with the help of a mobile device like a Personal Digital Assistance or a mobile phone. Porteous (2006) defines mobile banking as including mobile payment but involves access through mobile devices to broader range of financial services like account-based savings or transactions product offered by bank. According to Porteous, both mobile payment – which he defined as financial transactions undertaken using mobile devices such as a mobile phone – and mobile banking, are subsets of a broader domain of e-payment and e-banking respectively. In this study, Porteous' definition is adopted and mobile banking is broadly defined here to include mobile payment. Yet other authors like Rajnish and Stephan (2007) defines mobile banking as the provision and availing of banking and financial services with the help of mobile telecommunication devices. The scope of the offered services may include facilities to conduct bank and stock markets transactions, to access customized information and to run accounts. Peevers et al. (2010) shows mobile banking as applying to customers using their mobile device to perform banking activities. They also looked at mobile banking as services diversification, in that, banks offer increased value to customers. Wessel and Drennan(2010); Zhou (2011) also defined mobile banking as an emerging facet of electronic banking and other financial services. Mobile banking is one of the creative services which have been adopted by the bank and other institutions that are dealing with financial services in the market (Paul 2012).

Nir and Acharya (2012) found out that it is possible for mobile banking to support many services. It has been found out to be a social economic development in the emerging markets. Particularly, mobile banking services facilitates a person to person transfer of funds which is very important for emerging economy because it gives financial services to the unbanked. Nir and Acharya (2012), also found out that mobile banking assists in facilitating emergency responds and disaster recovery. InfoDev (2006) stated that mobile banking has been found to a potential service to offer customers by the mobile operators and therefore it has increased their loyalty while generating fees and messaging charges. Financial institutions which have had difficulty providing profitable banking services through traditional channels see mobile banking as branchless banking (Ivatury and Mas 2008; Donner and Tellez 2008).

Among the many benefits of mobile banking being person to person transfer of funds and long distance remittances, Donner and Tellez (2008) recorded that most mobile banking service in developing countries like Kenya has enabled users to do three different types of transactions: First is to Store value in an account accessible via a mobile phone. In this case, if the user already has a bank account, their bank account is linked to it and if not, the process creates a bank account for them. Second is to convert value in or out of the store value account. In this case, if the mobile banking account is linked to a bank account, users can visit the bank to carry out the cash transactions. If otherwise, the user can visit the GSM operator retail stores and in a more flexible situation, visit the corner kiosk or grocery shops to perform their transactions. And finally, transfer stored value between accounts linked to two mobile phones by using a set of SMS messages and pin numbers.

In addition, Ignacio Mas (2010) stated that mobile banking can also be beneficial to all people in many different ways but can only be possible if everyone has access to secured saving accounts services through technology enabled retail network, and connected to the national payment systems like government, commercial providers and households. Ignacio Mas (2010) studied that mobile banking is very essential to poor people because it offers them an opportunity to accumulate balances for lump sum investments in their businesses. It can also help to notify them against unexpected events and connect to wider economy through electronic remittances, salary payments and social payments. Women also would benefit as they could accumulate savings outside of homes thereby

increasing their decision-making power over households' resources allocation. Ignacio stated further that many benefits could also accrue to government agencies.

First and foremost, the development ministry could ensure that households have savings tools to self-insure against shocks and accumulate funds to purchase other development inputs. Secondly, the central bank could gain a better handle of the velocity of money in the economy by reducing cash holding under the mattress. Thirdly, it could benefit the ministry of finance as it affords her the opportunity for cost effective collection of taxes and fines. Also it could benefit the social ministry who could distribute welfare payments more cheaply, effectively and directly into people's accounts even if they live in remote rural towns. Mobile banking could provide an extended history of transactions which could make tracing suspicious financial transactions quite easy. Finally, it can help politicians connect the previously disenfranchised people. This access reduces the vulnerability of the poor and hence tends to build or promote political and social cohesion.

Georgi and Pinkl (2005), Rajnish and Stephan (2007) defined mobile accounting as transactions based banking services that revolves around a standard bank account and are conducted via mobile devices. According to Rajnish and Stephan (2007), classified services offered by mobile banking into three categories: brokerage, mobile accounting and financial information. Mobile accounting is further divided into account operation and account administration. Account operation are the activities that involve monetary transactions which may involve an external account such as when paying bills, or internal 13 accounts such as transferring funds from one saving account to another for example, transfer of funds between sub accounts, money remittances. Account administration are the activities that aid an account holder to maintain their account and this may include access administration, cheque book requests, change operating accounts and block lost cards.

Mobile banking is mobile brokerage is another service that is offered by mobile banking. In the context of banking and financial services (Georgi and Pinkl 2005) stated that it is mobile financial services of non-informational nature revolving around a securities account. Also it is defined as the intermediary services related to the stock exchange center like sales and purchases of stocks, bonds, funds, derivatives and foreign exchange among others (Rajnish and Stephan 2007). Just like mobile accounting, it is also divided

into two categories - account operation and account administration. This helps to differentiate between services required to operate a securities account and services required to administer such accounts. Therefore, it requires informational services usually offered alongside mobile financial information. Account operation here is primarily concerned with the sale and purchase of financial instruments such as placing and cancellations of orders to sell or purchase securities. Account administration could be in the form of access administration, where a mobile device can be used to modify account details.

2.7 Theoretical Framework

A theoretical framework refers to a group of related ideas that provides guidance to a research project or business endeavor. The study has been explained using two theories to guide the research

2.7.1 Game of Theoretical Approach in Group Lending

Classical financial institutions require collateral for loan to be advanced to an individual. Low income and lack of security exclude low income earners from funds. In contrast, MFi's adopt group peer pressure and social selectivity to increase repayment rates and hedge against default risk through group lending. The group is responsible for a loan given to specific individual. As group forms voluntary, no group is willing to accept a member whose reputation is questionable. Murdoch (1999) in case of Grameen bank, the sanction for default is lasting credit denial for all groups' members.

Guttman (2006) distinguishes three major problems responsible for low credit provision for poor in standard banking systems. Adverse selection; Ex ante moral hazards occurring when borrower has incentives to take too high risks in investing loans; ex post moral hazard while a borrower decides to deny possible profit to avoid loan repayment. Through systematic information the threats can be investigated.

Sachs (2005), group lending decreases transactional cost which is a limiting factor for standard banks. Approach also interesting to counter often assumed insufficiency credit worthiness of the poor, a rational shared by standard banking institution (Romanes, 2008). The design of groups lending is formalized by game theory approach. The design involves a trigger strategy. The player (MFi's and five borrowers) cooperate until one 25 defaults, where MFi's deny further was to group pushing the trigger. Assumption made is that lending is done simultaneously to group members. Player is MFi's and player is

group. Basic play resembles prisoner dilemma and social optimum is achieved if both players cooperate. That is, MFi's grants credit and all group members eventually pay. Where members use the loan for a highly risky project and eventually fail to pay, the sanction is denial of the loan in future.

To ensure long term cooperation on group part, and continuous repayment of loans, the discounted profit in every period for cooperating from player 2 has to exceed the sum of discounted profits from defecting once. Guttman (2006) study though without game approach argues that "assertive matching" process of group formation separating risky from safe borrowers would only occur in absence of dynamic incentives such as proposed trigger strategy. *Ceteris Paribus*, he argues that the marginal benefit of having a safer partner would decrease with higher income and with higher success probability of one's investment project. However, he assumes throughout the feasibility of side payment between both borrowers, where one pays a certain amount to share cost if his own player succeed and that of his partner fails. In absence of the assumption the results of assertive matching holds also for dynamic setting. Hence a trigger strategy is also stable in non-game theoretical analysis which supports its robustness.

2.7.2 Microfinance Change Theory

According to Srikant, Epstein and Yuthas (2008) Microfinance may be one of the world's most powerful new solutions to poverty, as well as to the wars, diseases and suffering that poverty ignites. Micro finance supporters argue that microloans increases household consumption, give women clout in their communities and improve the nutrition of young children (Shahidur, Khandker, 2005). Critics in contrast, contend that the world most vulnerable people are often in no position to take on the risk of entrepreneurship. This they support with research findings showing that microfinance clients have been known to scrimp on food, sell their furniture, and borrow from loan sharks while also taking second class jobs to pay off their loans.

Microfinance therefore overall fails to find its way to world poorest people (Susy, Lisa, 2002). Microfinance varies so much in their mission strategy which makes it a challenge to assess their impact. Few MFIs have explicitly formulated their path towards desired outcomes. Without clear theory of change, these MFIs invest resources and track outcomes that have little to do with their ultimate goals. The ultimate goal for most of the organization is to alleviate poverty by giving people access to credit. The theory of

change for this organization stipulates that by building financial institutions for poor, the clients will eventually be able to move from poverty. Just like banks, they track financial outcome such as loan repayment, loan size and number of clients.

This is an egregious oversight as the vast majority of micro finances clients have no prior business or banking experience. A client centered theory as opposed to institution centered theory as opposed to institution centered theory as opposed to institution centered theory is critical for success in improved standards of living. This is to allow for inclusion of MFIs success and borrowers profitability. This calls for financial education, management training, value chain support and social services. Apart from income, health nutrition, housing and education should be used (Marc and crane, 2007). Institutionalized approach can hide how poorly MFIs clients are faring. MFIs often lend to groups and hence do not report when individual client within the group defaults. High loan repayment rate do not necessarily indicate wealthier, happier clients. Another common indicator of MFIs health is the average size of its loans yet a study in Bangladesh found that the longer the line of credit, the more the families borrowed rather than saving some of their credit for future use. These families continued to borrow to borrow from informal sources plunging them into excessive indebtedness (Manfred and Sharma, 2002).

Thus, although organization PAR might be zero, the percentage of clients moving out of poverty might be unknown. Client with training increased their profits, reinvested into business and maintained better records than those not trained (Dean and Valdiva, 2006). Client centered approach also emphasize on the need to measure whether their loans are actually moving people out of poverty. Grameen bank does this with its poverty index. This includes social economic indicators such as school age children going to school age whether the \members are free from treatable health problems. Such measures can show whether organization are achieving their social goals. Client centered approach requires that the MFIs staff apart from competence in banking need also to be conversant with human services. The MFI s ought to consider success of micro enterprises critical both to alleviate poverty and drive financial returns to MFIs. Although the ranks of MFIs are swelling, the MFI s remembers that their clients are often in business by necessity, rather than by choice. They are not entrepreneurs in their traditional sense. If their communities had jobs and if their families situations permitted it, they would be employed.

2.8 Conceptual Framework

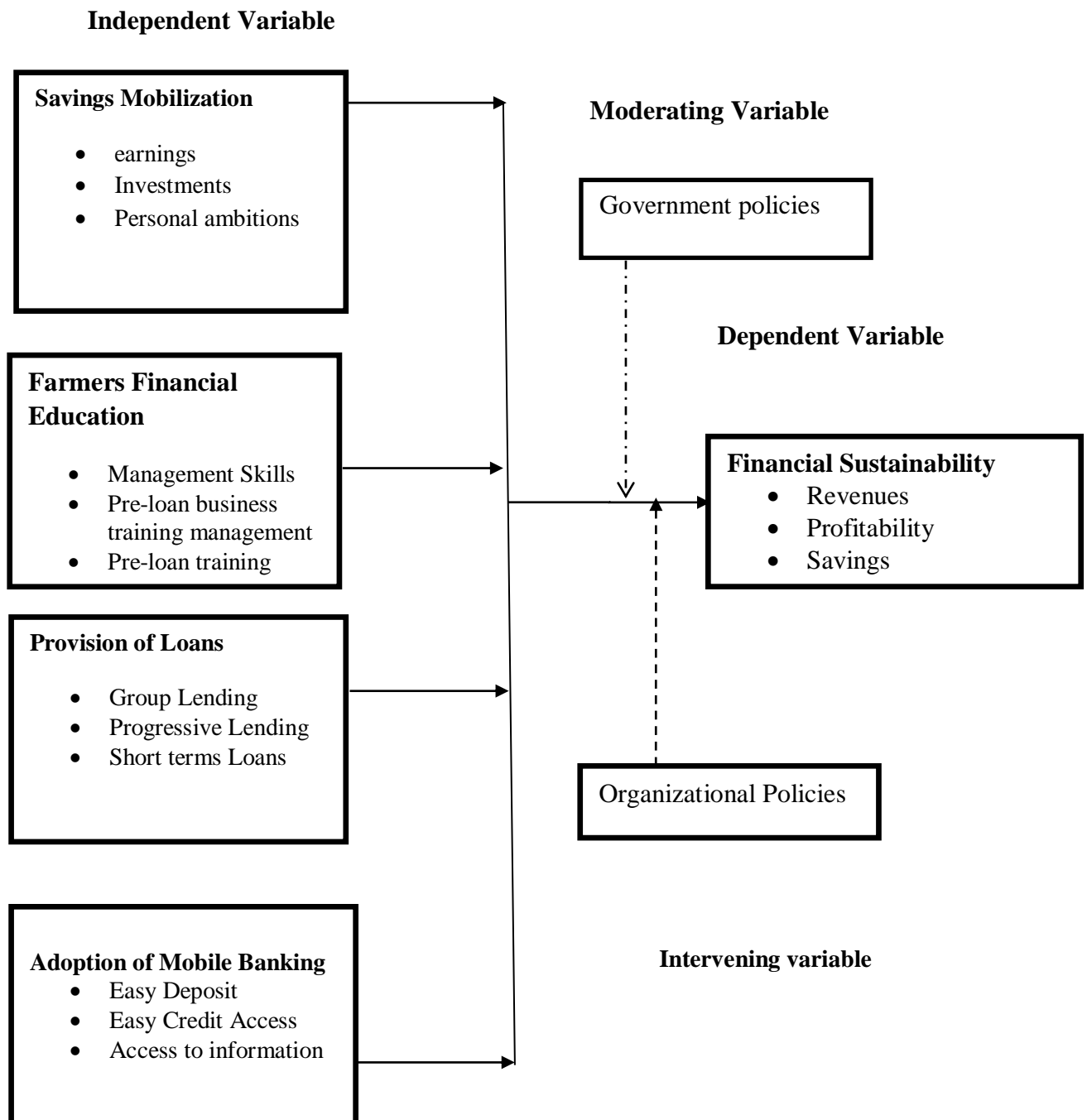


Figure 1 Conceptual Framework

2.9 Summary of literature Review

Accessibility of MFIs to the people is not a sufficient condition in ensuring improved standards of living for the people. Mahmmod (2011) explains that focus by MFIs on growth at the expense of social aspects negatively impact on the work by MFIs. The social aspect therefore needs to be intertwined with financial ones. Micro Summit (2012) agreed that those who sell MFIs products have a duty to know their customers, design and sell products that meet their needs. D. Collins et al (2009) explains that the world poor have three broad financial goals. One is to regularize the financial flows of money followed by better preparations to cope with emergencies and also school fees with investment coming in last. MFIs failure to intertwine social and financial aspects results to policies that favour institutions growth at the expense of the clients. MFIs failure to integrate social and financial aspects results to policies that favour institution growth at the expense of the clients.

2.10 Research Gaps

Variables	Source of literature	Findings	Knowledge
Savings Mobilization	Patten and Rosengard, 1991; Rutherford, 2000; Banerjee & Duflo, 2007; Collins et al., 2009).	Studies of microeconomic financial behavior argue that, within the formal and informal sector poor households have a savings capacity which enables them to provide for non-subsistence expenditure	The authors acknowledged that within the formal and informal sector poor households have a savings capacity which enables them to provide for non-subsistence expenditure. However, the authors failed to identify ways of mobilizing households to save
Farmers Financial Education	Hilgert, et al. (2003)	found a very strong and significant link between knowledge and behavior across the range of personal finance activities..	The author identified there are very strong and significant link between knowledge and behavior across the range of personal finance activities. However, the author failed to identify Further, the most effective ways to learn personal financial management skills were identified to be the media and video presentations, while informational seminars and formal courses were rated lowest
Provision of Loans	UNIDO (2003)	Found out that growth and the competitiveness of women entrepreneurs have been hampered by the lack of funds, training skills and weak government infrastructure in promoting entrepreneurship projects.	The study failed to acknowledge that Microfinance sustainability may be a main component in creating sound financial sustainability structures in the world's poorest countries
Adoption of Mobile Banking	Nir and Acharya (2012)	The author found out that it is possible for mobile banking to support many services. It has been found out to be a social economic development in the emerging markets.	From the study, it was clear that mobile banking services facilitates a person to person transfer of funds which is very important for emerging economy because it gives financial services to the unbanked. The author failed to acknowledge that

		Particularly, mobile banking services facilitates a person to person transfer of funds which is very important for emerging economy because it gives financial services to the unbanked.	mobile banking service in developing countries like Kenya has enabled users to do three different types of transactions:
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CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discussed methods used in undertaking the study. It contained research design, target population, sample size and sampling procedure. It also contained research instruments, data collection procedures and data analysis used, ethical consideration and operational definition of variables.

3.2 Research Design

This study adopted a descriptive research design. This particular approach is helpful in saving time, effort, and costs that would otherwise be incurred in collecting data over several time periods, (Sekaram, 2007). In addition, descriptive survey design is more fitting because it allows respondents to give pertinent information on important issues and ability to effectively assemble data from extensive variety of individuals and informative settings. In addition, the research design allows the research to effectively assemble data from a variety of responses and informative settings. Other research designs were omitted because they were not deemed suitable for this study. The data was collected, scrutinized and presented with the help of tables and short paragraphs explaining the findings.

3.3 Target Population of the Study

According to Oso and Onen (2005) target population is the total number of the subjects of interest to the researcher. In Embu county, Green Fedha has a total population of 1400 client (tea farmers) and a total population of 5 employees (Green Fedha, 2018). The target population for this study consisted of 1405 respondents. The target population is presented in Table 3.1.

Table 3.1: Target Population

Respondents	Target Population
Tea Farmers	1400
Employees	5
Total	1405

Source; (Green Land Fedha, 2018)

3.4 Sample Size and Sampling Procedures.

Sampling is a procedure, process or technique of choosing a sub-group from a population to participate in the study Kothari (2004). A sample is a smaller group or sub-group obtained from the accessible population (Mugenda & Mugenda, 2010).

3.4.1 Sample Size

Since the target population of small-scale farmers was large the researcher used 10% of the total population of small-scale farmers to get a sample size of 140 small scale farmers. Kothari (2004) says that a representative sample is one which is at least 10%-30% of the population thus the choice of 10% is considered as representative of the population. Since the total population of employees is small the researcher did not sample hence it used census, which is capturing the entire population of the employees. The study used 145 respondents as the sample. The sample size was shown in the table 3.2.

Table 3.2: Sample size

Respondents	Target Population	Sample Size
Tea Farmers	1400	140
Employees of Green Fedha	5	5
Total	1405	145

In this study the total sample size of all respondents was 145 respondents

3.4.2 Sampling Procedure

Stratified random sampling was used in this study to identify the participants as it gave everyone in the population an equal chance to be selected as part of the sample that was ultimately used. Stratified random sampling is a technique whereby a population is divided into mutually exclusive groups called strata and then a simple random or systematic sample is selected from each group or stratum (Johnson & Christensen 2004:207)

3.5 Data Collection Instruments

Two sets of data were relevant to the effective conduct of this research namely primary and secondary. The primary data which referred to field data was obtained through the use questionnaires for farmers and the selected employees. Questionnaire contained the background information of the small-scale tea farmers who were

respondents in the study and also employees of Fedha Questionnaire method was preferred for the study as respondents are presumed to be able to respond to questionnaires since they are literate and with a questionnaire within a reasonable duration, one can gather lots of information. In addition, questionnaire method offers discretion as they are anonymous while at the same time ensures standardization.

3.5.1 Piloting of Research Instruments

A pilot study refers to a trial administration of an instrument to gauge their suitability. The purpose of pilot testing aimed to establish the validity and reliability of the research instruments and hence enhance face validity, (Joppe, 2011). The pilot testing was conducted using the questionnaire and interview schedules. The researcher carried pilot testing where a sample of 7 employees from a Daima sacco and 8 clients were used and were selected purposively; hence 15 questionnaires were used. It is justified by Mugenda and Mugenda (2003) where a 10% recommendation of the sample size representation is used in the pilot study.

3.5.2 Validity of Research Instruments

Validity is the test of quality of research with similar importance. Content validity was used to validate the instrument. Content validity addresses the degree in which the sample of the test represents the content that the test intends to measure (Orodho, 2005). Discussions between the researcher and her supervisor were considered and incorporated in the study. Validity was enhanced through giving a range of choice on various issues possessed by respondents like giving a select of choices in age limit and the duration of stay. These ensured the chances of giving false information are greatly reduced.

3.5.3 Reliability of Research Instruments

Mugenda and Mugenda (2003) defined reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trials. An instrument is reliable when it can measure a variable accurately and obtain the same results over a period. A pilot study was conducted. Pilot testing was utilized to ensure reliability of the research instrument in the study and using Cronbach's Alpha value to establish whether the research instrument was reliable or not. A Cronbach's Alpha value obtained was 0.76 and which is above 0.7 is recommended for a reliable research instrument, (Cronbach, 1951).

3.6 Data collection procedures

The researcher sought for an introductory letter from University of Nairobi and Authorization letters and research permit from NACOSTI. This document enabled the researcher to secure an authorization letter from the County Commission and County Director. The researcher then embarked on administering of data collection instruments to the sampled respondents. The instruments were collected the same day.

3.7 Data Analysis Method

Data analysis referred to the approach employed by researchers to establish order, structure and give significance to mass primary data collected (Saunders & Lewis, 2012). Errors and inconsistency in collected primary data was eliminated by sorting, editing and analyzing the data. Tabulation for the current study's individual research questions quantitative data was conducted with both the objectives of providing the researcher with a complete visualization of how the data would look like and additionally aiding the researcher in spotting patterns. Collected data was analyzed using SPSS presented using of descriptive statistic; frequencies, mean, variance and standard deviation. Results of the analysis facilitated the process of making justifiable conclusions on the problem under inquiry. Data from open ended questions will be analyzed making use of content analysis and results from this analysis will be presented in themes guided by the objectives of the current study. Information from this will be summarized by employing frequencies and percentages.

3.8 Ethical considerations

The researcher explained to the respondents about the research and that the study was for academic purposes only. The researcher made it clear that the participation was voluntary and that the respondents feel free to decline or withdraw any time during the research period. Respondents were not be coerced into participating in the study. The participants were informed of consent to make the choice to participate or not and they were guaranteed that their privacy was protected by strict standard of anonymity.

3.9 Operational Definition of variables

According to Martyn (2008) operationalization is defined as the process of strictly defining variables into measurable factors. This process defined fuzzy concepts and allows them to be measured, empirically and quantitatively. Operationalization was achieved by looking at behavioral dimensions, indicators, facets or properties denoted

by the concept, translated into observable and measurable elements to develop an index of the concept. Measures can be objective or subjective. It is not possible to construct a meaningful data collection instrument without first operationalizing all the variables.

Table 3.3: Operationalization of Variables

Research Objectives	Variable	Indicators	Scale of measurement	Data collection method	Data analysis
To determine how savings mobilization, influence Financial Sustainability of tea farmers in Embu east sub county.	savings mobilization	<ul style="list-style-type: none"> • Earnings • Investments • Personal ambitions 	Ordinal	Questionnaires & Interview schedules	Descriptive statistics
To establish the influence of farmer's financial education on Financial Sustainability of tea farmers in Embu east sub county	farmer's financial education	<ul style="list-style-type: none"> • Management Skills • Pre-loan business training management • Pre-loan training 	Nominal	Questionnaires & Interview schedules	Descriptive statistics
To determine the influence provision of loans on Financial Sustainability of tea farmers in Embu east sub county.	provision of loans	<ul style="list-style-type: none"> • Group Lending • Progressive Lending • Short terms Loans 	Ordinal	Questionnaires & Interview schedules	Descriptive statistics

To examine how adoption of Mobile Banking services influence Financial Sustainability of tea farmers in in Embu east sub county.	Mobile Banking services	<ul style="list-style-type: none">• Easy Deposit• Easy Credit Access• Access to information	Ratio	Questionnaires & Interview schedules	Descriptive statistics
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CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter focused on data analysis, presentation and interpretation. Data collected was presented and analyzed according to the objectives of the study with an aim of answering research questions stated in chapter one.

4.2 Questionnaire Return Rate

The study targeted a total sample size of 145 respondents, from that sample size 143 respondents filled in and submitted the questionnaires making a response rate of 99%. According to Mugenda and Mugenda (2010), 99% response rate was good and representative and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. In the study; the response rate was excellent. This implies that majority of the respondents filled the questionnaires and the return rate was appropriate for use of the instrument in data collection. The findings are shown in Table 4.1

Table 4.1: Questionnaire Return Rate

Description	Issued	Returned	Percentage
Questionnaires	145	143	99%

4.3 Demographic Information of the Respondents

This section analyzed the demographic data of the selected respondents. It helped to build a profile of the respondents in response to their, gender, education level, duration at workplace and role played. The study findings are summarized in the subsequent tables.

4.3.1 Study Respondents by Gender

The respondents were asked to indicate their gender. The responses are shown in Table 4.2

Table 4.2: Distribution of Respondents by Gender

Gender	Frequency	Percentage
Male	47	33
Female	96	67
Total	143	100

The study sought to know the gender of the respondents. Based on the study findings, majority of the respondents at 67% were female while 33% were male. This implies that majority of the staff were women. However, it's important to note that the gender ratio as per government regulations has been surpassed.

4.3.2 Age of Respondents

The respondents were asked to indicate their age and Table 4.3 shows the results.

Table 4.3: Distribution of Respondents by Age

Age	Frequency	Percentage
20-30 years	24	17
31-40 years	37	26
41-50 years	43	30
51 Years and above	39	27
Total	143	100

The findings show that 17% were between the age 20-30 years, 26% were between 31-40 years, 30% were 41-50 years while the remaining 27% were 51 years and above. This implies that majority of the respondents were between 41-50 years.

4.3.3 Years of Experience

The respondents were asked to indicate the period of experience. The results are presented in Table 4.4

Table 4.4: Distribution of Respondents by Years of work Experience

Years of Experience	Frequency	Percentage
0-5 years	51	37
6-10 years	38	26
11-15 years	26	18
16- 20 years	19	13
Over 20 year	9	6
Total	143	100

The findings show that 37% of the respondents had an experience of 0-5 years, 26% of the respondents had an experience of 6- 10 years, 18% of the respondents had an experience of 11-15 years , 13% of the respondents had an experience of 16 – 20 years while the remaining 6% had an experience of over 20 years . This implies that majority of respondents had worked in the organization for a longer accumulated hence they had experience.

4.3.4 Education Level of the Respondents

The respondents were asked to indicate their education level. Table 4.5 shows the distribution of the respondents by education level

Table 4.5: Distribution of Respondents by Education Level

Education Level of the Respondents	Frequency	Percentage
Secondary	32	22
Diploma	54	38
Degree	39	27
Any other	18	13
Total	143	100

The findings indicate that 22% of the respondent had secondary education ,38% of respondents had a diploma level of education , 27% had a degree level of education while the remaining 13% had any other education level .This implies that majority of participants had enough knowledge and skills to enable them to fill the questionnaire and answer the questions correctly.

4.4 Savings mobilization on Financial Sustainability of Tea Farmers

The first objective was to assess how savings mobilization influenced the Financial Sustainability of tea farmers in Kenya.

4.4.1 Ratings on Client's Ability to Save

The study sought to find out how the employees of the microfinance rated their clients saving ability. The results are shown in the Table 4.6

Table 4.6: Ratings on Client's Ability to Save

Client Ability to Save	Frequency	Percentage
Good	87	61
Poor	15	10
Average	24	17
Below average	17	12
Total	143	100

Based on the findings above 61% of the respondents rated their clients ability to save as good, 10% rated it as poor, 17% rated it as average while the remaining 12% rated it below average. This implies that majority of the respondents agreed that their clients ability to save was good.

4.4.2 Frequency of depositing in accounts

The study sought to find out how often the clients deposited money in their accounts. The response is as shown in Table 4.7

Table 4.7: Frequency of Depositing in Accounts

	Frequency	Percentage
Occasionally	96	67
Rarely	12	8
Often	27	19
Never	8	6
Total	143	100

From table 4.7, the study found out that; 67% of the farmers did deposit money in their accounts occasionally, 8% deposited rarely, 19% deposited often while 6% never deposited. This implies that majority of the respondents deposited and complies with Keynes (1936), who first raised the dynamic of savings as being constrained by income at a macroeconomic level which can also be considered at a microeconomic level of operation.

4.4.3 Client's Participation in Savings Programmes

The study sought to find out if the farmers did participate in the saving programmes of the institution. The response is as shown in table 4.8

Table 4.8: Client's Participation in Savings Programmes

	Frequency	Percentage
Yes	137	96
No	6	4
Total	143	100

Table 4.8, views on whether the farmers participated actively in the savings programmes in your institution, 96% agreed that they did participate actively while the remaining 4% of the respondents disagreed. According to (Loayza et al., 2000) it is further supported by macroeconomic level findings that savings measured by, savings as a percentage of GDP are strongly correlated with increased income at both an individual and national level. For developing countries it is estimated that, with a doubling of income per capita, there is an increase in the long-run private savings rate of 10% points of disposable income.

4.5 Farmers Financial Education and Wealth Maximization

The second objective was to find out how farmers financial education did influence the wealth of tea farmers in Kenya; Likert scale for rating questionnaires was employed. Scale: 5- Strongly Agree, 4 - Agree, 3 - Neutral, 2 – Disagree and 1 - Strongly Disagree.

Table 4.9: Farmers Financial Education

	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
The organization gives financial advice to clients before offering services	87	61	34	24	17	12	3	2	2	1
Clients have become more informed regarding finance	90	63	39	27	10	8	2	1	2	1
Clients have become wiser in their decisions regarding their finances	103	72	31	21	8	6	1	1	0	0
With the financial education offered by the microfinance the clients are able to make more informed economic decisions	99	69	35	24	7	5	1	1	1	1

Table 4.10, on whether the organization gives financial advice to clients before offering services, 61% of the respondents strongly agreed, 24% of the respondents agreed, 12% were neutral, 2% disagreed while the remaining 1% of the respondents strongly disagreed. This implies that majority of the respondents agreed that the organization gave financial advice to clients before offering services. On whether clients had become more informed regarding finances, 63% strongly agreed, 27% agreed, 8% were neutral, 1% disagreed while the remaining 1% of the matter strongly disagreed. This implies that the majority of the respondents agreed that the clients had become more informed regarding finance. On whether the clients have become wiser in their decisions regarding their finances, 72% of the respondents strongly agreed, 21% agreed, 6% were neutral on the matter while the remaining 1% of the respondents strongly disagreed. This implies that majority of the respondents agreed

that the clients have become wiser in their decisions regarding their finance .the last statement that stated if with the financial education offered by the micro finance the clients are able to make more informed economic decisions, 69% of the respondents strongly agreed, 24% agreed, 5% of the respondents were neutral on the matter, 1% disagreed while the remaining 1% strongly disagreed. This implies that majority of the respondents agreed that with the financial education offered by the microfinance the clients are able to make more informed economic decisions.

4.6 Provision of Loans and Wealth Maximization

The third objective was to assess how provision of loans influenced the Financial Sustainability of tea farmers in Kenya. A scale for rating questionnaires was employed depending on the question

4.6.1 Loans offered are improving the Living Standards of Clients

The study sought to find out how the loans offered by the microfinance have improved the living standards of the client. The response is as shown in table 4.11.

Table 4.10: Loans Offered are Improving the Living Standards of Clients

	Frequency	Percentage
Yes	133	93
No	10	7
Total	143	100

From the above table 93% of the respondents agreed that the loans did improve the living standards of the clients, 7% disagreed. This implies that majority of the respondents agreed that the loans did improve their living standards.

4.6.2 Accessibility of loans to other clients

The study sought to find out the rate of accessibility of loans to clients. The response is as shown in the Table 4.12.

Table 4.11: Accessibility of Loans to other Clients

	Frequency	Percentage
Poor	6	4
Good	86	60
Average	47	33
Below average	4	3
Total	143	100

From table 4.12, on whether the loans were accessible to clients, 4% stated them as poor, 60% rated it as good, 33% rated it as averaged 3% rated it as below average. This implies that majority of the respondents rated the accessibility of loans as good. This goes in line with Luyirika (2010) carried out a study on the role of microfinance in the socio-economic development. As one of the ways of improving the financial assistance towards SMEs growth, the findings revealed that microfinance institutions could increase the money given to their clients so as to allow them expand and diversify their investment opportunities, reduce the interest rates so that all the profits realized do not go towards paying the interest and also increase the grace period to allow the growth of the enterprise.

4.6.3 Micro Credits have Improved Tea Farming

The study sought to find out how micro credits have helped improve tea farming. The response is as shown in table 4.13.

Table 4.12: Micro Credits have Improved Tea Farming

	Frequency	Percentage
Yes	140	98
No	3	2
Total	143	100

From the table above 98% of the respondents agreed that micro finances did improve tea farming while 2% disagreed. This implies that majority of the respondents agreed that micro credits have helped improve tea farming. This goes in line with Luyirika

(2010) carried out a study on the role of microfinance in the socio-economic development. As one of the ways of improving the financial assistance towards SMEs growth, the findings revealed that microfinance institutions could increase the money given to their clients so as to allow them expand and diversify their investment opportunities, reduce the interest rates so that all the profits realized do not go towards paying the interest and also increase the grace period to allow the growth of the enterprise.

4.7 Adoption of mobile banking and wealth performance.

The forth objective was to find out how adoption of mobile banking did influence the wealth of tea farmers in Kenya. Likert scale for rating questionnaires was employed. Scale: 5- Strongly Agree, 4 - Agree, 3 - Neutral, 2 – Disagree and 1 - Strongly Disagree. The findings are represented in table 4.14.

Table 4.13: Adoption of Mobile Banking

	Strongly Agree		Agree		Not sure		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
Mobile banking services are easily accessible to clients	95	66	32	22	15	11	1	1	0	0
Mobile banking has enabled ease in deposit and withdrawal by clients	88	62	41	27	11	8	3	2	1	1
Clients are able to access easy credit	79	55	37	26	24	17	2	1	1	1
The service is easy to understand hence becoming a popular mode of banking	95	66	26	18	20	14	1	1	1	1

From table 4.14, on whether mobile banking services are easily accessible to clients, 66% of the respondents strongly agree, 22% agreed, 11% were not sure , while the remaining 1% of the respondents disagreed . this implies that majority of the respondents agreed that mobile banking services are easily accessible to clients. On whether mobile banking has enabled ease in deposit and withdrawal by clients, 62% strongly agreed, 27% of the respondents agreed, 8% were not sure, 2% disagreed while the remaining 1% strongly disagreed. This implies that mobile banking has enabled ease in deposit and withdrawal by clients. On whether clients are able to access easy credit, 55% of the respondents strongly agreed, 26% agreed,17% of the respondents were not sure , 1% disagreed while the remaining 1% strongly disagreed. This implies that majority of the respondents agreed that clients are able to access easy credit. On whether the service is easy to understand hence becoming the popular mode of banking, 66% of the respondents strongly agreed , 18% agreed , 14% were not sure , 1% disagreed while the remaining 1% of the respondents strongly disagreed. This implies that majority of the respondents agreed that the service is easy to understand hence becoming a popular mode of banking.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of findings and discussions of findings, conclusion and recommendations of the study based on the study objectives. Suggestions for further study are also presented

5.2 Summary of Findings

This section gives a summary of the findings generated in chapter four based on the objectives of the study.

5.2.1 Savings Mobilization on Financial Sustainability of Tea Farmers.

The first objective was to assess how savings mobilization influenced the Financial Sustainability of tea farmers in Kenya. A scale for rating questionnaires was employed depending on the question. The study sought to find out how the employees of the microfinance rated their clients saving ability. Based on the findings above 61% of the respondents rated their clients ability to save as good, 10%) rated it as poor, 17% rated it as average while the remaining 12% rated it below average. The study found out that 67% of the farmers did deposit money in their accounts occasionally, 18%) deposited rarely, 19% deposited often while 6% never deposited. On whether the clients participated actively in the savings programmes in your institution, 96% agreed that they did participate actively while the remaining 4% of the respondents disagreed.

5.2.2 Farmers Financial Education on Financial Sustainability of Tea Farmers.

The second objective was to find out how farmers financial education did influence the wealth of tea farmers in Kenya.; Likert scale for rating questionnaires was employed on whether the organization gives financial advice to clients before offering services, 61% of the respondents strongly agreed ,24% of the respondents agreed ,12% were neutral , 2% disagreed while the remaining 1% of the respondents strongly disagreed . this implies that majority of the respondents agreed that the organization gave financial advice to clients before offering services.

On whether clients had become more informed regarding finances, 63% strongly agreed, 27% agreed, 8% were neutral, 1% disagreed while the remaining 1% of the

matter strongly disagreed. This implies that the majority of the respondents agreed that the clients had become more informed regarding finance. On whether the clients have become wiser in their decisions regarding their finances, 72% of the respondents strongly agreed, 21% agreed, 6% were neutral on the matter while the remaining 1% of the respondents strongly disagreed. This implies that majority of the respondents agreed that the clients have become wiser in their decisions regarding their finance .the last statement that stated if with the financial education offered by the micro finance the clients are able to make more informed economic decisions, 69% of the respondents strongly agreed, 24% agreed, 5% of the respondents were neutral on the matter , 1% disagreed while the remaining 1% strongly disagreed. This implies that majority of the respondents agreed that with the financial education offered by the microfinance the clients are able to make more informed economic decisions.

5.2.3 Provision of Loans on Financial Sustainability of Tea Farmers.

The third objective was to assess how provision of loans influenced the Financial Sustainability of tea farmers in Kenya. A scale for rating questionnaires was employed depending on the question. The study sought to find out how the loans offered by the microfinance have improved the living standards of the client. The study found out that 93% of the respondents agreed that the loans did improve the living standards of the clients, 7% disagreed. This implies that majority of the respondents agreed that the loans did improve their living standards. On whether the loans were accessible to clients, 4% stated them as poor, 60% rated it as good, 33% rated it as averaged 3% rated it as below average. This implies that majority of the respondents rated the accessibility of loans as good. The study sought to find out how micro credits have helped improve tea farming above 98% of the respondents agreed that micro finances did improve tea farming while 2% disagreed. This implies that majority of the respondents agreed that micro credits have helped improve tea farming.

5.2.4 Adoption of Mobile Banking and Wealth Performance.

The forth objective was to find out how adoption of mobile banking did influence the wealth of tea farmers in Kenya. On whether mobile banking services are easily accessible to clients, 66% of the respondents strongly agree, 22% agreed, 11% were not sure, while the remaining 1% of the respondents disagreed. This implies that majority of the respondents agreed that mobile banking services are easily accessible to clients. On whether mobile banking has enabled ease in deposit and withdrawal by

clients, 62% strongly agreed, 27% of the respondents agreed, 18% were not sure, 2% disagreed while the remaining 1% strongly disagreed.

This implies that mobile banking has enabled ease in deposit and withdrawal by clients. On whether clients can access easy credit, 55% of the respondents strongly agreed, 26% agreed, 17% of the respondents were not sure, 1% disagreed while the remaining 1% strongly disagreed. This implies that majority of the respondents agreed that clients are able to access easy credit .On whether the service is easy to understand hence becoming the popular mode of banking , 66% of the respondents strongly agreed , 18% agreed , 14% were not sure , 1% disagreed while the remaining 1% of the respondents strongly disagreed. This implies that majority of the respondents agreed that the service is easy to understand hence becoming a popular mode of banking.

5.3 Discussions of Findings

This section presents a discussion of the findings and compares and contrasts these findings with other scholarly studies done on the same topic.

5.3.1 Savings Mobilization and Financial Sustainability of Tea Farmers.

The study found out that majority of the respondents agreed that their client's ability to save was good. This goes in line with African Development Bank, (2009) states that in relation to financial access, mobilization of saving has a role within the economy is a clear theoretical and policy goal. For instance, the African Development Bank states that improving "mobilization of domestic resource will require deepening domestic financial intermediation to mobilize savings" and that "Domestic savings may turn out to be significant and, possibly, a cheaper alternative to external sources of financing than bond financing. The study also found out that majority of the respondents did deposit. This complies with Keynes (1936) first raised the dynamic of savings as being constrained by income at a macroeconomic level which can also be considered at a microeconomic level. Microfinance has researched and found out that poor households with subsistence incomes had no savable surpluses and that this has led to the reason for them having no savings (Bhaduri, 1977). Financial Sector Deepening Program, 2009; African Development Bank, 2012, found out that in the recent household survey, that the most frequently cited reason for not having a formal savings account is lack of monetary resources.

5.3.2 Farmers Financial Education and Wealth Performance.

The study found out that majority of the respondents agreed that the clients had become more informed regarding finance. On whether the clients have become wiser in their decisions regarding their finances, the study found out that majority of the respondents agreed that the clients have become wiser in their decisions regarding their finance. The study found out that that majority of the respondents agreed that with the financial education offered by the microfinance the clients can make more informed economic decisions. This goes in line with Hilgert, et al. (2003) found a very strong and significant link between knowledge and behavior across the range of personal finance activities. Further, the most effective ways to learn personal financial management skills were identified to be the media and video presentations, while informational seminars and formal courses were rated lowest. Personal experience, friends and family were the main sources of knowledge while formal education like high school education and educational sessions either to the job or outside of a school environment was rated lower across all financial practices and skill levels. Unfortunately, the study does not provide conclusive evidence that financial literacy leads to sound personal finance. Moore (2003) also shows that borrowers who took out high-cost mortgages display little financial literacy. Financial literacy is positively related to investment behavior. Individuals who answer all three financial literacy questions correctly are more likely to have an investment related custody account and a voluntary retirement savings account. Financial literacy also relates positively to the incidence of a mortgage while we find no such relationship for consumer debt.

5.3.3 Provision of loans and Financial Sustainability of Tea Farmers.

The study sought to find out how the loans offered by the microfinance have improved the living standards of the client. The study found out that majority of the respondents agreed that the loans did improve their living standards. Microfinance programmes play the role of providing small amounts of capital to entrepreneurs for many years. Microfinance sustainability may be a main component in creating sound financial sustainability structures in the world's poorest countries. It is often the first step in launching Small Micro Enterprises, which is the start of what should be a continuous sequence of credit access necessary to support the Financial Sustainability of farmers in developing countries (United Nations, 2005). Developing a sustainable microfinance industry (2005) stated that Ugandan Government has far much

established an outreach program to support Microfinances than the Kenyan government. The government of Uganda has established and designed a multi donor, private sector driven microfinance outreach plan to spread sustainable microfinance services to undeserved areas in Uganda.

This implies that majority of the respondents rated the accessibility of loans as good. This goes in line with Luyirika (2010) carried out a study on the role of microfinance in the socio-economic development. As one of the ways of improving the financial assistance towards SMEs growth, the findings revealed that microfinance institutions could increase the money given to their clients so as to allow them expand and diversify their investment opportunities, reduce the interest rates so that all the profits realized do not go towards paying the interest and also increase the grace period to allow the growth of the enterprise. Luyirika (2010) explains that small amounts of money given at a time affect the growth of the enterprises. It was also noted that there were too many deductions from the money disbursed initially yet the whole amount was paid back. The respondents reported that they paid even for what they had not received and what was annoying was the deductions made from the small amount given, thus the money given was lowered even more.

The study found out that majority of the respondents agreed that micro credits have helped improve tea farming. This goes in line with Luyirika (2010) carried out a study on the role of microfinance in the socio-economic development. As one of the ways of improving the financial assistance towards SMEs growth, the findings revealed that microfinance institutions could increase the money given to their clients so as to allow them expand and diversify their investment opportunities, reduce the interest rates so that all the profits realized do not go towards paying the interest and also increase the grace period to allow the growth of the enterprise. Luyirika (2010) explains that small amounts of money given at a time affect the growth of the enterprises. It was also noted that there were too many deductions from the money disbursed initially yet the whole amount was paid back. The respondents reported that they paid even for what they had not received and what was annoying was the deductions made from the small amount given, thus the money given was lowered even more.

5.3.4 Adoption of Mobile Banking and Wealth Performance.

The study found out that majority of the respondents agreed that mobile banking services are easily accessible to clients. On whether mobile banking has enabled ease in deposit the study found out mobile banking has enabled ease in deposit and withdrawal by clients. On whether clients are able to access easy credit the study found out that majority of the respondents agreed that clients are able to access easy credit. The study also found out that majority of the respondents agreed that the service in mobile banking were very easy to understand hence becoming a popular mode of banking. This goes in line with Nir and Acharya (2012) found out that it is possible for mobile banking to support many services. It has been found out to be a social economic development in the emerging markets. Particularly, mobile banking services facilitates a person to person transfer of funds which is very important for emerging economy because it gives financial services to the unbanked. Nir and Acharya (2012) also found out that mobile banking assists in facilitating emergency responds and disaster recovery. Info Dev (2006) stated that mobile banking has been found to a potential service to offer customers by the mobile operators and therefore it has increased their loyalty while generating fees and messaging charges. Financial institutions which have had difficulty providing profitable banking services through traditional channels see mobile banking as branchless banking (Ivatury and Mas 2008; Donner and Tellez 2008).

5.4 Conclusion

The study concludes that Financial Sustainability of tea farmers depends on the following factors Farmers Financial Education; Provision of loans; and adoption of mobile banking. Based on the findings Savings Mobilization, Farmers Financial Education; Provision of loans; adoption of mobile banking has significantly improved the wealth of tea farmers

5.5 Recommendation

The study recommends the following;

1. There should be concerted efforts by the management of MFIs in place to put in adequate measures through training and recruitment to enhance the competence and performance of its employees at the human and conceptual level of

organization, as the best policies will be harnessed through a high competency and great intellectual ability.

2. Microfinance Institutions of top management should embrace a culture of self-sustenance through exploring on ways to generate their own income and extending the same to farmers through the concept of saving mobilization.
3. High levels of accountability should be put in place by the MFIs and the government in place to ensure the budgetary allocation of credit facilities to farmers is concomitant with income available and priorities should be given in terms of the needs on the ground at the local level.
4. Research on how to get collaboration and joint ventures for funding and mobilization of resources should be should be done between the microfinance institutions and farmers aimed at curbing financial constraints witnessed through fully utilizing the mobile banking platforms available.

5.6 Suggestion for further study

The following further studies are suggested from the study in order to enhance research activities in the area of sustainability of financial sustainability of tea farmers in a given country; The study unmasked financial sustainability amongst tea farmers in Embu East Sub-County and came out with variables such as savings mobilization, farmers financial education, provision of loans and adoption of mobile banking systems

The same study can be repeated using other variables such as Economic and social policy, technology, financial collaboration and stakeholder interests under the topic factors influencing financial sustainability of tea farmers in Embu East Sub-County, Embu County, Kenya. Another study can be done in other tea growing areas of the country to unravel if indeed the variables used here have the same applicability effects and influence, as it applies to tea farmers as seen in the study.

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APPENDICES

APPENDIX I: LETTER OF TRANSMITTAL OF INSTRUMENTS

Immaculate Kinyua,

187,

Embu,

To the Participant

Dear Sir/ Madam,

RE: ACADEMIC RESEARCH PROJECT FOR A MASTERS DEGREE PROGRAM.

I am a student at the University of Nairobi (UON) pursuing a master's degree course in project planning and management. I am required to conduct and submit a research report on influence of microfinance on Financial Sustainability of tea farmers in Kenya; a case of Greenland Fedha microfinance in Embu East sub county. I am inviting you to participate in this research study by completing the attached questionnaire. Your cooperation and honesty in filling this questionnaire will be highly appreciated.

Thank you for your time.

Yours faithfully,

Immaculate Murugi Kinyua.

APPENDIX II: QUESTIONNAIRE FOR EMPLOYEES AND TEA FARMERS

The information provided will only be for the purpose of this study. Read carefully and give appropriate answers by ticking or filling the blank spaces.

SECTION A DEMOGRAPHIC INFORMATION

1. Gender
 - a) Male ()
 - b) Female ()

2. In which age group do you belong?
 - a) 20-30 yrs
 - b) 31-40yrs
 - c) 41-50yrs
 - d) 51 and above

3. Indicate your working experience.
 - a) 0-5 years
 - b) 6-10 years
 - c) 11-15 years
 - d) 16-20years
 - e) Over 20 years

4. What is your level of education?
 - a) Secondary level
 - b) Diploma level
 - c) Degree
 - d) Any other

5. Indicate your department.
 - a) Marketing
 - b) Finance
 - c) Human resource
 - d) Customer care
 - e) Information technology

SECTION B: SAVINGS MOBILIZATION AND FINANCIAL SUSTAINABILITY OF TEA FARMERS

6. how would you rate your client's saving ability?(tick one)
 - a) good
 - b) poor
 - c) average
 - d) below average

8. How often does the clients deposit in their accounts ?
- Occasionally
 - Rarely
 - Often
 - Never
9. Do clients actively participate in the savings programmes in your institution?
- Yes
 - No
10. If no recommend on how you would improve the clients' saving ability as an organisation?

SECTION C: FARMERS FINANCIAL EDUCATION AND FINANCIAL SUSTAINABILITY OF TEA FARMERS

On a scale of 1 – 5, indicate your level of agreement on the following statements1 – Strongly agree, 2 – agree, 3 – neutral, 4 – disagree, 5 – strongly disagree

Statements	Strongly agree	Strongly Agree	Agree	Not Sure	Disagree	Strongly disagree
The organisation gives financial advice to clients before offering services						
Clients have become more informed regarding finance						
Clients have become wiser in their decisions regarding their finances						
With the financial education offered by the microfinance the clients are able to make more informed economic decisions						

11. Would you say that the financial education offered by your institution has increased the client's income and enhanced their financial stability? If yes, explain.

SECTION D: PROVISION OF LOANS AND FINANCIAL SUSTAINABILITY OF TEA FARMERS

12. Would you say that the loans offered by the microfinance have improved the living standards of the clients?
 - a) Yes
 - b) No
13. How would you rate the accessibility of loans and other services to clients?
 - a) Poor
 - b) Good
 - c) Average
 - d) Below average
14. How would you rate the clients' income after the loan?
 - a) Average
 - b) Below average
15. Micro credits have helped improve tea farming.
 - a) Yes
 - b) No
16. Would you say that the investment decisions farmers make after getting the loan have helped them grow financially?
 - a) Yes
 - b) No
17. Recommend on ways tea farmers can acquire their economic and financial growth through micro credits.

SECTION E: ADOPTION OF MOBILE BANKING AND FINANCIAL SUSTAINABILITY OF TEA FARMERS

On a scale of 1 – 5, indicate your level of agreement on the following statements1 – Strongly agree, 2 – agree, 3 – neutral, 4 – disagree, 5 – strongly disagree

Statements	Strongly agree	Strongly Agree	Agree	Not Sure	Disagree	Strongly disagree
Mobile banking services are easily accessible to clients						
Mobile banking has enabled ease in deposits and withdrawal by clients						
Clients are able to access easy credits						
The service is easy to understand hence becoming a popular mode of banking						

18. On a scale of 1-10 where would you place the deposit rates since clients adopted mobile banking?
 - a) 2
 - b) 5
 - c) 6

APPENDIX III: MAP OF TEA GROWING REGIONS IN KENYA

