FINANCIAL SERVICE ACCESSIBILITY STRATEGIES FOR FARMERS' ECONOMIC EMPOWERMENT IN KENYA: A SURVEY OF SMALL-SCALE TEA FARMERS IN KISII COUNTY

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A THESIS REPORT PRESENTED TO THE INSTITUTE OF POSTGRADUATE STUDIES OF KABARAK UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DOCTOR OF PHILOSOPHY DEGREE IN BUSINESS ADMINISTRATION (STRATEGIC MANAGEMENT)

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DECLARATION

The research thesis is my own work, and to the best of my knowledge, it has not been presented for the award of a degree in any other university or college.

Signed:--Date-------------------------------------.

Thomas Ombui Nyakweba

REG NO: GDB/1213/09/13

RECOMMENDATIONS

To the institute of postgraduate studies:

The research thesis entitled "**Financial Service Accessibility Strategies for Farmers' Economic Empowerment in Kenya: A Survey of Small-Scale Tea Farmers in Kisii County - Kenya**" and written by **Thomas Ombui Nyakweba** is presented to the Institute of Postgraduate Studies of Kabarak University. We have reviewed the research thesis and recommend it be accepted in partial fulfilment of the requirement for the award of the degree of Doctor of Philosophy in Strategic Management.

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DEDICATION

This work is dedicated to my parent, brothers and sisters, beloved wife, children and friends.

ABSTRACT

Economic empowerment is an important goal for any Government. Agriculture is the main source of food as well as income of Kenya's economy. Various interventions and policies for ease of access to financial service have been carried out by different state and non-state agencies to achieve intermediate goals of enhancing the level of financial service providers, physical proximity, creating favourable economic factors, and addressing cross-cutting social contributory factors such as engendering, financial literacy among others. Therefore, the study was set to investigate the financial service accessibility strategies for economic empowerment in Kenya based on a survey of small-scale tea farmers in Kisii County. It was guided by the Resource-Based View Theory and incorporated the following theories: Financial Inclusion Theory, Classical Theory of Interest Rate, Financial Deepening Theory and Imperfect Information Theory. The study adopted a descriptive research design. Simple random and stratified sampling techniques were used. A sample size of 398 of tea farmers (participants) was studied, which represented all registered KTDA farmers in Kisii County and their several coded and un-coded buying centres. Questionnaires were used to collect primary data and later analysed using SPSS version 20. Descriptive and inferential statistics were used to analysed data as well as establish the relationship between variables and draw conclusions. The key findings using principal component analysis extraction method showed that there was significant positive relationship between the level of financial providers, Physical proximity, economic factors, social factors, the moderating effect of demographic factors on the relationship between financial service accessibility strategies and economic empowerment and the joint influence of financial service accessibility on economic empowerment among small-scale tea farmers in Kisii County –Kenya. It was concluded that the level of access to financial service providers is a significant aspect in enhancing economic empowerment. There is inadequate infrastructure development in the rural areas which affect financial accessibility among tea farmers' educational level determines tea farmers' financial accessibility and the effect of demographic factors. The study recommends that financial institutions should develop financial products that are tailor-made to the needs of tea farmers to increase financial inclusion among farmers and adopt reliable information technology which will enhance financial inclusivity among tea farmers. The national government, through the ministry of lands and the national land commission, should ensure that land ownership challenges are addressed so that those lands can be used for economic purposes which include using the title deeds for securing credit facilities from financial institutions to enhance their economic welfare. That through collaboration between KTDA and financial institutions, tea farmers should regularly organise workshops, training on financial literacy to create awareness on financial management and opportunities for their economic empowerment. Suggestions are proposed for further research in financial service access strategies that can economically empower farmers in Kisii County and the same to apply to other counties in Kenya and Africa as a whole; including political, cultural behaviour and climatic changes.

KEYWORDS: *Financial Accessibility Strategies, Economic Empowerment, Financial Providers, Economic factors, Physical factors, Social factors, Tea farmers.*

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LIST OF ACRONYMS

CBK	Central Bank of Kenya
CBOs	Community Based Organisations
CRDB	Cooperative Rural Development Bank
DFID	Department for International Development of the United Kingdom
ERSWEC.	Economic Recovery Strategy for Wealth and Employment Creation
FA	Farmers' Associations
FAO	Farmers Agricultural Organisations
FAO	Food and Agriculture Organisation of the United Nations
FFS	Farmer Field Schools
FGD	Focus Group Discussions
FSAS	Financial Service Access Strategy
FSD	Financial Service Development
FSPs	Financial Service Providers
GAPS	Good Agricultural Practices
ICTs	Information Communication Technologies
IDACA	Institute for the Development of Agricultural Cooperation in Asia-Japan
IFAD	International Finance Agricultural Development
IFC	International Finance Corporation
ILO	International Labour Organisation
IOM	International Organisation of Manufacturers
KTDA	Kenya Tea Development Agency
MFIs	Micro Finance Institutions
NGO	Non-Governmental Organisations
NPOs	Non-Profit Organisations
OECD	Organisation for Economic Cooperation and Development
PRIDE	Promotion of Rural Initiatives and Development Enterprise
PRSPs	Poverty Reduction Strategy Papers
ROSCAs	Rotating and Savings Credit associations
S&T	Science and Technology
SACCOS	Savings and Credit Cooperative Societies
SAN	Sustainable Agricultural Network
SCC	Saving and Credit Cooperatives
SEDA	Small Enterprise Development Agency

SIDO	Small Industries Development Organisation
TU	Trade Unions
UNDP	United Nations Development Programme
US	United States
USAID	United States Agency International Development
USD	United States Dollar
VCF	Value Chain Funds

OPERATIONAL DEFINITION OF KEY TERMS

This section provides definitions of terms used in the Thesis. For purposes of the study, the definitions provided the meanings of the terms which may be divergent from their normal day to day meaning. The meanings intended were specific to the requirements and objectives of the research study whose findings are discussed and presented.

For the aim or purposes of this study, Financial Service Accessibility Strategies, includes farmers, economic empowerment, financial service providers, physical proximity, economic factors, social factors and the moderating effect of demographic factors.

Financial service accessibility strategies: as used in this study refers to action plans, perspectives, ploys or tactics that can be employed or adopted to get financial resources to empower farmers by the government.

Financial service providers' strategy: as used in this study refers to those institutions that can provide funds to farmers; such as commercial banks, cooperatives, NGOs, ROSCAs, money lenders, friends and relatives for their economic empowerment. However, according to Tagoe et al. (2005), access to finance enables individual farmers to do what they desire to do and is gradually being recognised as a significant aspect of economic development.

Physical proximity: as used in this study refers to the closeness of financial institutions in terms of geographical location and infrastructure as well as information that can create awareness of financial services and funding opportunities that will enable small-scale tea farmers' access financial services for their economic empowerment.

Economic factors: as used in this study, refers to factors of production such as land, labour, capital and entrepreneurship, which enhances financial accessibility among small-scale tea farmers.

Economic empowerment: as used in this study is a process of change that focuses on expanding the range of choices that farmers can make to empower themselves economically and it's the process through which the economically underpowered farmers gain control over the conditions of their lives, resources and ideologies. Moreover, the degree of empowerment is measured by the existence of choice, the use of choice, and the achievement of choice (Alsop, & Heinsohn, 2005).

Social factors: as used in this study refers to financial literacy and gender equity that enhances financial service accessibility for small-scale tea farmers' economic empowerment.

Financial Literacy: financial literacy as used in this study includes, education and training for farmers which can help in empowering and educating consumers so that they are

knowledgeable about finance in a way that is relevant to their lives and enables them to use this knowledge to evaluate products and make informed decisions (Miller et al., 2009).

Gender equity: as used in this study means Women, men and youth access to and control over financial resources for their equitable and sustainable economic empowerment.

Small-scale Tea farmers: as used in this study refers to those farmers owning small-based plots of land below 10 acres on which they grow subsistence crops and one or two cash crops relying almost exclusively on family labour (Survey, 2018).

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The tea industry operates under the Tea Act (Cap 343) and Agricultural Act (Cap 318) of the laws of Kenya. While the former is vested with regulatory services, the latter is more managerial overseeing the whole process of production as a technical arm. Small-scale tea farming in Kenya was placed under The Kenya Tea Development Agency-KTDA (formerly; Kenya Tea Development Authority). Currently, the small-scale farmers' account for 60% of all the tea produced in Kenya (Tea Board of Kenya, 2018). The large-scale tea plantations are still under the control of big multinationals. This is so because the locals were not able to purchase the large and expensive Tea Estates at independence, Tea Board of Kenya (TBK, 2006).

Tea farming has been practised in Kisii County for more than five decades since 1966 (TBK, 2018). According to the study, currently this cash crop is more depended on by many farmers in the county more than coffee, pyrethrum and more recent avocado and bananas due to its monthly payments and annual bonuses (Department of Agriculture, Kisii County Report (2018). Tea was introduced in Kenya in 1904, but commercial production started in the 1920s. The industry expanded fast after the Second World War, but expansion was limited to commercial estates until 1963 when Kenya became independent. Thereafter, the government recognised the potential of the small-scale tea growing as a vehicle for rural development and economic empowerment of the indigenous Africans (TBK, 2011). The Africans were permitted to grow tea. Over the last decade, the small-scale tea farmers, under the management of Kenya Tea Development Agency (KTDA), have annually produced about 60% of Kenya tea (TBK, 2011). In 1960, the small-scale tea farmers produced 149 metric tons. Currently, from the projected 412 000 metric tons in 2017, 473 000 tons were produced in 2018, it is expected to jump to 500,000 metric tons by 2020 (KTDA, 2018). This rise was so fast in the early stages that it was more than doubling every decade. This rise was however much faster in the small-scale sector than the estates (TBK, 2018).

Small-scale tea farmers face a number of challenges such as low payment of monthly salaries and yearly bonus; market competition, leadership disputes, fertiliser distribution and better tea clones and therefore, for proper management of KTDA it was divided into 7 regions which are home to Kenya's key tea-growing belts. They are 1. Aberdare ranges,

covering Kiambu up to Nyeri. 2. Aberdare ranges which cover Githambo, Kenyaini, Kiru, Gatunguru, Chinga, Iriaini, Gitug Gathuthi and Ragati.   3. Mount Kenya 4. Mount Kenya and Nyambene   5. Kericho highlands, 6. Kisii highland 7. Nandi Hills and Western highlands (KTDA, 2018; Mbadi, Owuor, 2008). This study is from region 6 (Kisii County).

In Kisii region, tea was introduced in 1966 by James Finlays Company from Kericho, which was an overseas company. This led to the construction of the first tea factory known as Nyankoba, which is in Nyamira County. In 1977, James Finlay Company sold the factory to KTDA, which took control of the tea factory or production in Kisii region. KTDA built other factories at Kebirigo, Nyansiongo and Kiamokama due to increased tea production in the larger Gusiiland. Kiamokama, which is now in Kisii County, was constructed in 1970. It gave birth to Nyamache Tea Factory in 1978, Ogembo Tea Factory in 1984, all with a significant number of tea buying centres to support tea collection and delivery (TBK, 2018; KTDA, 2017). Since its introduction from 1966, most of the tea growers accessed money from tea earnings to educate their children, open small business enterprises, use for domestic household needs, help improve infrastructure, earn the country foreign exchange hence increase revenues through export; in addition it creates employment from farm level to the factory and to brokers at Mombasa auction through the value chain. However, agricultural productivity has gradually stagnated in recent years, despite continuous population growth (USAID, 2019). Moreover, only about 20 per cent of Kenyan land is suitable for farming, and in these areas maximum yields have not been achieved, leaving considerable potential for increases in productivity (USAID, 2015). The majority of farmers work without basic agricultural inputs or updated technology and lack adequate financial or extension services. Therefore, the government requires financial service access strategies to increase productivity by small-scale tea farmers in order to increase revenues for their empowerment. Currently, more than 77035 growers are engaged in tea farming KTDA record (KTDA Region 6, 2018). Despite the fact that they receive monthly and yearly payments, majority of the farmers are living in deplorable conditions due to limited financial services access to boost their livelihoods. It is not clear whether it is due to limited financial institution around them to access financial services, lack of credit requirements, limited financial literacy, insurance, and land to increase production or serve as collateral, awareness of funding opportunities or due to gender imbalances. Based on the above assumptions, the study attempted to critically analyse financial service access strategies to mitigate farmers' economic empowerment.

Access to financing: means the access to all formal and informal funding resources to meet the various consumption or investment needs: cash resources derived from formal or informal activities but not deposited into a bank account; current or savings accounts in public or private agencies, or specialised institutions; loans from these organisations, micro - credits from NGOs, government grants, informal loans from friends or family.

Access to finance is defined as getting adequate and affordable financing over a suitable timescale (Tagoe et al., 2005). Finances enable individuals to do what they desire to do and are gradually being recognised as a significant aspect of economic development. Low access also leads to increased income inequalities, poverty, and low growth rates. Thus, access to finance and an inclusive financial system which caters for all groups of people has been advocated as a means to reduce inequalities and poverty in developing countries (World Bank, 2008).

Empowerment is defined as the ability of people to have access to productive resources that enable them to increase their earnings and obtain goods and services that they need in order to be able to take part in the development and also to be able to make their own decisions. When one is empowered, they are freed from the chains of dependency, and now they are able to control their own lives through personal decision making of life choices (Kimanjara, 2013).

Empowered individuals have the ability to exercise their bargaining power. Empowerment refers to the expression of self-strength, control, self-power, self-reliance, freedom of choice, own decision making and capability (Khan, & Rahaman, 2007). According to (Mjomba, 2011) posited that empowerment includes similar capabilities like the ability to make decisions about personal/collective circumstances and ability to access information and resources for decision making. Access of resources alone does not translate to empowerment, but the capacity to use those resources for the purposes of their choice and without reliance on other people's decisions guarantees empowerment (Kimanjara, 2013).

Indicators of economic empowerment (Khan, & Rahaman, 2007) include increment in saving, reduced levels of unemployment, and reduced levels of indebtedness, sound decision making and increased cases of self-employment. Empowerment encourages people to gain more skills and knowledge. As a result, productivity in their line of involvement is realised

and consequently, income is generated hence more savings and reduced levels of debt and reliance. Financial access strategies will help tea farmers' to be empowered by increasing their incomes generations through savings and investments.

According to Mintzberg (1992) "Five Ps for Strategy," it is perspective, ploy, position, plan, and pattern. Strategy is the bridge between policy or high-order goals on the one hand and tactics or concrete actions on the other. Strategy and tactics together straddle the gap between ends and means. In short, a strategy is a term that refers to a complex web of thoughts, ideas, insights, experiences, goals, expertise, memories, perceptions, and expectations that provides general guidance for specific actions in pursuit of particular ends. Strategy is at once the course we chart, the journey we imagine and, at the same time, it is the course we steer, the trip we actually make. Even when we are embarking on a voyage of discovery, with no particular destination in mind, the voyage has a purpose, an outcome, an end to be kept in view.

It is a general framework that provides guidance for actions to be taken and at the same time, is shaped by the actions taken. This means that the necessary precondition for formulating strategy is a clear and widespread understanding of the ends to be obtained. Without these ends in view, the action is purely tactical and can quickly degenerate into nothing more than flailing about. Owing to the definitions' above, access to financial resource or providers, factors of production (land), the physical proximity of financial providers, credit, low-interest rates and influence of social factors will be used as financial service access strategies on farmers' economic empowerment among tea farmers in Kisii County.

In India, the "broad approach to financial inclusion aims at 'connecting people' with the banking system and not just credit dispensation; giving people access to payments system and portray financial inclusion as a viable business model and opportunity" (Reserve Bank of India, 2008). Access could include access to various financial products and services, bank accounts, bank credit, savings products, remittances and payment services, insurance services, home mortgage and financial advisory services.

A study by the Partnerships for Financial Inclusion in Latin America and the Caribbean: A Catalyst for Inclusive Growth (2014) pointed out that, in order to access financial services, people living in rural areas require the possibility of finding institutions near their home, as

transaction costs are high, due to lack of infrastructure, the distance and/or access to transportation. The latter also affects the supply of those financial services. This situation hampers the chances people have of accessing services, products and financial channels. It also generates misinformation regarding how the formal financial system works, and about products, usages, rights and duties of clients, and financial services.

In Canada, while gender inequality in wages in contexts of high female education appears to be conducive to growth in early stages of export-oriented industrialisation, its viability as a profit-maximising strategy starts to decline once labour markets tighten and surplus female labour starts to dry up (Seguino, 2000). Micro-level evidence suggests that not only does women's access to employment and education opportunities reduce the likelihood of household poverty but resources in women's hands have a range of positive outcomes for human capital and capabilities within the household. A strong instrumental rationale for ensuring women's participation in processes of growth will contribute to the inclusiveness of growth (Kabeer, 2012), not merely because women constitute 50% of the world's population, but also because women's access to economic resources improves distributional dynamics within the household.

A study by Adeleke, Kamara and Brixiova (2010) for investment, small-scale farmers in all four countries of East Africa depend on savings from their low incomes, which limits opportunities for expansion. Because of the lack of collateral and/or credit history, most farmers are bypassed not only by commercial and national development banks but also by formal micro-credit institutions. In addition to their own sources, farmers thus rely on incomes of friends and relatives, remittances, and informal money lenders.

In all countries studied, the share of commercial banks' loans to agriculture has been very low compared to manufacturing, trade, and other services sectors, hampering expansion and technology adoption. For example, in Kenya, the lack of capital and access to affordable credit is cited by small-scale farmers as the main factor behind the low productivity in agriculture. Access to formal credit in Tanzania and Ethiopia is mainly confined to large urban centres, where collateral requirements are high. In Uganda, high-interest rates inhibit agricultural investments. While more recently micro-finance institutions have taken financial services to millions of previously un-bankable clients due to innovative instruments, they have so far largely failed to reach poorer rural areas and/or small-scale agricultural producers

whose livelihoods are characterised by highly seasonal investments, risks, and returns (Peacock et al., 2004).

In Uganda, for example, land degradation was estimated to lead to annual losses of up to 12% of GDP (Kimaru, & Jama, 2005). While such losses are not reflected in GDP, they reduce living standards and slow development (Kimaru, and Jama, 2005). A study on the rural livelihood in Kenya, Malawi, Tanzania and Uganda by Ellis and Freeman (2002) revealed that farm production accounted for more than 50 per cent of the total household income.

In Kenya, in order to give farmers access to financial services for their economic empowerment, the government has demonstrated commitment to supporting and reviving the agricultural sector as articulated in the Economic Recovery Strategy for Wealth and Employment Creation (ERS-WEC, 2003-2007) that ideally set the stage for the revival of the agricultural sector. This was followed by an elaborate Strategy for Revitalising Agriculture (SRA, 2004 - 2014) which formed the framework for reforms and formulation of programmers' in the sector.

Vision 2030 has agriculture as one of the key sectors expected to contribute to achieving the desired 10 per cent annual economic growth rate for the country. It proposes that small-scale agriculture should be transformed from its current subsistence level, marked by low productivity and low added-value to an innovative, commercially-oriented, internationally competitive and modern agricultural sector. And to achieve this dream, critical access to financial service strategies is vital. In Kisii county vision: agriculture is a modern, innovative, diversified, market-focused and profitable agriculture sector. Mission: To promote a highly agricultural system that is efficient in resource management and creation of employment and food security (Department of Agriculture, Kisii County, 2017).

In Kisii County, over 80% of the population depends on agriculture for their livelihood – both as a source of food as well as income. However, due to high population density coupled with relatively small farm sizes in the County, it is becoming more and more challenging for the sector to continue being an effective pillar for food security and income generation. This calls for new and innovative ways of producing more (food) with less (land) and adding value to what is produced. This will require agricultural producers in the County to operate in a technologically advanced environment while constantly diversifying their enterprise

portfolios in order to meet the increasing demand for food as well as household income, through financial accessibility strategies more specifically tea farmers who are the majority in the county and were the units of the study.

1.2 Statement of the problem

Access to financial services plays a critical role in leading to economic empowerment among many farmers in Kisii County, Kenya. According to the International Finance Corporation (2014), three-quarters of the world's poor that live in rural areas, 80 % directly or indirectly depend on agriculture as their main source of income and employment. Demirgüç-Kunt, Beck and Honohan (2008) posed that, in many third world countries, financial access is still limited to only 20–50 per cent of the population, excluding many poor individuals and SMEs. According to Robinson (2001), banking services in developing nations reach less than 20% of the population. Small-scale tea farmers in Kisii face many challenges in accessing financial services including limited access to financial markets. Despite the numerous efforts undertaken by the Government and the donor community such as: building resilience of vulnerable communities, improving nutrition and access to clean water, private sector investment, empowering women's entrepreneurship by UNDP's (Ndegwa, 2018), beyond zero campaign (Kenyatta, 2018), public financing agriculture project by Action Aid Kenya, farming subsides to ensure food security (GOK Report, 2009), feed the future initiative (USAID, 2015) increasing access to affordable financing for farmers, entrepreneurs and business, providing ICT solutions, improved seed varieties and other agricultural inputs, many rural farmers mostly tea growers have remained underpowered due to limited capacity to access safety nets like loans to mitigate against households, hunger and disease in spite of the availability of several sources of agricultural financing. Maintenance of the farms, harvesting of tea and transportation to buying centres, market competition from tea brokers, lack of proper financial education, diminishing land size, the proportion of household heads by sex is against women, population (KNBS, 2009) are the problems that are facing tea small-scale farmers in Kisii. This study was set to find out financial service access strategies for economic empowerment among small-scale tea farmers in Kisii County.

1.3 Broad objectives of the study

The broad objective of this study was to analysed financial services accessibility strategies on economic empowerment among small-scale agricultural tea farmers in Kisii County-Kenya.

1.3.1 Specific Objectives

i. To analyse the level of financial providers access strategy on economic empowerment among small-scale tea farmers in Kisii County- Kenya.

ii. To identify the physical proximity of financial service access strategy on economic empowerment among small-scale tea farmers in Kisii county-Kenya.

iii. To establish the effect of economic factors on access to financial service strategy on economic empowerment among small-scale tea farmers in Kisii County- Kenya.

iv. To analyse the influence of social factors on access to financial services strategy on economic empowerment among small-scale tea farmers in Kisii County- Kenya.

v. To establish the moderating effect of demographic factors on the relationship between financial service accessibility strategies and economic empowerment among small-scale tea farmers in Kisii County- Kenya.

vi. To determine the joint influence of financial service accessibility on economic empowerment among small-scale tea farmers in Kisii County –Kenya

1.4. Hypotheses

Ho_1: level of access to financial service providers has significant influence on economic empowerment among small-scale tea farmer in Kisii County-Kenya.

$H0_2$: Identification of physical proximity of access to financial services strategy has a significant influence on economic empowerment among small-scale tea farmer in Kisii County-Kenya.

$H0_3$: Establishing economic factors on access to financial services strategy has significant influence on economic empowerment among small-scale tea farmer in Kisii County-Kenya

$Ho4$. Analysing social factors on access to financial services has significant influence on economic empowerment among small-scale tea farmer in Kisii County-Kenya

$H0_5$: Establishing the moderating effect of demographic factors has a significant influence on the relationship between financial service accessibility strategies and economic empowerment among small-scale tea farmers in Kisii County-Kenya

$H0_6$: Financial service accessibility has a significant joint influence on economic empowerment among small-scale tea farmers in Kisii County -Kenya.

1.5. Justification of the study

The study was conducted in Kisii County, which has a high potential in agriculture with an adequate amount of rainfall for both food and cash crop production, tea being its major cash

crop. The rationale for choosing Kisii is that the region is directly related to the researcher's interest, it is accessible and the researcher's knowledge of the area under study. According to Swart (2005), the ideal setting for the study is one that is directly related to the researcher's own interest. He further points out that the study area is easily accessible to the researcher and that it will allow immediate rapport with the participants. Additionally, given that the devolved system of Government was just put in place in Kenya in 2013, the researcher's position is that studies directly related to County farming activities are needed now more than ever before.

The population of Kisii County is 907 per square kilometre compared to other counties in Kenya (KNBS, 2015) because of such huge population, the study intended to investigate strategies on how locals in this area accessed funds to empower themselves, tea being their main source of income in Kisii County; where there are limited or inadequate financial resources, lack of government-provided drinkable water, electricity supply, gender imbalances in financial access, income inequalities, and tarred roads necessitates the scope of this study to cover only the financial service accessibility strategies for small-scale tea farmers economic empowerment with the above infrastructural deficiencies. Agriculture is the main economic activity and is not fully modernised to serve as a major employer. This formed the basis of this study.

1.6. Significance of the study

Tea farming earns the country foreign exchange through the export of tea. Currently, it is the country's leading export crop. Many people are employed in the tea industry indirectly in the factories, value chain and directly in the farms. Tea growing has contributed to industrial growth through the establishment of processing factories and packaging industries. Transport lines have been constructed, and existing ones improved to link the farms to the factories.

The results of this study intend to contribute to a deeper understanding of financial management perspectives of financial access strategies phenomenon in the farming sector and the financial service providers in Kenya- Kisii County as coined by Kaplan and Horton (1996) in the balanced scorecard methodologies. In essence, this study aims to contribute to Kenyan management research in the field of financial accessibility strategies. Findings of this research even though not generalisable could be of interest to numerous stake scales within the agriculture sector and the financial service sector as well as policymakers capable of influencing the direction and nature of the farming environment in Kisii. The findings and

recommendations of this study could be helpful for small-scale tea farmers to evaluate the real value of financial strategies on their economic empowerment.

The study focused on financial access strategies that empower tea farmers economically to raise their standard of living by accessing financial services from financial providers. It was to provide a clear distinction between the standard of living and quality of life variables in measuring the economic situation of tea growers. This was to provide better understanding and clarity to the implication of the findings for comparison by future studies; and its outcome to be useful as reference materials for government, development agencies and other publics in the provision of financial services to tea farmers. The research was expected to deepen the understanding of the challenges and opportunities of communities living and working in the tea sector so that ways can be found to address the issues in the short- and long-term basis.

1.7 Scope of the study

The study entailed the investigation of small-scale tea farmer's financial service access strategies. It was conducted within Kisii County, covering 9 sub-counties: The study was restricted to investigating the financial services accessibility strategies for small-scale tea farmers' economic empowerment in Kisii County. It was restricted to the level of financial providers, identification of the physical proximity, establishing the effect of economic factors, the influence of social factors and establishing the moderating effect of demographic factors. The present study was confined to small-scale tea farmers' involved in tea farming within Kisii county and the financial service access strategies that will enhance their economic empowerment; where there are limited or inadequate financial resources, lack of government-provided drinkable water, electricity supply, gender imbalances in financial access, income inequalities, and tarred roads necessitates the scope of this study to cover only the financial service accessibility strategies for small-scale tea farmers economic empowerment with the above infrastructural deficiencies. Stratified, random and purposive sampling was used to select 398 registered small-scale tea farmers registered under KTDA, by use of questionnaires and from published magazines, journals, newspapers, KTDA document analysis and financial statements in the study.

1.8 Limitations and delimitations of the study

The major limitation of the study was the financial service access strategy on one crop in agriculture, namely the tea sector. There was the difficulty in finding complete data as some respondents were not ready to reveal their incomes for security reasons because of cultural believes of which hunt and robbery in the study area. However, the researcher, including assistants, employed endeavoured to guarantee the confidentiality of information. Certain data needed for analysis were not easy to be obtained, especially figures on monthly payments and yearly bonuses. However, the researcher employed various conventional techniques to accrue relevant data which allowed for data cross-checking for certainty.

Tea growers lack the education and knowledge needed to understand financial services that are available to them. Loan officers find it unprofitable to serve the small credit needs and transaction volume of the lower-income tea farmers. Banks were not geographically accessible for the tea farmers, because financial institutions are located in towns where large business transactions and higher-earning working-class people are centred. The study relied on the respondents' response only, which may give room for bias and dishonesty since physical inspection of the assets was not carried out.

The nature of doctoral research, in most cases, imposes some restrictions on the researcher, which may include the scope and coverage of the study as a result of time and financial constraints. This study is not an exception to these constraints. This study may not provide a complete picture of the phenomenon studied.

The actual amount of income available to the households and the economic value of household and enterprise assets could not be determined. The study relied on the respondents' response only, which may give room for bias and dishonesty since physical inspection of the assets was not carried out. This limitation does not allow for the comparison of values of assets with household and enterprise income.

Future researchers may wish to involve professional values to determine the ranges of value of assets to be used for their study. In addition to the above, the illiteracy level of the respondents made it difficult for them to personally complete the questionnaire without the researcher's assistance. This could create a mistake though adequate care was taken by the researcher in the fieldwork. Since the respondents were not able to personally peruse the

completed questionnaire before it was used for the study, it may likely affect the outcome of the study especially in areas where increase, decrease and additions are used. In this case, future studies may want to consider registered small-scale tea farmers who may have a better level of education than the registered non-educated small-scale tea farmers used in this study.

The results of the study are biased because the study was conducted in Kisii County targeting small-scale tea farmers based within Kisii County. The study looked at a small population of Kisii County. Full understanding of the concept of financial service access strategies was a challenge to the respondents. Some   of the respondents did not know if some factors such as tax, interest rates, have a real effect on their income because they do not have an idea of how much tax is levied or interest charged on their proceeds

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter reviewed some related literature on the topic of access to financial service strategies on economic empowerment among small-scale tea farmers in Kisii County-Kenya. This was captured in two sections, theoretical and empirical review; the conceptual framework and summary of the literature.

2.2 Theoretical Review

The study used a livelihood framework to conceptualise and understand the livelihood processes in the study area. Livelihood frameworks are often used by researchers to document and analysed the processes by which individuals and households utilise their resources and opportunities to make a living in particular socio-economic and biophysical contexts (Ellis, 2000; Shanmugaratnam, 2008; De Haan, & Zoomers, 2005). The mediating factors may facilitate or inhibit the livelihood process, thereby influencing the nature of the livelihood outcome (Shanmugaratnam, 2008; De Haan, & Zoomers, 2005). The livelihoods are indicators of economic empowerment. They include the scope and combination of activities and choices (Liu, & Liu, 2016); a means of gaining a living (Loison, & Loison, 2016); comprises the capabilities, assets and activities required for a way of living (Ashley, & Carney, 999; Scoones, 1998).

They can also be defined as the course by which households establish progressively diverse livelihood portfolios (Niehof, 2004); adequate stocks and cash flows to meet basic needs (Hilson, 2016), and they are a form of self-insurance (Barrett, Reardon, & Webb, 2001). Livelihood diversification is a major means by which many individuals reduce risk. It is widely understood as a form of self-practice in which people exchange some foregone expected earnings for reduced income variability achieved by selecting a portfolio of assets and activities (Abdulai, & Crole-Rees, 2001; Adesina, Mbila, Nkamleu, & Endamana, 2000; Barrett, et al., 2001). Farm household diversification refers to income strategies of rural individuals in which they increase their number of activities, regardless of the sector or location (Brandth, & Haugen, 2011; Loison, & Loison, 2016; Martin, & Lorenzen, 2016; Liu, & Liu, 2016).

According to Gary (2007), a theory is a set of statements developed through a process of continued abstractions. It is a generalised statement aimed at explaining a phenomenon.

The study is grounded on the following theories: Resource-Based View Theory, financial deepening theory, financial inclusion theory, classical theory of interest rates and imperfect Information theory.

These theories are relevant to the study since they advocate on the benefits accrued from providing financial service access strategy support to tea farmers' economic empowerment. Their relevance to the study is as indicated below:

2.2.1. Resource-Based View Theory

The central premise of RBV addresses the fundamental question of why firms are different and how firms achieve and sustain competitive advantage by deploying their resources. For example, Selznick's (1957) idea of an organisation's 'distinctive competence' is directly related to RBV. Also, Chandler's (1962) notion of 'structure follows strategy', as well as Andrews' (1971) proposal of an internal appraisal of strengths and weaknesses, led to the identification of distinctive competencies. Resources, which are the basic unit of analysis for RBV in this study, can be defined as those assets that are tied semi-permanently to the firm (Maijoor, & Witteloostuijn, 1996; Wernerfelt, 1984). It includes financial, physical, human, commercial, technological, and organisational assets used by firms to develop, manufacture, and deliver products and services to its customers (Barney, 1991). Resources can be classified as tangible (financial or physical) or intangible (i.e., farmer's knowledge, experiences and skills, firm's reputation, brand name, organisational procedures and patents). All this depends on farmers' capabilities. Capabilities refer to a firm's capacity to deploy and coordinate different resources, usually in combination, using organisational processes, to effect the desired end (Grant, 1996). They are information-based, intrinsically intangible processes that are firm-specific and are developed over time through complex interactions among the firm's resources (Conner, & Prahalad, 1996).

However, the founding idea of viewing a firm as a bundle of resources was pioneered by Penrose in 1959. Penrose argued that it is the heterogeneity, not the homogeneity, of the productive services available from its resources that give each firm its unique character. The notion of a firm's resources heterogeneity is the basis of the RBV. The significance of the resource perspective as a new direction in the field of strategic management was broadly

recognised with the path-breaking article by Wernerfelt (1984). Wernerfelt suggested that evaluating firms in terms of their resources could lead to insights that differ from traditional perspectives.

In 1991, Barney came up with a framework to identify characteristics of firm resources which include the following: valuability, rarity, inimitability, and non-substitutionality. In this respect, many authors (Amit, & Schoemaker, 1993) have adopted and even expanded Barney's view to include: resource durability, non-tradability, and idiosyncratic nature of resources.

The central proposition of the resource-based research is that firms are heterogeneous in terms of the strategic resources they own and control. It is generally suggested that this heterogeneity is an outcome of resource-market imperfections (Barney, 1991), resource immobility (Barney, 1991), and firms' inability to alter their accumulated stock of resources over time (Carroll, 1993). In this vein, each firm can be conceptualised as a unique bundle of tangible and intangible resources and capabilities (Wernerfelt, 1984).

In a changing environment, firms must continually acquire, develop and upgrade their resources and capabilities if they are to maintain competitiveness and growth (Argyris, & Schön, 1996; Robins, & Wiersema, 1995; Wernerfelt, & Montgomery, 1988). In this study, farmers must continually acquire, develop and upgrade their resources and capabilities if they have to reach their targets and be economically empowered.

In a more formalised manner, Dierickx and Cool (1989) argue that strategic assets (those resources that are non-tradable and create sustainable advantage) must be built or accumulated within firm boundaries by choosing appropriate time paths of flows (e.g., R & D expenditures). This internal process is determined by factors such as time, the existence of other related assets, complexity and causal ambiguity of the accumulation process, and intraorganisational conflicts among those who make the managerial decisions about the process (Dierickx & Cool, 1989; Amit, & Shoemaker, 1993). In other words, resources and capabilities are considered as the product of a history of strategic choices and resource commitments made by the firm and guided by economic rationality and by motives of effectiveness and profitability (Conner, 1991).

Apart from firm-specific characteristics, it should not be ignored that resource selection and deployment are also influenced by external factors, including the social, economic, or technological environment, industry structure, buyer and supplier power, and competitors' behaviour. Therefore, following Amit and Shoemaker's (1993) point of view, it can be argued that the economic empowerment of a farmer's strategic assets is an integrative process that depends on the small-scale tea farms' strategic choices, in relation to industry and market-determined factors. The applicability of the firm's bundle of resources and capabilities particularly to tea farmers setting, the overlap with the industry and market factors will determine the tea farmers' economic empowerment. From a resource-based perspective, sustainable economic empowerment is the outcome of resource strategies selection, accumulation and deployment through farmers' capabilities and is based upon the premise of farms' resource heterogeneity.

Traditionally, one of the most important research questions of the management literature has been the relationship between innovation, firm structural characteristics (e.g., formalisation, centralisation, specialisation) and industrial environment. From this traditional perspective, it is supposed that differences in the firm's innovative activities are basically explained by industry and organisational structure characteristics (e.g. Wolfe, 1994). By contrast, more behaviourally oriented research streams, and especially evolutionary economics (Nelson, & Winter, 1982), have studied innovation activities and performance not only in terms of organisational structure or industry characteristics but also in terms of resources and capabilities (Dosi, 1988).

According to Leonard-Barton(1995) the presence of different organisational resources and capabilities positively affects the outcome of the innovation process and, thus, can be used to extend the findings -gained by past research- on the firm's capacity to innovate. The term 'innovation 'refers to organisational (or firm-level) innovation. Organisational innovation is generally defined as an internally generated or externally purchased device, system, policy, process, product or service that is new to the adopting organisation (Damanpour, 1991). Under this view, innovation represents a means of transforming an organisation, whether as a response to changes in its internal or external environment or as a proactive action taken to influence its environment.

The resource-based research on innovation is based on the fundamental premise that organisational resources and capabilities are those that underlie and determine a firm's capacity for innovation. Within this perspective, organisational resources (tangible and intangible) are taken to provide the input that in turn, is combined and transformed by capabilities to produce innovative forms of competitive advantage.

The literature has identified a number of resources that are critical for innovation like human resources which provide skills, education, training, information and technology; financial resources can expand farmers' capacity to support their innovative activities (Lee, Gibson, & Oxley, 2003). Whereas the opposite holds true when there is a lack of financial resources (Helfat, 1997). It should be noted that there is serious gender disparity due to social-cultural issues among tea farmers in Kisii County and this hinders creativity and innovation because women are the majority in tea handling but hardly do they handle the finances. And because of this, internally farm generated funds women are disadvantaged from training and this impacts negatively on innovation and creativity. The relevance of RBV to this study widely covers all the study objectives. For instance, financial resources are provided by financial institutions such as commercial banks and SACCOs in the form of credits to empower tea farmers economically; physical resources like infrastructure and information technology which make it easier for tea farmers to reach the factories/banks and access information respectively; land as a limiting resource helps farmers to grow tea in large or small quantities depending on the land size and land rights; human capital as a resource when well-developed leads to acquisition of knowledge, experience, literacy, training and subsequently creativity and innovation and hence the much required competitive advantage.

In adopting the Resource-Based View for this study, the researcher is aware of its weakness. The RBV has been criticised for ignoring factors surrounding resources, assuming that they simply "exist". Considerations such as how resources are developed, how they are integrated within the firm, and how they are released have underexplored by the theory. This counter assumption notwithstanding the RBV is the closest one to the conceptualisation of financial service accessibility strategies adopted by this study.

2.2.2. Financial Inclusion Theory

This theory observes that there is a process of ensuring access to appropriate financial services and products needed by all sections of the society including the vulnerable groups

such as weaker sections and low-income groups, at an affordable cost, in a fair and transparent manner by mainstream financial services providers (Chakrabarty, 2011). An inclusive financial sector that provides access to credit for all bankable people and firms, insurance for all insurable people and firms, savings and payment services for everyone (United Nations, 2006). Inclusive finance does not necessarily require that everyone who is eligible to use each of the services, but they should be able to choose them if desired. However, this theory has its own barriers.

World Bank (2008a) classified financial access barriers into four main categories: lack of documentation barriers, physical barriers, lack of appropriate products and services affordability barriers. Branches have been the traditional bank outlet for geographic access; therefore, geographic distance to the nearest branch relative to the population can provide an indication of lack of physical barriers to access (Beck, Dermirguc-Kunt, & Levine, 2007). This theory is applicable to financial service accessibility strategies for farmers' economic empowerment in relation to the level of financial providers among tea farmers and physical proximity of financial institutions, the reason being it does not discriminate against any cadre or level of the tea farmers regardless of the geographical distance or individual financial status.

2.2.3. Theory of Interest Rate

According to classical theory, the interest rate in real terms is the reward for the productive use of capital, which is equal to the marginal productivity of physical capital. In a money economy, however, as physical capital is purchased with monetary funds, the rate of interest is taken to be the annual rate of return over money capital invested in physical capital assets (Keynes, 1960). According to Keynes, true classical theory of interest rate is the savings-investment theory. Basically, the theory holds the proposition based on the general equilibrium theory that the rate of interest is determined by the intersection of the demand for and supply of capital. Thus, an equilibrium rate of interest is determined at a point at which the demand for capital equals its supply.

Demand for capital comes from tea farmers who wish to invest in capital goods industries. In fact, demand for capital implies the demand for savings. Investors agree to pay interest on those savings because the capital projects, which will be undertaken with the use of these funds, will be so productive that the returns on investment realised will be in excess to cover

the cost of borrowing that is interest. Capital is demanded because it is productive, due to its power to yield an income even after covering its cost, interest. The marginal productivity curve of capital, therefore, determines the demand curve for capital (Kaminsky, & Reinhart, 2000). Increased interest rates discourage the uptake of mortgage facilities because of the high costs of financing the loans. This theory has established a link between access to financial services and economic empowerment based on interest charged on loans given to farmers because when high interest is charged on loans, farmers are discouraged from borrowing and vice versa. This theory incorporates objective number one on interest rates. Most of the financial institutions or providers such as commercial banks, cooperative societies, ROSCAs, SACCOs, money lenders, shy locks charge different rates on loans given to farmers. These rates determine where farmers can go for borrowing depending on the rates. The theory holds relevance to this study due to the fact that when interest rates are low accessibility to financial service is high and hence enhanced economic empowerment.

2.2.4. Financial Deepening Theory

Financial deepening is the increased provision of financial services and access to basic financial services such as credit, savings and insurance. This theory was proposed by Edward S. Shaw in 1973. The theory holds that FD is a necessary pre-condition for economic growth. It is based on the premise that credit access is enhanced and this offers the necessary financing to firms in the economy, and hence economic growth is realised (Shaw, 1973). The theory enables financial intermediaries to perform their functions efficiently of mobilising, pooling and channelling domestic savings into more productive capital, thereby contributing to the economic growth of a country.

This theory plays a vital role in increasing the ability of individuals and households to access basic services such as education, health, and thus having a more direct impact on poverty reduction. For a financial sector to be said to have deepened the following should be evident; increase in the range of financial services, regulations and stability of the financial sector is improved, the extent to which the capital is allocated to private sector household is increased and the amount of cash intermediated is increased (Shaw, 1973). The theory brings about financial inclusion which offers incremental and complementary solutions to deal with poverty. It accelerates economic empowerment since it increases the size of the financial system and its role in financing with a wider choice of services geared towards economic

empowerment. This theory establishes a link between factors of production and access to financial services for farmers' economic empowerment as portended in this study.

2.2.5. Imperfect Information Theory

Information imperfection occurs when one party to a transaction has more and timely information than another party. This imbalance can cause one party to enter into a transaction or make costly decisions. According to Lofgren et al. (2002) information asymmetry is a common feature of any market interactions, for example, the seller of a good often knows more about its quality than the prospective buyer while a borrower knows more than the lender about his creditworthiness.

The theory suggests that it would be difficult for banks to operate profitably in developing countries credit markets and to attain extensive outreach. Based on this theory, it would, therefore, be difficult for policymakers, bankers, educationists, financial analysts, donors and government decision-makers to advocate for the entrance of commercial banks into microcredit markets to provide financial services to tea farmers in Kisii County. This theory relates perfectly well with the study because it embraces information, education and training to farmers.

2.3 Empirical Review

2.3.1 Level of financial provider's access

Critical financial service access strategies on farmers empowerment will be meet through funding resources that consist of internal and external resources which comprise of three sub-sectors: the formal, semi-formal and informal sector. The formal financial sector falls under the banking law and regulation and supervision of financial authorities. It includes various kinds of banks (commercial, development, specialised, regional, co-operative), insurance companies, social security schemes, pension funds, and in some countries, capital markets. In many countries, the formal sector is largely urban-based and organised primarily to supply the financial needs of the wealthier population and larger corporations (Demirgüç-Kunt, & Levine, 2008). The organisations in the semi-formal sector are not included in the arrangement stated in the formal sector above.

In Kisii county institutions that may offer finance to this sector are either licensed or supervised, these institutions charge exorbitant interest rates and charges. They operate under

particular laws and regulations. This sector includes credit unions, non-governmental organisations and microfinance institutions (MFIs). The latter often originate from NGOs, and semi-formal sector operates in urban as well as rural areas and is mostly dependent on subsidies and assistance from governments or donors.

The informal sector is characterised, in general, by social structures, individual operators, ease of access, simple procedures, rapid transactions, flexible loan terms and amounts. It includes local member-based organisations such as rotating savings and credit associations and self-help organisations. Individual informal moneylenders are also widely found in developing countries, although they are more prevalent in some countries such as Kenya. There are many types of informal money-lenders, including pawnbrokers, shopkeepers, - traders and landlords. They usually charge steep interest rates, sometimes running up to 100% a month (Reserve Bank of India, 2008).

Lastly, there are relatives, friends, and neighbours from whom those in need can borrow, although primarily for emergencies or special purposes rather than for ongoing working capital needs. In this situation, lenders tend to provide small loans at no or low interest, but they may expect non-financial obligations in return for their credit.

Kiriti-Nganga (2012) conducted a study on the impact of the global Financial Crisis and Remittances in Kenya. The study found that data from the Central Bank of Kenya shows that remittances from the Diaspora only reduced for the first six months of 2009 after which they started rising though not at the same rate as before. After that, remittances have taken an upward trend, and they comprise a sizable proportion of Kenya's Gross Domestic Product (GDP). Remittances have been shown to smoothen consumption on the part of recipients. The data show that only a very small proportion of remittances in Kenya are used for the improvement of land, though Kenya is an agricultural country. With the looming debt crisis in the Eurozone, the future of remittances in Kenya looks bleak unless the crisis is sorted out fast. Kiriti-Nganga (2012) did not show how financial crisis and remittances from diasporas lead to financial service access strategy for farmers economic empowerment.

Financial service access strategy is critical in empowering tea farmer's economically to meet their financial needs, such as school fees, buy household items, food and etcetera. According to (Meyer, 2011), agricultural finance refers to financial services, including savings, transfers,

insurance and loans, potentially needed to power and move the agricultural sector, including farming and farm-related activities including input supply, processing, wholesaling, and marketing. Most of these activities are conducted in rural areas where small-scale farmers dominate. Meyer (2011) was not clear on sources of funding to tea farmers and economic empowerment as coined by Kaplan and Horton (1996) on financial perspectives balance scorecard.

By enabling risk diversification across firms and industries, financial systems can influence the allocation of resources and hence economic growth; financial markets and intermediaries also mitigate liquidity risk and induce savers to invest in high-return projects requiring a long-term commitment of capital. Highly liquid markets for stocks, bonds, and demand deposits transform these financial instruments into investments and into high-return, long-term projects. Therefore, access to finance can contribute to narrow economic growth and broader social development (Demirgüç-Kunt, & Levine, 2008).

According to the World Economic Forum (2017), prolonged lack of investment causes real damage to the economy. Low investment dampens demand, slowing growth and putting pressure on employment. In the long run, a lack of investment can hollow out the productive capacity of the economy. The report further indicated that low investment could also negatively affect inclusiveness. On the asset side, a lack of investment opportunities pushes interest rates down and asset prices up, disproportionately benefiting high net-worth households while pushing, for instance, homeownership out of reach for many. On the income side, a good share of investment tends to be in construction activity– a sector that provides jobs and incomes for low-skilled segments of the population. And investment can drive productivity –and hence incomes – for all. From the above literature, it does not reflect clearly financial access strategy and economic empowerment as indicated in the RBV theory and financial inclusion theory (Chakrabarty, 2011).

A study by Sebatta, Wamulume and Mwansakilwa (2014) in Zambia in the agricultural sector shows that about 80% of the population exclusively dependent on agriculture-related livelihoods, many of whom are poor people in the rural countryside. In order to improve the status of poverty and improve rural lives, access to rural finance and intensity of small-scale farmers' participation in the financial markets are very important components. Increased Access to rural finance, therefore, should focus on improving access to banking services and

credit in rural areas so that farmers will economically be empowered. The study literature is scarce on economic empowerment.

2.3.1.1 Commercial Banks

The providers of rural financial services can be formal, semi-formal or informal but their services should be able to support farmers increase income such that they are not technically excluded from patronising the formal financial providers in these areas because of low education and financial illiteracy among rural people. According to Henry and Schimmel (2011), access to finance in rural areas creates an opportunity for rural people to increase their productivity and income through the purchase of goods and services. He further pointed out that formal financial providers neglect the rural areas because they find it too costly to operate in such areas, and therefore anticipate low level of economic return in the form of profit for the financial institution.

According to Richter (2011), rural areas are highly underserved by formal financial service providers because they either avoid such areas or fail to offer relevant sustainable financial services to rural people.   Lohlein and Wehrheim (2003), pointed out that the reluctance of banks to participate in rural finance and also lend to rural people aggravates the lack of access to financial services to rural enterprises which may hamper the economic improvement of rural people. Chiumya (2006), pointed out that the majority of low-income households, in all parts of the world, historically have not had access to formal financial service; because most formal financial service providers regard low-income earners and households in rural areas as too poor financially, having no access to surplus funds to either save with or borrow from their institutions." The above author's literature is not clear or rather is scarce on financial access strategies and economic empowerment among farmers.

Several categories of people such as rural inhabitants, poor people and uneducated people are not served by formal financial institutions in developing countries (Adjei, Arun, & Hossain, 2009).).   Braverman and Guasch (1993) estimated that only 5% of farmers in Africa and about 15% in Asia and Latin America had had access to formal credit. On average, across developing countries, Braverman and Guash (1993) found that 5% of borrowers received 80% of formal credit. Rosenberg, Landau and Mowery (1994) asserted that 90% of the rural population in developing countries lacks access to financial services from formal financial institutions, either for credit or for savings. This 90% may have no better alternative than to

either patronise or participate in informal finance programs. The authors did not show economic empowerment only discussed financial access without showing how it empowers farmers economically as a resource.

The literature concerning the impact of inflation and interest rates on mortgage financing offered by commercial banks is rather scarce. Williams and Nguyen (2005) analysed the impact of ownership change on bank efficiency in South East Asia between 1990 and 2003 by employing stochastic frontier analysis (SFA) and Fourier flexible functional form. The results of their research, demonstrate that foreign ownership did not lead to performance improvements at privatised banks. Sufian (2009) investigated the efficiency of the Malaysian Banking Sector during the Asian financial crisis of 1997 by employing first Data Envelopment Analysis (DEA), and then a Tobit model for the period between 1995 and 1999. Some recent empirical studies analysed the efficiency change of banks and banking groups during the 2000-2001 crises and the restructuring period that followed suit in Turkey. The literature on financial access in the study is rather scarce, and the need for this study is vital to fill the gaps.

Iganiga (2008) pointed out that the financial system provides services to about 35% of the economically active population of Nigerian citizens, while the remaining 65% are excluded from their services. In a country with a population of 140 million people, it suggests that about 91 million are served by informal finance providers. If the only available financial service providers to the rural people in Nigeria are informal sources such as the cooperative societies, money lenders, self-help groups and rotational savings associations, what is the hope for the empowerment of tea farmers for possible access to financial services and improvement in the standard of living in rural areas in Kisii? This question is essential because it provides a guide for the aim of this study, thus a justification of the research gap that, Comprehensive studies have not been carried out to ascertain the low access to financial services in the county; and this research intends to provide a critical analysis of the factors that contribute to financial services access as a strategy for economic empowerment among small-scale tea farmers in Kisii County.

2.3.1.2 Cooperative Societies and formal groups

Cooperatives are financial organisations that are owned and controlled by the members, which provide savings and credit services to their members in the community (Sharma,

Simkhada, & Shrestha, 2005). They are voluntary associations that are members owned, self-managed and democratically controlled within a specific location (Adedayo, & Yusuf, 2004). Nippierd (2002) observed that cooperatives have contributed to improved livelihood and better economic decision making of women. According to Birchall and Ketilson (2009), increasing the role of women in the economy is important for economic resilience and growth; however, their integration into the formal sector is still constrained by limited access to credit, property, technology and technical skills. The literature did not discuss economic empowerment among farmers.

Majurin (2012) revealed that cooperatives are also effective points of entry for addressing a broad range of gender equality issues such as unpaid work, shared responsibilities and gender-based violence. A study by Gita (1993) depicted that 57.7% of women in cooperatives take initiatives to organise cultural programs in their community as against only 10.7% of women in the unorganised sector. Cooperatives have been successful in not only increasing the social participation of women but also in developing drives, initiatives and leadership qualities. However, to date, women's active involvement and leadership in agricultural cooperatives continue to be rather low (USAID, 2015).

Cooperative runs agro-marketing for equality production and marketing the products internally and externally to realise the better price to the farmers to uplift the socio-economic condition of women (Bastakoti, 2011). Paudel (2011) pointed out that cooperatives provide access to microfinance to rural people, accelerate agricultural production and ultimately empower rural people, including women. He further said that cooperative provides microfinance in the form of credit to individuals and groups with limited resources. Microfinance has improved the family's wellbeing by increasing household's food sufficiency level, assets accumulation and children's education. Prakash (2003) points out that a cooperative institution can help accelerate the process of development and participation of women in their organisational and business activities.

Cooperative societies constitute an avenue through which cheap credit is channelled to the rural areas and especially when it is supported by international donors and governments (Huppi and Feder, 1990). Financial cooperatives are described by Larocque, Kalala, and Gaboury (2002) as an avenue for those without access to commercial banking services to gain access to financial services that may include savings deposit, productive credit, consumer

credit and loan. Sizya (2001) argued that cooperatives had been the leader in development interventions that aim to alleviate the poverty level of the poor in rural areas.

Akoten (2007) conducted a survey with owners of small enterprises in Kenya and found ROSCAs to be the most important source of credit in terms of loan size. Kan (2000) found ROSCAs to be an important source of funds for capital accumulation in Taiwan between 1972 and 1992.

Satakwowa (2014) studied factors that influence savings of small-scale tea farmers in Kericho town- Kenya. His study was based on a cross-section explanatory survey method. Researcher's target population was Kericho town-based tea farmers whose population is 380 according to KTDA. The researcher used cluster sampling technique where the respondents were drawn from various tea centres in Kericho. A sample of 190 tea farmers from Kericho town was randomly picked. He collected qualitative and quantitative primary data using structured and self-administered questionnaires which targeted small-scale farmers. How levels of income influence the need to save, importance of age and gender of household on the decision to save, how existence of institutional bodies such as SACCOs affect farmers decision to save, how interest earned on a savings account influence decision to save, the importance of tax to their saving decision, importance of dependency ratio to their saving decisions and how access to credit influence saving decisions; used a univariate analysis to analysed each variable of the factors that influence saving to establish its effect on saving. Multivariate analysis used regression to analyse the effect of demographic factors on saving, as demonstrated by Swasdpeera and Pandey (2012). To analyse the pattern of correlations among the variables that influence saving decisions under the study, factor analysis and principal component analysis methods were used. The model, in essence, analysed savings as a function of age, gender of household head, dependency ratio, tax, the existence of SACCOs, access to credit and interest rate earned on savings on individual's savings.

A negative relationship exists between the interest rate and age because the older one grows, the less motivated they become to saving for the sake of the interest to be earned on the savings account hence they are not motivated to a great extent to save because of interest. Their decision to save is motivated by other factors interest does not play a significant role in their saving decision. A positive relationship exists between dependency ratio and income because as dependency ratio increases; it puts a strain on income/ resource base hence the

need for increased income with higher dependency ratio. The higher the dependency ratio, the higher the need for increased income.

A positive relationship exists between access to credit and income. As the income levels of the individuals go down or are low, the desire to access credit goes up to satisfy their consumption needs. A positive relationship exists between access to Sacco and income. The respondents' need for increased income is motivated partly by their participation in a Sacco in order to earn dividends as they deposit their resources and, in the process, gain part ownership of the institution. On the other hand, when then income levels go up, especially during peak seasons and during the tea bonus months, the need to deposit more funds by the respondents is increased.

A positive relationship exists between access to SACCOs and access to credit. Most of the respondents deposit their resources with the SACCOs in order to access easy loans. The need for loans creates a positive relationship. The SACCO loans are sought because they are deemed to be relatively cheaper than loans obtained from commercial banks. The terms and conditions of borrowing are also flexible. A customer is able to access a loan and use their savings deposits as collateral for the loan.

 He concluded that most of the farmers do not fully understand the importance of saving. The more they put their funds away in savings accounts, the more indebted they are at the end of the day. Most of their income ends up in loan repayments which sees them constantly topping up their loans to sustain their livelihoods. The poor saving culture among the tea farmers due to low literacy levels, poor funds management and low-income levels among other contributing factors.

SACCOs which are the key institutions through which most of the farmers are paid and through which they access credit have not been seen to take an active role in reducing the debt burden of the tea farmers and encourage them to save for future consumption and investment besides other factors playing a role in influencing the decision to save. The key role played by the Sacco has been encouraging the farmers to access more loans.

There is need to civic educate the masses on the importance of saving considering that some of the factors indicated in the study as being those that influence them to save only leave

them highly indebted. These factors are access to credit, access to SACCO and the need for more income. During peak seasons, the farmers make considerable amounts of money, but this money is not put to good use because of lack of knowledge on good personal financial management mostly contributed by low literacy levels.

Like other developing countries, Kisii County has been dealing with microfinance institutions since the 1990s, when the Government of Kenya embarked on financial sector reforms to create an effective and efficient financial system. The main objective was to facilitate the accessibility of financial services to the low-income people as a means to improve the social and economic well-being of the people, but these people majority of them are financially weak and underpowered where tea farmers are the majority.

In 2015, USAID supported more than 1.5 million households to embrace new ideas and farming practices as part of the Feed the Future initiative. Feed the Future investments are focused in 27 target counties, and in four main value chains, including dairy, livestock, horticulture, and staple foods such as maize, millet and sorghum. Feed the Future activities also link producers to markets, improve input supply, increase access to financial and business development services; promote innovative, private sector solutions; and facilitate more efficient business practices and farmer-friendly policies that contribute to a growing national economy. However, the literature did not show how these new ideas and farming practices empower small-scale tea farmers economically! From the above literature, it can be argued that cooperatives and ROSCAs are vital financial access strategies for economic empowerment, but the majority of tea farmers are inadequately empowered.

2.3.1.3 Insurance

Risk is a measure of uncertainty and can be measured in the form of variance in income, probability of loss, and size of the maximum possible loss. Risk and vulnerability can be caused by factors that range from drought, health shocks, pests, commodity price shocks, political strife, conflicts, thefts and many other shocks (Dercon, 2005). Attitudes to risk change over time as needs alter and people's capacity to afford to lose varies (Conquest Research Limited, 2004). The evidence indicates fairly clearly that willingness to take financial risk decreases significantly among people who are retired or nearing retirement (Distribution Technology, 2005). UK consumers have low levels of knowledge and understanding of pensions and investments. They also tend to be risk-averse (Finke and

Huston, 2003). As a financial access strategy, insurance is a vital component that can help tea farmers to be empowered, since it minimises risk impact on poor households by covering, natural hazards, yield, price and transaction costs in order to increase farmers' incomes.

Hazell and Norton (1986) report that the types of risks farmers face depend on the type of farming system, climate and policy and the institutional environment. According to World Bank (2015) climate change poses the biggest risk for agriculture and food security. We need to invest in agriculture to be able to adapt to climate change. We also need to use insurance and other mechanisms to mitigate the effects when climate events cause losses in agricultural production and assets. Investments in climate adaptation and development of insurance and other capital market products to compensate for losses are underdeveloped in emerging markets and need to be further developed. Kihimbo, Ayako and Omoka (2012) pointed out that moral hazard issues can be reduced by collateral requirements by increasing and adding a potential cost to borrowers when those are not making their best effort.

International Labour Organisation cited in (OLAL, 2009) that, only 20% of the world's population has adequate social protection like health care and pension facility. According to (Babara, 2011) agriculture is subjected to vagaries of adverse weather conditions which results in volatility in farm production and income, which in turn may adversely influence the food security of a nation.

According to Sadoulet and De Janvry (1995), risk has a negative effect on welfare, under the situation of isolated markets; there is a negative correlation between the individual's own production and the market price. According to Evans and Ngau (1991), farm households can raise their agricultural output earnings and productivity by increasing land under cultivation, applying more purchased inputs, hiring more labour and equipment, switching from subsistence to higher-value cash crops, or by selling a greater proportion of crop yield. They further said that these methods, however, expose them to more risks since output or market prices may fall below expected levels. The farm household decision in such a situation will depend on its assessment of the risks involved and its capacity to withstand the losses should the outcome turn out bad.

In principle, traditional insurance instruments, including crop insurance, can be used to transfer the risk of extreme weather events. However, insurance markets are underdeveloped

and often non-existent in rural areas of lower-income countries due to poor contract enforcement, asymmetric information, high transaction costs, and high exposure to spatially covariate risks (Skees, & Barnett, 2006). In the absence of formal insurance markets, households may also utilise a variety of informal risk transfer mechanisms (Besley, 1995). These mechanisms include family and community mutual-aid obligations as well as semi-formal micro-insurance or state-contingent loan entities. These mechanisms can be somewhat successful in addressing the asymmetric information and transaction costs problems that plague formal insurance markets, but they tend to break-down when spatially covariate shocks occur (Zimmerman, & Carter, 2003).

According to Dandekar (1976), crop insurance is recognised to be a basic instrument for maintaining stability in farm income, through promoting technology, encouraging investment, and increasing credit flow in the agricultural sector. The basic principle underlying crop insurance is that the loss incurred by a few is shared among others in an area, engaged in a similar activity. Also, losses incurred in bad years are compensated from the resources accumulated in good years.

The *Kilimo Salama* index-based insurance in Kenya is the product which has been successful in protecting farmers against risks from drought or excessive rainfall, both of which can have disastrous effects on the harvest. Most insurance is indemnity-based, meaning the company insures against crop loss or damage. *Kilimo Salama* was developed by the Syngenta Foundation for Sustainable Agriculture (SFSA) and launched in partnership with Safaricom and UAP. *Kilimo Salama* is a tool for farmers to avoid the risks associated with rainfall variability that directly affect their livelihoods. But most of the farmers in particular tea farmers in Kisii are not covered by insurance companies due to limited financial resources.

2.3.1.4 Collateral requirements

Collateral refers to the extent to which assets are committed by borrowers to a lender as security for debt payment (Gitman, 2003). The security assets should be used to recover the principal in case of default. SMEs, in particular, provide security in the form of properties such as houses, the businesses, the car, and anything that could actually bring back the principal in case of default on loans (Garrett, 2009). Security for loans must actually be capable of being sold under the normal conditions of the market, at fair market value and also with reasonable promptness. However, in most banks, in order to finance SMEs and to accept

loan proposals, the collateral must be 100 % or more, equal to the amount of credit extension or finance product (Mullei, & Bokea, 2000).

Kihimbo et al. (2012) pointed out that moral hazard issues can be reduced by collateral requirements by increasing and adding a potential cost to borrowers when those are not making their best effort. He noted that sometimes the borrowers extract the funds provided by the lenders for their own personal and private use. Therefore, the collateral requirements when in place can reduce negative consequences that can arise due to improper utilisation of the funds by SMEs. It is evident that most SMEs are denied and discriminated by the lenders in providing financing. Collateral is always a compulsory requirement in traditional lending as a way of minimising default risk anticipated by lenders. Such collateral requirement becomes more rigid if borrowers are economically poor. However, the poor usually do not own valuable assets which can be used as appropriate collateral when applying for loans from traditional financial institutions, and as a result, poor people are historically considered un-creditworthy and precluded from the traditional credit markets.

Microcredit is an innovative idea that challenges the traditional lending wisdom of 'no collateral means, no credit'. It deems the poor as creditworthy as the rich and provides collateral-free loans to the poor to develop entrepreneurial activities. According to Miller and Jones (2010), Value Chain Finance (VCF) refers to "finance that takes place within the value chain and external finance that is made possible by value chain relationships and mechanisms". VCF can be implemented in two strategies (Carroll et al., 2012). First, financing can be provided against guaranteed purchase agreements with small scales — an increasing number of impact-driven small-scale agriculture lenders.

According to Osoro and Muturi (2013), access to credit refers to the ability of individuals and enterprises to obtain external funding to enable them to ease cash flow problems. Credit can be either short term or long term depending on the lenders' assessment of the borrowers' ability to repay. Access for credit by growers in Kenya has been identified as a necessary condition for job creation and economic growth, whereby without collateral no credit or borrowing is granted. Diagne, Zeller and Sharma (2000), argued that financial services such as credit facility contribute greatly to the growth of individuals, sectors and countries, and have positive effects on poor people's livelihoods.

In the case of agriculture, credit is an important element in the agricultural production process, which allows producers to satisfy the capital needs of the production cycle. In addition to maintaining consumption of basic necessities, he said, access to credit can increase poor farmers' risk-bearing ability and help them alter their risk-coping strategies so that farmers may be willing to adopt new and riskier strategies with higher potential return in their production instead of risk-reducing but inefficient strategies. Hence, credit is a powerful instrument to help poor people invest and break out of a 'vicious cycle' of poverty because it has the potential to improve the users' incomes and savings, and consequently, enhance investment and reinforce high incomes (Mohamed, 2003).

A study by Meeme (2013) on factors influencing access to formal credit by small-scale women tea farmers found out that, majority of the respondents presented by 62% depended on cooperatives, 50% said on banks as sources of formal credit to a very great extent, 50% said shylocks, 50% mentioned lending enterprises respectively.

Strategically small-scale farmers need production capital which is a scarce resource to improve their production. The provision of credit can encourage the farmers to use modern technologies and procure inputs for farm use, thus bringing them to a higher level of productivity and increasing their incomes (Lianto, 1987). Such increases in household incomes are much needed for improving food security and eventually will come from the gains in agricultural productivity and through better technology and more productive crops thus leading to economic empowerment of small-scale farmers.

Lack of access to credit is readily understandable in terms of the absence of collateral that the poor can offer conventional financial institutions coupled with the various complexities and high costs involved in dealing with large numbers of small, often illiterate borrowers (Montgomery, & Weiss, 2005). Robinson (2001) observed that the rural population is denied access to credit since most of them are unable to meet the collateral requirements, the inadequacy of complete information and the viability of credit services.

A study by Kashuliza and Kydd (1996) revealed that the type of financial institution and its policy would often determine the access. Where credit duration, terms of payment, required security and the provisions of supplementary services do not fit the needs of the target group, potential borrowers will not apply for credit even where it exists, and when they do, they will

be denied access. In addition, Bigsten (2003) stated that in developing countries asymmetric information, high risks, lack of collateral, lender-borrower distance, small and frequent credit transactions of rural households make real costs of borrowing vary among different sources of credit.

According to Nyoro (2002), lack of access to credit facilities has been highlighted as a key constraint to farmers' investment. Many farmers have hardly been able to meet farm expenditures due to lack of financial command and potential. The thrust of this study draws from the premise that access to credit by farmers is a key strategy to increase productivity. In this case, one of the major reasons is that purchased seasonal inputs and requisite labour are rarely affordable by farmers on a "cash" basis. Majority of these farmers face liquidity constraints that compromise the crucial investments in agriculture and other sectors necessary in increasing productivity (Doward et al., 1998).

Evidence from Asia and Latin America illustrates that the major constraint for accessing credit was product design; as such products need to be tailored specifically to the needs of the borrowers (Meyer, 2002). According to Hudon (2004), the poor require flexible and inexpensive products that match their capacity to borrow and address their needs for them to cope with crisis; thus, there is a strong need for credit. The challenge for MFI's is to design credit products tailored to respond to different client needs. Similarly, these products should be easily accessible, with reasonable interest charged and more attractive terms than what they already access.

According to International Fund for Agricultural Development, low investment in the agricultural sector is more evident in Kenya especially to small-scale farmers, yet it is an important source of boost to the agricultural sector (Nyairo, 2015). Lack of working capital to enhance productivity has led to low output amongst small scales. In 1990 commercial banks closed down rural branches to cut costs and improve profits. With this kind of situation, traditional financial institutions such as savings and credit cooperatives (SACCOs) emerged to lend those who could not reach the threshold of bank requirements. Agricultural trade in Kenya, especially by small scales, is lacking, and producer organisations are either weak or non-existent.

In the recent past, the number of SACCOs has also increased, yet the level of agricultural credit supply to small-scale farmers is still low. In Kisii county majority of the tea growers are unable to access financial services due the fact that increase of population has led to land fragmentation which can serve as a collateral, small-scale tea farmers have no land title, car log, or other securities that can be used as collateral and majority of them since they depend on farming are not employed elsewhere and therefore vital to evaluate financial service accessibility strategies for their economic empowerment. Access to financial service has become a challenge to many farmers in Kisii County who depend on tea farming due to their inability to get credit collateral requirement to meet financial institutions funding.

2.3.1.5 Interest rates and other charges

Access to financial service by small-scale tea farmers is being hindered by high-interest rates charged on loans taken. Accessibility to financial services among tea farmers empowerment is a hurdle due to interest rates that keep on changing and as a result, farmers fear taking loans from financial institutions. Changes in interest rates directly affect the profitability of the agricultural sector by influencing borrowing, spending and investing, since agriculture is an especially capital-intensive industry. Changing interest rates impact agriculture indirectly through affecting the level of general economic activity, such as output and employment, exchange rates and international trade. Matur et al. (2012) observe that real interest rates have theoretically ambiguous effect on savings due to the opposing substitution and income effects. They note that an increase in real interest rates reduces the present value of future income flows and therefore has a negative impact on savings, at the same time it increases the net return on savings making savings attractive today. This leads to postponement of consumption and has positive impact on savings.

Hudgens (2011) pointed out that, all of the predicted benefits of microfinance have come under intense scrutiny after recent social and political tension in India has cast doubt on the social mission of MFIs. Muhammad accused MFIs of exploiting the poor and charging outlandish interest rates. He argued that interest rates among MFIs should be capped at the cost of funds, plus 15 per cent.

Bett (2011) studied the effects of inflation and interest rates on mortgage finance offered by commercial banks in Kenya. He used descriptive and correlation study research design, the target population of ten commercial banks in Kenya, offering mortgage finance during the

years 2008-2012. He used secondary data of annual reports and financial statements of commercial banks, offering mortgage finance in Kenya and SPSS version 17 for analysis of data. Findings revealed that average interest rates for mortgage loans advanced kept declining over the five-year period. Average interest declined from 19.67% in the year 2008 to 14.0% during the year 2012. His findings revealed that average interest rates for mortgage loans advanced kept declining over the five-year period. Average interest declined from 19.67% in the year 2008 to 14.0% during the year 2012. He concluded that inflation and interest rates have a positive effect on dividend pay-out of commercial banks in Kenya; supported by the study findings which showed that there was a strong positive relationship (R= 0.717) between the variables. 51.4% of mortgage finance uptake in commercial banks in Kenya could be explained by inflation and interest rates. From his study it was evident that at 95% confidence level, the variables produce statistically significant values and can be relied on to explain mortgage finance uptake in Kenya.

According to Mutua and Oyugi (2005), interest in access to finance has increased significantly in recent years, as growing evidence suggests that lack of access to credit prevents lower-income households and small firms from financing high return investment projects, having an adverse effect on growth and poverty alleviation. They further argued that high-interest rates affect access to agricultural finance negatively with the number of borrowers reducing with reducing amounts borrowed especially from the formal financial sector. Basu and Srivastava (2005) highlighted the negative effect of interest rates on borrowers by stating that poor borrowers are cut off by high formal sector interest rates from access to agricultural finance and end up paying higher interest rates to informal lenders.

Mohamed (2011) conducted a study on the impact of the financial crisis on the global economy. The aim of this paper was to analyse the different measures taken by the G7 and G20 leaders to face the current global financial crisis and to show whether such decisions represent a return to protectionism. The paper proposed the introduction of a new economic system based on Islamic banks' principle, which calls for cancelling interests. This line of thinking might solve speculation problems and put this type of crisis to an end. The study established that this financial crisis pushed most developed countries to lower their banking rates and to implement null-approximating interest rates, a move which replicates the principle adopted by Islamic banks.

A study conducted by Kibet et al. (2009) on the determinants of household savings: case of small-scale farmer's; entrepreneurs and teachers in rural areas of Kenya, found out that the adoption of liberalisation measures in Kenya culminated in the rise and spread of interest rates in the financial sector that saving rate has however remained low. This can be argued that without finance in the case of agriculture tea farmers, no savings for investment and therefore hardly will they be empowered due to high rise and spread of interest rates.

The study further revealed that none of the respondents viewed interest gained on savings as a motivating factor to save. The households in the study preferred putting the money away in investments, the returns of which are viewed to exceed those of savings with a net result of higher than anticipated opportunity cost. There was no mention of financial access for farmers' economic empowerment.

According to CBK (2016), interest rates charged by commercial banks were lowered to 14% in order to empower Kenyans to borrow at cheap rates for their economic empowerment. On the same note, the government of Kenya should enact laws to control legal fees, stamp duties, valuation fees and other excess bank charges to reduce the cost of credit further. In Kisii, small-scale farming consists of the larger population living under the poverty line with the subsistent source of food.

2.3.2   Physical Proximity to financial service access

2.3.2.1   Distance

Physical access is often considered the most important source of access to finance in developing countries. Despite the notion of branchless banking and availability of ATM machines, yet easy access to a normal bank branch staffed with people is still very important in the less developed areas. Porter (1966) pointed out that access to bank branches leads to increased savings and investment, improve the efficiency of allocation of capital, and increase the ability of monetary authorities to stabilise the economy. Lewis (1955) further argued that the amount of saving depends partly on how widespread these facilities are; people save more than when the saving institution is some distance away.

According to Kumar, Savarimuthu and Ravichandran (2003), there are indeed differences between the availability of financial services between regions of the country, placing financial institutions in each region or municipality in itself is not a sufficient condition for

broadening access. Even if there is a financial institution present in a given location, its clients may be biased towards the better off of the institution.

According to Fin Mark Trust (2012), assessing the geographical distribution of individuals in terms of the geographical distribution of formal financial institutions in Rwanda led to the conclusion that physical access or proximity to financial institutions does not serve as a major restriction to formal financial inclusion. However, the physical accessibility of formal financial is one of the barriers to enter formal financial services for low income. They aversely highlighted that lack of bank branches in the neighbourhood could prevent the unbanked from gaining access to formal financial sector services.

The World Bank (2008) report deemed that physical access is one of the major constraints of financial access. The bank highlighted that there are different opportunities that financial institutions provide to their clientele as a way of tackling this issue. Some institutions allow clients to access services over the phone or via the internet; others require them to visit a branch or automated teller machine. The World Bank proposed that ideal measure would indicate the average distance from household to branch or ATM, the density of branches per square kilometre or per capita, providing an initial, albeit crude indicator. According to Ghosh (2012), as a consequence, many low-income people in remote areas where such facilities are not available within a reasonable distance, tend to rely more on informal markets.

Recent studies by Chaia et al. (2011) and Demirgüç-Kunt et al. (2008) show that in the early 2000s, roughly 2.5 billion adults, or half of the world's adult population, lacked any bank account; in Sub-Saharan Africa. A major challenge for empirical research on financial access is the paucity of micro-level data and the non-random nature of bank expansion (Burges & Pande, 2006). The physical distance of farm households from formal lending institutions is one of the factors that influence access to formal credit. According to Hussein (2007) farm households are discouraged from borrowing from credit sector if it is located farther.

Another study by Miller and Jerry (1983), based on the data from a sample survey of 699 randomly selected peasant farmers in Bolivia applied discriminate analysis to identify a set of socio-economic, physical and psychological factors that influence credit use among small farmers with a view to differentiate between borrowers, potential borrowers, and non-

borrowers. The results of the study indicated that borrowers were characterised by higher resource base, farm size, a higher level of education, a large number of cattle, higher household incomes, higher level of market integration, greater use of improved technology, larger operating costs and investments, and higher risk ability. Potential borrowers were characterised by further distance from markets, low level of market integration, higher transaction costs, a smaller number of cattle, etc. Furthermore, non-potential borrowers were characterised by lack of interest to expand production, lower level of education, limited use of improved technology, shortage of labour and proximity to market.

Burges and Pande (2005) as cited by Haniffa and Hudaib (2006) found that state-led expansion of rural bank branches in India has helped reduce poverty. Specifically, the authors found robust evidence that opening bank branches in rural unbanked locations in India was associated with a reduction in rural poverty rates in those areas. Similarly, Brune et al. (2011) found that increased financial access through commitment saving account in rural Malawi improves the well-being of poor households as it provides access to their savings for agricultural input use.

The time spent to gain access to credit in a formal institution is among such cost that leads small borrowers to prefer informal lending services. For example, a survey on women in Kenya by Anderson and Baland (2002), found that majority of women joining informal funds groups were aimed at saving and borrowing to keep their money away from commercial banks to avoid costs and commissions charged.

Technological innovations, such as prepaid cards to distribute loan payments and mobile phone plans to make loan payments and transfer cash, make it easier for women to gain access to capital by reducing the need for women to travel long distances, allowing them to sidestep social constraints that restrict the areas women can visit or the people with whom they can interact (Duncombe, & Boateng, 2009). Banking expansion in Kenya has coincided with the rise of Equity Bank, a pioneering for-profit bank that devised a banking service strategy targeting low-income clients and traditionally under-served territories. However, people are not adequately empowered since most rural farmers hardly have Bank accounts.

2.3.2.2 Infrastructure

Ndebele (2011) posited that development of an efficient road network facilitates the movement of goods from farms to markets, makes social interaction easier and may change the land use and settlement pattern of an area by attracting settlements and economic activity to develop along major roads. The building of new roads could lead to the growing of cash crops hitherto unknown in a particular area, thus increasing the volume of agricultural trade.

In Uganda, the government announced in January 2009 that its coffee exports dropped both in volume (8 per cent) and value (23 per cent or USD 10 million) due to logistical problems and limited supply of containers compared with the same month in 2008 (Neven et al., 2009). In Kenya, underdeveloped rural roads and other key physical infrastructure have led to high transport costs for agricultural products to the market as well as of farm inputs and electricity in rural areas is expensive and often not available reducing farmers' competitiveness. Questions to ask are: how do farmers access their funds for economic sustainability when tea rots at the buying centres before being delivered to the factories because of transportation and storage facilities? How does this crop (tea) benefit the grower as it goes to waste before it can be weight due to lack of road network?

World Bank (2013) observed that financing agriculture-related infrastructure, such as rural roads, port facilities and loading terminals is needed in most of the poorest countries. Currently, transportation costs are often too high; particularly for landlocked areas where moving food in and out becomes almost impossible because of poor logistics and high costs. In Kisii County, poor infrastructure, unreliable electricity, high costs of fuel and packaging materials further increase production costs (KTDA, 2015). The factories have been the hardest hit by the ban on procurement of wood fuel from the forest. This is because they rely on wood fuel to cure the tea. Since the ban was affected three years ago, the factories have been forced to procure fuel from the farms where trees are rare and therefore sold at exorbitant prices. Besides, storage facilities and collection centres are won out. From the literature above it can be seen clearly how farmers financial service access strategies are required to empower themselves economically.

2.3.2.3 Information

The adequacy and availability of information in the financial market are critical for both SMEs and financial providers. This is necessary for small-scale tea farmers in Kisii County.

No one will go to borrow unless he or she is aware of the products offered and explained properly on the implications of not honouring commitments between the financier and the borrowers.

In order for SMEs tea farmers to identify a potential supplier of financial services, they require enough information. Othieno (2010) argues that financial institutions require information to enable them to evaluate the potential risks associated with the SMEs that apply for bank financing and also to access the location where the same SMEs will be operating and its market segments. Information tries to determine awareness of funding opportunities by SMEs. In addition, information asymmetry is that relevant information is not available and known to all players in the financial market (Agostino, 2008). Bazibu (2005) observed that Information asymmetries are actually concerned with the two players in the financial market, the borrowers who know more about their business cases and the bankers who may not know more about it. On the other hand, it entails the lack of timely, accurate, quality, quantity, and completes information regarding the ability of the applicants to repay back the loan and to access financial products from the banking institutions.

Agostino (2008) pointed out that the failure of the current African market is because of the number of the current agricultural credit problems associated with the imperfection of the information in the risk presences and the failures of the market, that mostly occur due to the fact that it is costly to screen credit applicants. Small-scale tea farmers have a limitation to access loans from financial providers due to security requirements. Girabi and Mwakaje (2013) observed that one of the major factors constraining access to credit by small-scale farmers was lack of microfinance credit information.

A study by Kumar, Wankhede and Gena (2012) on the analysis of farmer's perception and awareness towards crop insurance as tool for risk management in Tamil Nadu-India, revealed that most farmers (65%) are aware of risk mitigation measures of the government, however only half of them were found aware of crop insurance scheme products. This casts shadows on these insurance schemes; whether it gives access to financial service for farmers empowerment or not, or they are just aware? Thus, there was a need for the study to ascertain financial service accessibility strategies among small-scale tea farmers' economic empowerment.

In a related study by Babara (2011) revealed that farmers do not have in-depth awareness about crop insurance scheme. The financial viability of the National Agricultural Insurance Scheme (NAIS) is very poor as it assumes a loss ratio greater than profits gained by farmers. Lack of sufficient market information predisposes small enterprises to a great challenge. Adams (2010), in his study, asserted that lack of market for the products contributed to most of the farmers being unable to pay off their debt. Girabi and Mwakaje (2013) in their study on small scales in Tanzania posited that access to market for the agricultural products impacted positively on agricultural productivity and in turn economic empowerment of small-scale scales is enhanced. However, Pender and Gebremedhin (2008) observed that access to market for agricultural produce is not enough by itself, but the market has to be efficient. Baloyi (2010) made a similar conclusion that access to market alone is not good enough, but market information is also necessary. Market information includes; product prices at national level, quality requirements, the best places and time to sell their products and information about their competitors and potential customers. Similarly, Davis (2008) argued that lack of market accessibility could hinder farmers from being able to procure farm inputs and sell their output and as a result their efforts in the farm are jeopardised.

Baloyi observed that one of the greatest impediments of development of rural farmers is lack of markets in rural areas. He contends that most small-scale farmers are located in rural areas where there are no formal markets. The farmers are compelled to market their produce to local communities in their areas, sometimes at a lower price or transport their produce to towns at a higher cost. According to Baloyi, this further leads to low bargaining power since they have poor access to market information and limited access to financial markets, which hinders them from selling their produce at competitive prices. He recommended that in order to ensure market participation by small-scale farmers, it requires that they gain access to reliable and high-quality farmer support services such as production inputs, on-farm infrastructure, training and extension services.

Kyale (2013) observed that microfinance institutions have managed to register MFIs in farm associations and updated their databases as a way to facilitate marketing. He further posited that those who were beneficiaries of market facilitation by MFI said that it boosted their income from their farms. Kyale recommended that intensified use and facilitation of ICT would go a long way in helping the MFIs to boost their income. Therefore, this study seeks to

assess the information of the market as an economic-financial access strategy for tea farmers' economic empowerment in Kisii county- Kenya.

2.3.2.4 Role of ICT in accessing financial Services

According to Nam and Ellinger (2008), the advent of communication technologies has helped to reduce transactions costs associated with banking activities. However, Porteous (2006) observed that a number of emerging mobile financial tools had been developed including the M-Pesa in Kenya, MTN Mobile Money in South Africa and privately-operated mobile money transfers in Rwanda. An important realisation, however, is that rural consumers are in themselves very diverse with differing needs and thus constituting varying marketing segments (Kaynak, & Harcar, 2005). The authors have not discussed on economic empowerment as far as ICT is concerned.

The Technology, for instance, encapsulates many of the factors initially recognised to be critical in the adoption of agricultural innovations namely relative advantage, complexity, risk and compatibility (Tobbin, 2012; Zhao et al., 2008; Eriksson et al., 2008; Laforet, & Li, 2005). Recent research on financial services in developed countries focused on the role of internet banking as an alternative for consumers (Berndt et al., 2010; Zhao et al., 2008; Nam, & Ellinger, 2008; Gan et al., 2006; Kaynak, & Harcar, 2005). Generally, adoption of electronic banking is a function of service quality, gender, education, risk, convenience, deposit rates, security, computer skills and image. Studies in developing countries including Ghana, Malaysia, South Africa, Indonesia, Kenya, Rwanda and Philippines is still grappling with the issues related to whether rural consumers could possibly accept to have bank accounts of their own and associated mobile technology (Saunders, Bendixen, & Abratt, (2007). For instance, Coetzee, van Zyl, and Tait's (2012) analysis of the urban poor in Johannesburg revealed that bank image, reputation and quality of services were important determinants of having a bank account while deposit rates were not essential in this decision.

Tustin (2010) poised that enhancing financial knowledge on products and services among the poor may be important in enhancing their ultimate choice of banking intermediary in South Africa. Tobbin (2012) explored the possibility of adopting mobile banking in rural Ghana and showed that perceived usefulness, ease of use and trust were essential factors underlying consumers' decisions.

An earlier study by Owusu-Frimpong (1999) in Ghana determined that banked rural consumers were mostly male and that they considered deposit rates and quality of services in their decisions. Social capital emerged as an important tool used in sharing information about banking products. Narthex and Owusu-Frimpong's (2011) study on Ghanaian students showed that image, attitude and behavioural aspects of staff and service quality were critical to open an account. These findings were also corroborated by outputs from Zimbabwe that noted the importance of usefulness, ease of use, relative advantage and risk, which are embodied in the TAM (Munongo, & Chitungo, 2013). Studies in India, Pakistan and Malaysia have also confirmed that age, education, gender, governance, customer satisfaction, interest rates, location, service quality are useful indicators in consumer decision making (Padmaavathy, & Brindha, 2014; Sharma, & Prasad, 2014; Ram, & Subudhi, 2014; Ramayah et al., 2003). Despite these findings, consumer segments are unique in terms of demographic, cultural and economic factors and these influence perception towards banking products by the poor (Laforet & Li, 2005). It can be argued that due to demographic factors tea farmers are financially underpowered in Kisii County.

Although the proportion of the population with access to financial services has been increasing according to Access to Finance in Kenya, there is inadequate understanding of rural consumers in terms of the factors taken into account when choosing among alternative financial intermediaries as postulated by theories of consumer behaviour. Not only are consumers different in terms of socio-demographic characteristics but also financial needs.

2.3.3 Economic factors

2.3.3.1 Land

For tea farmers to be empowered access to financial services is essential to meet their livelihoods and to achieve this land has to be focused as a financial access strategy for farmers economic empowerment; due land as a factor of production can be used as collateral in accessing loans from financial providers, and the production of tea itself depends on land. Land Size: It is defined as the total land owned by the household in acres. Binswanger, P. H. and Rosenzweig (1986) state that land has been the most important collateral for formal credit and he also argued that farmers with more land are more likely to seek credit and as long as the exploitation requires more capital. Therefore, in this study, land is hypothesised to increase the probability of farmers' access to credit.

Land ownership, as used in this thesis, refers to land that is owned within the community or Village Township, where a majority of activities and trade take place. It also suggests a high level of financial security that implies ability to overcome poverty because land acquisition is considered very important by farmers' because from land farmers are able to provide food, clothing, shelter and other basic needs for their household. The expanse of land used for tea farming or other agricultural purposes that is located within the community. The piece of land is such that it has economic value based on the economic profile of the community. Expansion in land acquisition has a direct relationship to increase in income while land ownership contributes positively to poverty reduction (Haque, &Yamao, 2008).

According to Cotula Toulmin and Quan (2006), rural poverty is strongly associated with poor access to land, either in the form of landlessness or because of insecure and contested land rights. Increased land access for the poor can also bring direct benefits of poverty alleviation, not least by contributing directly to increased household food security. In countries where agriculture is a main economic activity, access to land is a fundamental means whereby the poor can ensure household food supplies and generate income.

Land is one of the most important resources in Kenya as it is the base upon which agriculture activities are carried out (GoK, 2006). Resource endowment is one of the factors affecting farmers' decision to adopt new agricultural technology (Khan et al., 2008). Land size is often used as an indicator of wealth and proxy for social status and influence. Farmers with large farms are likely to be better informed (Nkonya, Schroeder, & Norman, 1997), richer and keener in searching for information on improved technologies (Okwu, & Iorkaa 2011).

Agricultural production, coupled with the security of tenure, is more reliable and allows for wider and more diversified cropping patterns as well as the production of high-value crops. Secure land tenure provides an incentive and authority for farmers to adopt technologies. Lack of secure property rights affects household investment (Samuel, 2001). Access to land and ownership of assets (endowments) is fundamental to livelihoods (IFAD, 2001). In a farming community such as rural Wolaita, agricultural land constitutes the principal resource base. However, rapid population growth, in the absence of opportunities for intensification and development of non-farm pull factors leads to declining farm size and increasing landlessness.

In developing countries, high and rising population densities, together with other worsening conditions such as declining rainfall, fragile soils and the wide inequality gap between the mass of small scales and the privileged few, have constrained intensification (Lele & Stone, 1989). Evidence from Ethiopia indicates that intensification can also be hindered by diminutive holdings, production for subsistence, insecure land rights and archaic institutional arrangements (Nega et al., 2003). Analysts agree that intensification under such conditions has more to do with changes in the policy and institutional environment, rather than dependence on the market (Nega et al., 2003)

A recent study by Finan et al. (2005) shows that the ability of a household to generate sufficient economic livelihood may depend on land endowment, with access to a small amount of land able to permit the mobilisation of family assets to create large income gains, even among the poor. It is widely recognised that small land scales enjoy the advantage of lower-cost family labour and managerial skills, while owners of large landholding face scale diseconomies that are created by the use of hired labour. In this context, a better functioning land rental market can benefit both the small and large land scales by shifting the operational and ownership land holdings to the optimal operational size (Binswanger, & Rosenzweig, 1986).

According to Tatwangire (2011), equitable growth in household access to and investment of savings in natural and human resources can be imperative for sustainable economic growth and poverty reduction. It is widely believed that access to productive assets, including land, human capital, livestock, and farm equipment may play a significant role in enhancing the welfare of rural households. In particular, insufficient access to land and low productivity of land are considered to be major causes of rural poverty and food insecurity (Melmed-Sanjak, & Lastarria-Cornhiel, 1998; Holden, Otsuka, & Place, 2008). Several recent studies (Riethmuller, 2003; Ellis and Freeman 2004; Kristjanson et al., 2004) also show that an increase in access to land and non-land assets, when combined with the diversification of enterprises, can boost incomes of rural households and their abilities to secure better living standards.

Several studies have examined the ability of households to manage risk and smooth consumption in environments that are characterised by incomplete formal financial markets, uninsured risk, ubiquity of credit (borrowing) constraints, and farm household' aversion to

risk (Zimmerman, & Carter, 2003; Kazianga, & Udry, 2006). A combination of these characteristics not only create fluctuations in income but may also limit the remunerative use of assets and the ability of households to take on profitable activities (Dercon, 2002; 2005). However, access to assets can help rural households to deal with income uncertainty and to move out of poverty leading to economic empowerment.

Several studies show that individual rights to own land influence rural financial markets (Besley, 1995). Although land is a source for potential wealth for rural households, some countries restrict land property rights to only use rights for an extended period (example, Ethiopia). However, evidence from studies of land ownership in Thailand, for example, demonstrates that with secure ownership comes greater capital investment in farms, as well as easier access to credit at lower rates of interest (Feder, 1993). Secure titling should promote the more widespread use of land as collateral for loans, giving a boost to lending in rural areas which would deepen rural financial markets (Lamberte et al., 2006; Gonzalez-Vega, 2003).

Wivine (2012) studied an economic assessment of the factors influencing small-scale farmers' access to formal credit in Rwanda. The study findings revealed that Land is basically an asset for Rwandan household, which is used in production and which can be sold at any time by the owner. Land is known to be scarce and mainly distributed as an inheritance from father to son or daughter (Musahara, 2006), and can also be acquired through the market.

IIED (2002) conducted a review of the Poverty Reduction Strategy Papers (PRSPs) in West and Central Africa (summarised in Cotula et al. 2004). Although eight of the thirteen PRSPs covered by their study discussed the importance of improving access of poor people to land, only four identified related activities to be undertaken. Only two of the thirteen specifically mentioned women's access to land (Niger and Guinea), and five touched upon the importance of land tenure in relation to urban poverty (Benin, Central African Republic, Chad, Guinea, Mauritania). In one PRSP (Senegal) there was no reference to access to land or natural resources as a significant factor in poverty alleviation. Extending the sample three years later to incorporate a further 18 PRSPs from Latin America, East Asia, South Asia and Sub-Saharan Africa, a number of comparisons can be drawn. First, land issues play a more significant role in the more recent PRSPs examined. In thirteen of the eighteen, explicit

reference is made to the causal relationship between lack of access to land and poverty. The link is made with greater or lesser degrees of emphasis. For example, Burkina Faso's PRSP makes 13 references to access to land. Mongolia's 2003 PRSP outlines a new land law which proposes to give land to households, thereby addressing the question of access to land, although this is not directly posed in the document as a poverty issue. In sub-Saharan Africa, the most recently produced PRSPs frequently refer to the link between poverty and access to land.

A study by Mbugua (2013) revealed that Kenya's agriculture is predominantly small-scale farming, mainly in the high-potential areas. Production is carried out on farms averaging 0.2–3 ha, mostly on a commercial basis. This small-scale production accounts for 75 per cent of the total agricultural output, and 70 per cent of agricultural market produce.

In Kisii County, plots of land for agriculture are getting smaller and smaller due to the inheritance of land. This is creating challenges for those operating service delivery models, as service operators need to serve many small-scale producers, which increases costs. Since such small plots (in many cases) do not bring the farmers a decent income, they are not able to invest in their land.

2.3.3.2 Entrepreneurship

Entrepreneurs are people who engage in activities they themselves have designed. But not just any activity these are activities that are defined as a result of recognising an entrepreneurial opportunity. Stevenson and St-onge (2005) an entrepreneur is one who undertakes to recognise, manage, and assume the risks of a business. She/he is an innovator or developer who recognise and seizes opportunities; converts those opportunities into workable ideas; adds value through time, efforts, money, or skills; assumes the risks of the competitive marketplace to implement these ideas; and realises rewards from these efforts.

The Kenya government's policy for industrialisation and commerce soon after independence in 1963 was geared towards the expansion of overall output focusing on large-scale enterprises (Aleke, 2003). Matovu (2012) observes that governments that are concerned with the promotion of small enterprises should examine the impact of its policies and programmes on small businesses. Policies could crush the small business sector of any economy. While many countries have Owino et al. (2013) made a similar observation that government

regulation about wages; taxation, licensing and others are among the important reasons why informal sector business develops. Without careful attention, the government acknowledged that small enterprises have an important role in their economies; not much effort has been made to facilitate their growth. They have to compete for finance, markets, personnel, and utilities like any other business unit (Nabintu, 2013). In a few countries especially India, there has been affirmative action to promote small enterprises over a long period.

Most of the small-scale tea farmers in Kisii do engage in various small business activities using tea earnings for their economic empowerment and therefore need financing to increase their incomes. ACCA (2009) pointed out that finance is a significant element for determining the growth and survival of SMEs. Without external finance in Kisii county, small and medium enterprises will probably not be able to compete in an international market, to expand the tea businesses and strike linkages of business with the large firms. Further, access to finance is the most serious barrier to the expansion of businesses and start-ups, which have been mentioned by existing SMEs and potential operators (Urassa, & Olomi, 2008). However, due to lack of equity financing, the small businesses tea farmers go after debt financing that is mostly provided by the banks and non-banking institutions such as cooperatives' and societies. Indeed, access to debt financing is very limited, especially for SMEs due to the requirements for the provision of debt (Deakins, 2008).

The government of Kenya has put in place the Micro and Small Enterprises Act as an initiative aimed at encouraging all Kenyans in establishing SMEs by creating an enabling environment for small businesses to thrive and enhancing access to funding (Rambo, 2013). For their sustenance, SMEs need to use ICT in order to become more competitive and to provide opportunities to participate in the global value chains (Charbonneau & Menon, 2013). SMEs generate in total more jobs than larger companies and are fundamental to the competitiveness of the country as well as in stimulating innovation (IPEME, 2013).

Beck and Demirguc-Kunt (2006) observed that "Without inclusive financial systems, poor individuals and small enterprises need to rely on their personal wealth or internal resources to invest in their education, become entrepreneurs, or take advantage of promising growth opportunities." The economic contribution of small enterprises in Kenya is widely acknowledged. However, it seems little efforts are made to look at it from the youth perspective. The specific needs of the youth and particularly their entrepreneurial potential as

well as their critical contribution to economic and social progress are underestimated (Irene, 2009). Often overlooked is the development of small enterprises in favour of formal employment. Many do not consider becoming entrepreneurs a genuine career path with financial reward and work satisfaction but as an alternative to joblessness. Schoof (2006) quoted in (Irene, 2009) states that there is still general lack of accurate and concrete data on youth entrepreneurship especially as it relates to entrepreneurial framework conditions and creation of new firms by youth. Kyale, in his study on the impact of microfinance institutions on economic empowerment, observed that provision of financial management skills by microfinance institutions helped the MFIs owners to be better placed in managing their finances hence growth was realised.

A study conducted by Kimunyi (2015) on factors influencing the performance of small and medium enterprise tea firms in Mombasa County, revealed that influence of government regulations on the performance that the government provided financial support through the creation of support funds like Youth Enterprise Fund, Women Enterprise Fund among others. The study established that it was not easy to access business licenses from the Government. The study further established that government regulations affected the performance of SME Tea Firms to a great extent.

A study conducted by Makanda (2012) on the factors that influence small enterprise development among youth groups in Bomachoge constituency revealed that 88.5% of the youth groups had not sought alternative funding while only 11.5% accessed funds mainly grants from politicians and from other government agencies. None of the youth groups sought financing from banks, friends and family and member contributions due to high-interest rates. Small enterprises in Kenya cut across all sectors of the economy and provide one of the main sources of employment and generate widespread economic benefits (GoK, 2005). Small-scale tea farmers in Kisii County are hardworking who need funds to start a small business, but funds obtained from tea earnings are not adequate, this hinders their economic empowerment and therefore forms the basis for the study.

2.3.3.3 Labour

The cost of production (COP) of Kenyan tea is considered high when compared to other tea producing countries. This is causing uncertainty in the future of tea farmers in Kenya, and it could be sad if this industry collapsed the way the South African tea industry did. The cost of

production in Kenya is USD 1.33 per Kg of made tea. This compares poorly with other tea producing countries like Vietnam (USD 0.81 per Kg), Indonesia (USD 0.58 per Kg), Rwanda (USD 1.32 per Kg), Uganda (USD 1.20 per Kg), Tanzania (USD 1.16 per Kg), Malawi (USD 1.14 per Kg) and Zimbabwe (USD 1.11 per Kg, (SOMO, 2006).

According to SOMO (2006), the main factors contributing to the high cost of production are; high labour demand, high cost of farm inputs particularly fertilisers, high cost of energy/fuel at the factories, high cost of transport due to poor road and rail transport system and as well as numerous taxes and levies. The labourers hired in the small-scale tea farms are not permanent but are also involved in other activities. This makes their efficiency in tea plucking lower than that of plantation workers. This brings us to the question that if costs of production are high, how can farmers access financial service for their economic empowerment when their wages are hindered by high production costs?

2.3.4 Social factors

2.3.4.1 Financial Literacy

This strategy addresses gaps in financial literacy; with a view to enhancing Tea farmers' for making well financial decisions about managing and protecting their financial affairs. For an efficient financial service access strategic framework, both strategic planning and strategic thinking are necessary for farmers' decision making. Strategic thinking can be defined as a process of arranging alternatives through institutional thinking by evaluating alternatives and decisions to find out best fit among the institutions, its resources and the environment (Rowley, 1996). However, according to my view, thinking strategically, financial literacy and training are very important to farmers before every action related to strategy takes place. Strategic thinking is a distinct way of individual thinking which utilises creativity and intuition, and that builds "an integrated perspective of the enterprise" (Mintzberg, 1992).

Financial literacy means having the knowledge, skills and confidence to make responsible financial decisions. OECD (2005), defines financial literacy as the combination of consumers'/investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being. According to Miller et al. (2009) and Kevin (2014), financial literacy aims to collaborate the efforts of public, private and non-profit sector organisations to improve farmers' financial

literacy levels, to provide support for their financial decision-making, and over time, to contribute to their financial well-being.

According to Lee et al. (2003), the income-based approach is a prospective method that evaluates human capital based on the earning power or expected returns to investment in individuals that are considered to be influenced by acquired skills and education and is able to compute human capital as the sum of all the future income streams that an individual expects to earn in his or her lifetime. The education units of time are, therefore transformed and expressed as the human capital stock value in terms of money (Wößmann, 2003). In this thesis, the income-based approach is utilised to compute small-scale tea farmers' household human capital based on the individual earnings that are also influenced by acquired skills and education level. According to Lee et al. (2003), the income method can also utilise literacy rates, school enrolment rates, and average years of schooling as inputs

A study by Satakwowa (2014), on factors that influence savings of small-scale tea farmers in Kericho town-Kenya.' revealed a poor saving culture among tea farmers was due to low literacy levels, poor funds management and low-income levels among other contributing factors. He concentrated on tea farmers poor savings without mention of savings outcomes on critical access to financial services strategies for tea farmers. Through access to financial education strategy, incomes of small-scale farmers will enable them to be empowered. RBV theory suggests human resource competency, skills, knowledge or education raises incomes by increasing the productivity of workers.

According to Jolliffe (2002), Kurosaki and Khan (2006), the accumulation of human capital can improve the efficiency of labour input in terms of quality; it can also boost overall technical efficiency in production and allocative efficiency of the household. Recent literature builds on the human capital literature in labour economics and treats education as a risky investment that is chosen jointly with risky financial assets (Palacios-Huerta, 2003; Saks, & Shore, 2005). Campbell (2006) argues that with financial education, poor financial decisions are likely to be reconciled with economic theory given that households have been found to make sub-optimal decisions which deviate from what economic theory suggests. He posits that households with higher education levels (high school, college, graduate school) are likely to be more active in capital markets due to reduced information asymmetry.

Some researchers in developing economies, such as Schultz (1979), found that literate farmers in developing countries are more productive than illiterate farmers. They, therefore, recommend investing in human capital (education, health, etc.) as an effective strategic tool for economic development. Others, such as Mohammed Tamim, believe that economic empowerment is measurable in educational level from primary school to the university. They noticed that wherever the educational level is raised, the level of development is also raised. The take-off of Walt Whitman Rostow can start in a country if its population is completely schooled.

Greenspan (2002) argues that financial literacy helps to inculcate individuals with the financial knowledge necessary to create household budgets, initiate savings plans, and make strategic investment decisions. Proper application of that knowledge helps households to meet their financial obligations through wise planning and resource allocation so as to derive maximum utility. Hilgert, Hogarth and Beverly (2003) assert that financial knowledge appears to be directly correlated with self-beneficial financial behaviour. However, sceptics Lyons et al. (2006) question the effectiveness of financial education in improving financial literacy.

Van Rooij et al. (2007) in a study of Dutch adults established that households with low levels of financial literacy are more likely than others to base their behaviour on financial advice from friends and are less likely to invest in stocks. Based on the above literature, in Kisii County, tea farmers' a number of them are illiterate or semi-literate, unable to make sound decisions on financial management matters despite monthly payments on the ground they are financially weak. Mwongera (2013) described financial literacy as the ability to have appropriate bookkeeping skills and financial management skills.

Meeme (2013) argued that education on small-scale farmers is of paramount importance. She argues that better-equipped farmers with financial skills will be better placed to form trusting relationships with a sales banking institution. Kimanjara (2013) posited that the main causes of failure of small enterprises are lack of planning, improper financing and poor management. He further posited that financial management is not a choice if one has to become economically empowered because it is a necessity for survival, especially in financial transactions where a large amount of income is to be financially managed.

2.3.4.2 Training

Mamun, Wahab and Malarrizhi (2010) in their study found out that the followers of Grameen Bank group used micro-credit model to provide training in order to improve microenterprises management skills to enable their clients to take advantage of income and employment generating opportunities. Kyale (2013) in his study on the impact of microfinance institutions on economic empowerment observed that provision of financial management skills by microfinance institutions helped the MFIs owners to be better placed in managing their finances hence growth was realised.

Elsewhere in Malawi Personal interviews with Tea estates and small-scale tea farmers, in Malawi by Kachusa (2007) and Malawi Tea (2002), revealed evidence show that tea farmers are illiterate, and therefore access to financial services was a challenge because they Lacked Collective Bargaining power, this was evidenced by lack of knowledge of market structures, absence of business plans; farmers hardly knew even their profit margins and therefore, buyers took advantage of this ignorance and exploited the Small- scales heavily, thus denying them their incomes. Supply Chain Responsibility, small-scale tea farmer does not know how much money is deducted from their payments as tax; implying that the purchasing practices are not clear to small-scale farmers most of whom are illiterate.

Courchane and Zorn (2005) established that behaviour which is influenced by knowledge had a direct positive relationship with credit outcomes. While mistakes in making personal finance decisions are considered real, the study argued that lack of knowledge about key personal finance issues contributes to these mistakes, calling for knowledge acquisition to counter this. Capacity building observations and interviews indicated that only people in a high position like accountants, managers and agricultural advisers are considered for in-service training. Implying small-scale tea growers are not considered for capacity building on how to be empowered from tea proceeds.

"Financial literacy will economically empower farmers to save, invest and diversify their income streams and make tea farming a sustainable business," said KTDA chief executive Lerionka Tiampati (TBK, 2017). According to KTDA (2015), improved financial literacy will help farmers to manage the farms, income, improve productivity per bush and establish alternative income streams. "Given the current challenges leading to decreased productivity for most crops, it is critical that farmers are able to wisely manage the money received from

tea as well as be guided to make decisions on other sources of income," says Jane Onoka (IFC, 2015).

Financial service access strategy is vital for tea farmer's economic empowerment through training to tea farmers in Kisii County, since the majority of the farmers are inadequately trained on how to use the meagre financial resource such as, paying fees for their children, building and even buying household items. However, according to Beijing and Beyond (2004), training enables women and men to access capital and to expand their own income-generating micro-enterprises which, in turn, will expand household income.

A study conducted by (Aker, 2010), recommended that the training of the extension workers should include computer literacy to enable them access to the internet and other electronic information technologies. Farmers require electronic information to access information on modern farming and finance to understand a wider range of opportunities available in the financial market. According to Anderson and Feder (2007), the majority of poor households in developing countries rely on subsistence agriculture for their own food production and as a source of income.

Over the past few decades, various initiatives have been taken aimed at increasing food production by closing the technology gap faced by subsistence farmers; such initiatives have worked either directly through the supply of new technologies like as fertiliser, seeds of improved plant varieties, or indirectly through agricultural extension and advisory services or both. Farmer Field Schools (FFSs) are currently one of the most common approaches to rural adult education and agricultural extension and have reached an estimated 10–20 million people in over 90 countries (Braun, & Duveskog 2008; Waddington et al. 2014). However, early adopters of innovative agricultural techniques are often better-off farmers who are abler and more likely to accept the risk that any new method implies, as they have access to the necessary assets, the ability to absorb the costs of additional labour time and are comparatively better able to withstand a negative shock should it occur. Diffusion of knowledge from early adopters (who take part in the field school) to later adopters is often an explicit component of FFS program, in particular, those involving IPM curricula where diffusion from better-off to poorer farmers may be vital for sustained adoption and impacts (Feder & Savastano, 2006). According to Waddington and White (2014) poised that the IFAD-FAO IPM programme established a group composition and atmosphere that helped

breach traditional community roles and relationships, ultimately improving gender relations. Women in Bangladesh, India and Kenya also reported increased self-confidence in their interactions in the community, but other studies from Kenya and Bangladesh suggest that traditional gender roles within the household remained the same. They further pointed that the FFS theory of change is that adopting more participatory approaches in adult education programmes based on dialogical learning helps farmers to develop skills and capacity. They are less likely to internalise messages delivered through a top-down 'chalk and talk' approach. However, there is insufficient evidence to support or refute the notion that this factor affects capacity development one way or the other.

The study by Kiplangat (2014) on the Contribution of women groups in the Economic empowerment of rural women: a case of women groups in Bureti constituency, Kericho County, findings revealed that group leaders lacked proper expertise on how to manage their groups. This was confirmed by findings which showed that out of the 10 groups; only two groups had received specialised training on leadership and bookkeeping. That none of the group leaders had received training on project management, human resource management and conflict management. The study further revealed that members from nine groups had received training on entrepreneurship skills, while members from one group had not. Training, according to the study, was provided by K-rep Bank official, Faulu official, Equity Bank official, Kenya Women Finance Trust Fund official, Chepchep Sacco and Litein Sacco.

Access to financial literacy is one of the key challenges facing farmers in Kisii county, hence the reason why financial accessibility strategy is vital in education and training to the farmers to enable them to make proactive decisions and learn ways to plan and control household and business finances.

2.3.4.3 Gender Equity
Economic empowerment is the capacity of women and men to participate in, contribute to and benefit from growth processes in ways which recognise the value of their contributions, respect their dignity and make it possible to negotiate a fairer distribution of the benefits of growth (Eyben et al., 2008). Financial access strategy is critical for youths and women empowerment in Kisii County and the need to make agriculture more attractive   is crucial so that they can contribute more to county development to achieve vision 2030 food security for all.

According to (UN, 2009), Women access to, and control over economic resources is critical for the achievement of gender equality and empowerment of women as well as for equitable and sustainable economic growth. The study by (Kiplangat, 2014) on women group contribution in the economic empowerment of rural women in Kericho, revealed that through income-generating activities funded by the government and financial institutions, women acquired the assets mentioned: land, plots, motorbikes, and *posho* mills. The study also established through the group treasurers that they did not have a proper way of keeping financial records.

The study findings also showed that women groups had assets worth Ksh 200001 – 250000. Ksh 50001 – 100000, Ksh 100001 – 150000, Ksh 150001-200000, Ksh 360000. This is clear evidence that indeed, women groups are contributing towards the economic empowerment through financial access strategies. The members of this group affirmed this, noting that they formed the group in order to access loans and grants from the government. The study further revealed and noted that some group members did not necessarily invest but used the money to meet other needs for like buying of family accessories, clothes, paying of school fees, or taken by their spouses. This was affirmed by two members interviewed who said that there was a major concern on how women were balancing family needs and investing in income-generating activities.

Further, the group leaders said that members made contributions every month in order to increase their shares so that they are able to get higher loans to advance their economic activities; as indicated that they had knowledge of Government funds offered through Women Enterprise Fund, and Uwezo Fund. However, information acquired from one of the key informants who is a government official indicated that no women group in Cheborgei Division had applied for Uwezo Fund. When asked to state the reason, the official affirmed that women groups in the region lacked information on how the fund operated and that group leaders were not active enough to seek information on the same.

Training on Entrepreneurship Skills 90% received basic training from K-rep Bank official, Faulu official, Equity Bank official, Kenya Women Finance Trust Fund official, Chepchep Sacco and Litein Sacco. Key informants who participated in this study were in agreement that most women groups lacked the entrepreneurship skills and had no idea how to successfully

run a business, a claim they said had affected the effectiveness; Citing main contributing factors on low entrepreneurship skills were education, socio-cultural norms and low level of training by microfinance institutions as well as the government.

Kibas (2006), asserted that lack of opportunities for management training, financial management and People management had hampered women and their organisations from effectively engaging on enterprise development. Findings revealed that nine women groups through their 27 officials had improved the level of economic decisions of their members at the household level. At the individual level, the respondents interviewed said that group participation had increased their income as well as knowledge on how to improve their businesses and farming.

However, according to the World Bank (2015), the average age of farmers around the world is rising as agriculture is not appealing to young people. Women in agriculture do not have the same access to technology, finance and extension as men do, which results in lower yields and income. According to Omunjalu and Fondo (2014), in their study on microfinance and the youth empowerment concluded that microfinance influenced economic status, decision making power and knowledge hence was effective for the poor youth and middle class to rise to higher living standards.

Osmani (2007) described how poor women could be empowered through participation in microcredit programs. First, microcredit enables poor women to earn an Independent income and contribute financially to their families, which immediately raises their self-esteem as well as their esteem in the eyes of others. Campbell (2006) pointed out that, for most families, decision-making processes are mainly informed by the household heads, most of whom are men. The question posed, however, is whether the decisions and choices made are guided by financial literacy or other factors. Of interest to this study is to establish the decision-making process of households, whether the wife, husband, children or any other channel makes the decisions that empower the family's' financial access decisions.

Campbell argues that decisions to increase human capital by undertaking higher levels of education, for example, are subject to varying rates of return due to a number of factors, including one's expected lifespan upon completion of a degree program. In order to understand the link between household financial decisions and financial literacy, there is need

to understand the household's effective numeracy strength, as well as the connection between financial literacy and access to financial services. KHRC (2008) and Van der Wal (2008) pointed out that, the tea sector, in particular, is a vital component of the Kenyan agricultural sector, providing employment to around three million people both directly and indirectly, as well as considerably contributing to overall export earnings.

Although women provide the largest share of agricultural labour in rural Kenya, as well as domestic duties, they are continuously discriminated against in access to and control over agricultural benefits (Kibere, Kimani & Lodiaga, 2014). Due to this double burden regarding both productive and reproductive work, women are significantly time-poor, tending to work longer hours than men. Since women's domestic working hours are not remunerated, men frequently receive higher earnings (Ellis et al., 2000). This results in women's contribution to agriculture being 'invisible' and thereby overlooked.

Access to financial services is critical to the gender imbalance in access to and control over resources, and land ownership is hindering women's economic development in Kenya. The fact that women are sometimes denied titles of land ownership increases their dependability upon men in the household (Freidenberg, 2013). Ongile (1999) observed that, in tea production, men control the cash crop since they are, traditionally, the head of the household, while women are identified with household duties and food production.

A study by Koshy and Tiwary (2011), enhancing the opportunity for women in India's tea sector a gender assessment of certified tea gardens in Bangalore found out that Women are mostly involved in tea plucking where they spend many hours, outside, on their feet. One possible explanation for the predominance of women in tea plucking is that women are found to have rather low literacy rates and are therefore mostly found in positions requiring fewer skills and qualifications (Van der Wal, 2008. Women's lower level of education and skills again limit their access to resources and negatively affect their incentive to become increasingly involved in agricultural production and receive benefits from it (Suda, 2002).

The Kenyan government has recognised the marginalisation of rural women and the pressing issue of gender inequalities on a national level and attempted to tackle these by adopting a National Commission on Gender and Development in 2004, along with 'Gender Desks' across many of its ministries (Ellis et al., 2000). While the constitution recognises customary

law, it prohibits gender discrimination and recently removed the exemption from non-discrimination that was previously granted to customary family and inheritance law (WDR, 2012). Despite the attempt to institutionalise such specialised initiatives, gender inequalities remain, leaving women vulnerable as small-scale farmers with no legal protection within agricultural production, and little ability to compete in the international market, (Freidenberg,2013).

Ellis et al., (2004) pointed out that, missing legal protection, outdated labour laws and unequal access to resources are still negatively affecting women's ability to profit from agricultural benefits and operate on an equal level with their male counterparts. According to World Bank (2001), promoting women's empowerment is essential because in most cases, women are responsible for their children and for their family, thus empowering women is empowering the society at large.

Improving women's direct access to financial resources in Kisii County will result in higher investments in human capital and have a stronger impact on their children's health, nutrition and education. Studies from Bangladesh, India and Malawi show that women's access to credit improves the nutrition of girls, while men's access to credit does not (Hazarika & Guha-Khasnobis, 2008); when women are the ones taking out loans, their children are better fed (Khandker, 1998), more likely to be enrolled in school and more likely to be literate (Holvoet, 2004).

2.3.5 Moderating Effect of Demographic factors

The analysis in this section relates to the age, sex, educational level and marital status of tea farmers in Kisii County. Storey (2006) suggests five elements which are likely to influence the performance of a firm. These are age, gender, education, motivation, previous work experience of the owner/manager.

On the gender of the entrepreneur Kentor (2001) reported that most SMEs firms owned by men were bound to perform better than those owned by women. This could be attributed to the following factors: limited access to finance; stringent collateral requirements and women's double duties (Carter & Jones-Evans, 2000). Basic education enhances the overall quality of the business owner by providing basic numeric and literacy skills, thus increasing the chance of survival (Carter & Jones-Evans, 2000). Some studies state that the fact that a

business owner has a higher level of education seems to stimulate the growth and better performance of the firm, thus having an impact on survival, growth and performance (Hall, 2001).

The experience takes many guises, and breadth of experience is shown to be an important factor driving the performance of firms, with the number of previous jobs positively related to new firm Performance (Lumpkin and Marvel, 2007). Thapa (2008) reported that the likelihood of SMEs failure was also found to be associated with the owner/manager's work experience prior to business launch and education. Professional experience has been cited as an important factor affecting many aspects of entrepreneurial firms (Cant and Lightelm, 2003).

Blackman (2004) showed that the characteristics of the entrepreneur would influence the following: market opportunity, ways of handling business challenges, personal achievement, employment creation, independence, improvement of social status, profit, growth target thereby having an effect on the performance of the firm.

According to Lee et al. (2003), among development specialist, several trends have been mentioned as possible threats to agricultural and rural development in developing nations. Many of these threats are endogenous, and with the right policy environment, or with an "investment push" can be solved, like low levels of public and private investments in infrastructure and human capital.

It is generally argued that farms are fragmenting to a point in which their own economic viability is at risk. For instance, Lee et al. (2003) observed that exogenous threats referring to disadvantages of demographic development such as ageing of population or higher female to male ratios due to war and epidemics cuts the supply of labour and blocks rural development. Examples of these exogenous threats refer to disadvantageous demographic developments.

As countries develop, life expectancy increases, as health services and their coverage improve, and lifestyles change, reducing the risk of death. At a later stage, as countries continue developing, the fertility rate drops, as family planning services become available and / or, due to cultural and economic reasons, females reduce the number of children they have during their fertility life-span (in demographic terms 15 – 49 years). These are well-

established features of development in the dynamics of populations and are generally described together in what demographers call the demographic transition Lee et al. (2003).

Mariam (2014) studied women empowerment and economic development in Pakistan. The study revealed that women should be provided with the rights of education, jobs, health, security, and decision-making power. The major constraint in empowering women is male-dominated society reported by twenty-five respondents. They feel insecure if women start taking charge of things or family, so this thinking will not allow women to be empowered. Respondents stated that hindrances in Pakistan are family structure, expectations from women for family roles, cultural constraints, harassment at workplace and most importantly many people think that if women start work maybe they start superseding and dominating males. She concluded that Women are always ignored in our society. Women have obstacles in every aspect of life. In empowering women, education plays an important role. Women having rights are more confident, have better living standards, and they can make their own decisions.

One manifestation of the demographic transition is a change in the age/sex population pyramid shape, from properly a pyramid shape to a cylinder shape as countries move through the four stages of demographic transition: like the fall in the fertility rate manifests in a lower relative size of the younger cohorts, and the reduction of mortality rates shows in a higher relative size of older cohorts; Lee et al. (2003) observed that age and Farmers productivity efficiency increases at an average of 4.5% every ten years of age, to the average interval of 35 to 44, and then decreases at the same rate. In general, it has been observed that women are more risk-averse than men, the young are more risk-seeking than the old, wealthier individuals manifest a greater Willingness to invest in equities and the poor are risk-averse (Clark and Strauss, 2008).

In Kisii County, sustainable livelihood is one of the major concerns for the small-scale tea farmers. Land acquisition for non-agricultural purpose and distribution within the farmers, a growing number of marginal farmers where the economic viability of farming is a challenge, despite numerous benefits of tea farming like environment, ecological and social, economic empowerment is one of the key challenges for the farmers to empower themselves. According to the a number of farmers around 40 per cent farmers are willing to quit farming in India (OWSA) especially marginal and small farmers, and they are looking for other

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means to earn for their sustainable livelihood. Additionally, due to financial constraints, India in the last decade recorded the highest number of suicides in world history by the farmer community and still which continues among the farmers. Sustainable livelihood could be improved through economic empowerment. Therefore, this study will focus on demographic factors influence on the financial service accessibility strategy for farmers' economic empowerment.

2.4 Conceptual Framework

According to the resource-based view theory, a company is perceived to achieve a comparable sustainable advantage by controlling both its tangible and intangible assets. Firer and Stainbank (2003), advocate that value-added is a more appropriate means for conceptualising a company's performance. The conceptual framework and hypotheses explaining the relationship between financial service accessibility strategies and economic empowerment of small-scale tea farmers' variables are depicted in figure 2.1 below.

The conceptual framework being a hypothesised model identifies the concepts under the study and their relationships (Kothari, 1992). The study tested the relationship between the independent variable financial service access strategy and its components: financial providers, physical proximity, effect of economic factors, social factors and effect of moderating demographic factors and the dependent variable economic empowerment measured in terms of profitability, employment, increased income, infrastructural development, basic needs met or households assets.

Independent Variables Financial Access Strategy

Level of financial providers' access strategy.
-Commercial banks
-Cooperatives
-Insurance.
-financial credit (collateral)
-Interest rates

Physical Proximity
-Infrastructure
- Information
- ICT

Economic factors of financial access strategy
-Land and acreage
-Entrepreneurship
-Labour

Social financial service access strategy
-Financial literacy
-Training
-Gender Equity

Dependent Variable

Economic empowerment

Increased-income - Basic needs met
-Employment opportunities
-Women and youth empowerment-Business Opportunities-Profitability-Infrastructural improvement

Moderating factors:
-Age
-Education
-Gender

Source: Researcher (2018)

Figure 2.1: Conceptual Framework

2.4.1 Relationship between variables

Financial providers access strategy on economic empowerment among small-scale tea farmers in Kisii County- Kenya. Financial Resources availability and usage determine tea farmers' economic empowerment. When the level of access to financial services providers increases, economic empowerment among tea farmers in Kisii County improves. When financial resources are accessed from financial institutions such as commercial banks, cooperative societies, insurance, and provision of credit with low-interest rates and other charges from lending institutions to farmers do help to smoothen the relationship between financial accessibility and economic empowerment by increasing individual farmers esteem,

and their interdependence grows. Accessibility to financial resource as coined by Penrose (1959) as firms bundle of resources has direct relationship with farmers economic empowerment in a changing environment, firms must continually acquire, develop and upgrade their resources and capabilities if they are to maintain competitiveness and growth (Argyris, & Schön, 1996; Robins, & Wiersema, 1995; Wernerfelt, & Montgomery, 1988). Farmers must continually acquire, develop and upgrade their resources and capabilities if they have to reach their targets and be economically empowered.

Economic empowerment according to Khan and Rahaman (2007) include increment in saving, reduced levels of unemployment, and reduced levels of indebtedness, sound decision making and increased cases of self-employment is determined by financial service accessibility strategies. Paudel (2011) pointed out that cooperatives provide access to microfinance to rural people, accelerate agricultural production and ultimately empower rural people, including women.

The physical proximity of financial service access strategy on economic empowerment among small-scale tea farmer's in Kisii county-Kenya. When the physical proximity of financial services is enhanced, economic empowerment among tea farmers in Kisii County improves. Their exists the relationship between physical proximity and economic empowerment among small-scale tea farmers in terms of transportation costs, when infrastructure is good, time spend in transporting tea leaves to the buying centres and from the buying centres to the market for example to Mombasa is reduced and increases farmers income which in turn helps the farmer buy or meet basic needs such as household items or pay school fees for children, thus empowering the farmer. The World Bank (2008) report deemed that physical access is one of the major constraints to financial access. Ndebele (2011) posited that development of an efficient road network facilitates the movement of goods from farms to markets, makes social interaction easier and may change the land use and settlement pattern of an area by attracting settlements and economic activity to develop along major roads.

Information of financial access strategy in terms of awareness has a relationship with economic empowerment, in relation to market prices of tea, investment opportunities and even in innovation and risks associated with insurance and natural calamities like drought and hailstones which have positive and negative effects on earnings from tea farming.

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When economic factors of production are enhanced, economic empowerment among small-scale tea farmers in Kisii County improves. Finan et al., (2005) shows that the ability of a household to generate sufficient economic livelihood may depend on land endowment, with access to a small amount of land able to permit the mobilisation of family assets to create large income gains, even among the poor. Beck et al. (2007) observed that "Without inclusive financial systems, poor individuals and small enterprises need to rely on their personal wealth or internal resources to invest in their education, become entrepreneurs, or take advantage of promising growth opportunities." Effect of economic factors on access to financial service strategy such as land, entrepreneurship and labour relationship with economic empowerment is that when land is available farmers can plant more tea and increase income, land ownership can also be used as collateral for loans for farmers to access credit, for instance, SMEs to increase their profitability, business opportunities and increase infrastructural network which hence economic empowerment.

Influence of social factors on access to financial services strategy on economic empowerment among small-scale tea farmers in Kisii County- Kenya. When Social factors of access to financial services when enhanced economic empowerment among tea farmers in Kisii County increases. The relationship between social factors such as education, training and gender issues for tea farmers' economic empowerment is that when farmers are trained on how to manage their financial resource and educated, they are able to make sound financial decisions. According to KTDA (2015), improved financial literacy will help farmers to manage the farms, income, improve productivity per bush and establish alternative income streams. This strategy enhances farmers' in choosing better ways of channelling resources to sound investments and in creating employment opportunities as well managing their finances thus economic empowerment among small-scale tea farmers is made clearer (UN, 2009). Women access to, and control over economic resources is critical for the achievement of gender equality and empowerment of women as well as for equitable and sustainable economic growth.

When gender issues such equal rights are balanced among the farmers, women being majority in the communities who do much of the work in tea fields and households will be able to access finances from tea earnings, own land to produce more tea and even access funds from financial institutions to cater for their families where some are dead or not

responsible thus economic empowerment. Moderating effect of demographic factors has a relationship with economic empowerment in the sense that when people are ageing, are not able to do farm work effectively, make sound decisions and therefore young energetic when involved in tea farming will increase tea production which earns them money for own use, thus economic empowerment. The moderating effect of demographic factors on the relationship between financial service accessibility strategies and economic empowerment do significantly moderate the relationship between financial services accessibility and economic empowerment.

2.5 Gaps Identified in the Literature Review

Table 2.0.1: Literature Gaps

Author	Citation of findings	Specific objectives	Literature gap
Chiumya (2006), Adjei, Arun, & Hossain, (2009).	Found out that the majority of low-income households, in all parts of the world, historically have not had access to formal financial service; because most formal financial service providers regard low-income earners and households in rural areas as too poor financially, having no access to surplus funds to either save with or borrow from their institutions."	To analyse the level of financial providers' access strategy on economic empowerment among small-scale tea farmers in Kisii County- Kenya.	The literature is scarce, and if financial providers regard low-income earners as too poor and cannot be able to borrow. How can they be empowered then? As much as small-scale tea farmers are poor, they are not too poor to access finance from the providers because their tea bushes can be used as collateral to access finance for economic empowerment.
Iganiga (2008)	Found out that the financial system provides services to about 35% of the economically active population of Nigerian citizens, while the remaining 65% are excluded from their services.		Iganiga did not

Sufian (2009)	Investigated the efficiency of the Malaysian Banking Sector during the Asian financial crisis of 1997 by employing the first Data Envelopment Analysis (DEA), and then a Tobit model for the period between 1995 and 1999.		provide us with a strategy of empowering the 65% of the population Only talked of the Asian financial crisis without talking of financial accessibility for economic empowerment, what the study seeks.
Hussein (2007)	Farm households are discouraged from borrowing from the credit sector if it is located farther.	To identify the physical proximity of financial service access strategy on economic empowerment among small-scale tea farmers in Kisii county-Kenya.	The authors did not show financial access and economic empowerment through good infrastructure and quick information underlying tea farmers.
Othieno (2010)	Found out that financial institutions require information to enable them to evaluate the potential risks associated with the SMEs that apply for bank financing and also to access the location where the same SMEs will be operating and its market segments.		
Tobbin (2012	Explored the possibility of adopting mobile banking in rural Ghana and showed that perceived usefulness, ease of use and trust were essential factors underlying consumers'		

decisions.

Wivine (2012)	Studied an economic assessment of the factors influencing small-scale farmers' access to formal credit in Rwanda. The study findings revealed that Land is basically an asset for Rwandan household, which is used in production and which can be sold at any time by the owner.	To establish the effect of economic factors on access to financial service strategy on economic empowerment among small-scale tea farmers in Kisii County- Kenya.	The author's literature on financial access and economic empowerment is rather scarce because they cited land as a major asset for Rwanda and production on farms averaging 0.2-3 ha. Relationship between microcredit and the growth of small and medium enterprises in Kenya. The literature only con citrated on land as if it the only factor of economic empowerment
Mbugua (2013)	Revealed that, Kenya's agriculture is predominantly small-scale farming mainly in the high-potential areas. Production is carried out on farms averaging 0.2–3 ha, mostly on a commercial basis. This small-scale production accounts for 75 per cent of the total agricultural output, and 70 per cent of agricultural market produce.		
Mira and Ogollah (2013).	Inadequate information and knowledge were noted to have led to increased turn down during the application of loans		A study by Mira & Ogollah agree that information and knowledge is a limiting factor to access finance but does not show how this can empower farmers
Hussein, H. (2007).	"Farm Household Economic Behaviour in Imperfect Financial Markets", Doctoral Thesis, *Swedish University of*		The author discussed more about the influence of

	Agricultural Sciences, Uppsala.		government regulations on the performance of the support given to SMEs provided financial support without showing how it financially empowers the stake scales.
Mwongera (2014). Nt ref	Factors influencing access to microfinance credit by young entrepreneurs' projects in Athi River, Kiambu County, Kenya. Findings revealed that financial literacy as the ability to have appropriate bookkeeping skills and financial management skills		
Kimunyi (2015)	Factors influencing the performance of small and medium enterprise tea firms in Mombasa county. Revealed that influence of government regulation on the performance that the government provided financial support funds like through creation of youth enterprise fund, women enterprise fund, among others. It was not easy to access business licenses from the government and that regulations affect the performance of SMEs tea firm to a great extent.		
Satakwowa (2014)	Factors that influence savings of small-scale tea farmers in Kericho Town- Kenya. Findings revealed that the majority of respondents	To analyse the influence of social factors on access to financial services strategy on	The literature concerning the role of women in tea farming on financial service access

	reviewed dependency ratio, income access to credit and SACCOs as influencing their decision to save. Age, gender and tax were seen to have no effect on influencing the tea grower's decision to save.	economic empowerment among small-scale tea farmers in Kisii County- Kenya.	strategy is rather scarce because she used only educated women, majority of who are not more involved in picking tea and who depend on tea income with no formal income.
Thinkii (2014)	Studied the role of women in tea farming in Tigania East, Meru County.		
Mwangi (2015)	The effect of microfinance services on economic empowerment of small-scale farmers in Kiambu County. Her findings revealed that economic empowerment of small-scale farmers are influenced by access to credit followed by financial literacy and lastly access to the market.		The literature has identified access to credit, financial literacy and market as the only factors that influence economic empowerment, leaving out others like land, physical proximity and demography
Mariam (2014):	Women empowerment and economic development in Pakistan. The study revealed that women should be provided with the rights of education, jobs, health, security, and decision-making power		The study concentrated on women only, further widening the gender gap in terms of economic empowerment
Storey (2006)	Found five elements which are likely to influence the performance of affirming,	To establish the moderating effect of demographic	The authors differ in opinion over the influence of

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	namely: age, gender, education. Motivation and previous work experience of the owner or manager.	factors on the relationship between financial service accessibility strategies and economic empowerment among small-scale tea farmers in Kisii County-Kenya	demographic factors on economic empowerment.
Satakwowa (2014)	Factors that influence savings of small-scale tea farmers in Kericho Town- Kenya. Findings revealed that the majority of respondents reviewed dependency ratio, income access to credit and SACCOs as influencing their decision to save. Age, gender and tax were seen to have no effect on influencing the tea grower's decision to save.		The study to establish the relationship between demographic factors and financial accessibility on economic empowerment

Source: Researcher 2018

2.6 Operationalisation of variables

According to Mugenda and Mugenda (2003), operationalisation of variables entails the process of describing the operations that the research intends to apply in the measurement of the study. This study will entail five independent variables: level of financial providers' access, access to factors of production (economic factors), proximity and awareness of funding opportunities, social, financial service access and the moderating effect of demographic factors on financial access. The dependent variable in this study will be economic empowerment.

Table 2.0.2: Operationalisation of Variables

Objective	Type of variable	Indicator	Measurement	Measurement Scale	Type of data analysis

Financial service Access Strategy	Independent variable, financial service access	No. of farmers accessing credit. Livelihoods. -Land lease -Joint ownership -Family owner -sole proprietor -profit -wages	No. of financial providers. %of interest rates charged Size of land in acreage. Number of Tea bushes, Number of tea entrepreneurs Cost of labour	Interval. nominal ordinal Interval Ratio	Descriptive qualitative, quantitative
-level of Access to Factors of Production: -Land -Entrepreneurship -labour	Independent				Descriptive
Physical Proximity: -Distance -Infrastructure -Awareness. -ICT	Independent	Unit of distance. Availability of facilities. Quality and quantity. Accuracy of information	No. of banks near farmers. Time taken to reach financial institution and buying centre. memos, posters, magazines	Interval, and ratio	Descriptive qualitative, quantitative
Social, financial access strategy: -Financial literacy -Education & Training -Gender Equity	Independent	Level of education. Women participation	Academic certificates Work experience records, Progress Reports, number of	Nominal and interval	Descriptive, qualitative, quantitative

		trainings attended, number of women involved in decision making, in possession properties			
Moderating Effect: -Market factor -Demographic factors	Independent	market Reports Age, Gender, Education, Previous work experience, family entrepreneurial	Prices Age, Gender, Education, Previous work experience, family entrepreneurial	Nominal	Descriptive.
To establish the influence of government policies and regulations	Independent	Tax incentives Financial Support Ease of Licensing		Interval Nominal	Descriptive e
	Dependant economic empowerment	Level of income. improved living standard Properties owned and	Income flow. House hold items. Standard of living. Level of participation	Nominal, interval and ratio	Descriptive e, qualitative, quantitative

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controlled.	in	decision
Increased		making.
control	of	Increase
household		
recourses.		
Access	to	
new markets		

Source: Researcher,(2018)

Table 2.0.3: Operationalisation of Dependent and Independent Variables

Variable	Operationalisation of study variables in the study	Questionnaire Item
Level of financial	X1	Qb1, App I
Economic factors	X2	Qb2, App I
Proximity of financial	X3	Qb3, App I
Social financial services access	X4	Qb4, App I
Effect of moderating factors	X5	Qb5.1, App I
Economic dependant variable empowerment	**Y**	QC,App1

Source: Researcher, (2018)

2.7 Summary of the Literature

Whenever financial institutions are issuing credit facilities, farmers are faced with numerous drawbacks (Wanjohi, & Mugure, 2008) that later lead to stagnation and lack of the propelling force for growth in many sectors. Inadequate information and knowledge have been noted to have led to increased turn down in the application for loans (Mira, & Ogollah, 2013). This can be seen with respect to terms of interest charged; disclosures required for asset and debts, misuse of credit gotten and general unpreparedness when applying for credit. Cole et al. (2009) in India and Indonesia found that the chief determinant of demand for financial facilities was financial literacy. The more one is educated, the high the chances of applying for financial credit. In most sectors of the Kenyan economy, SMEs operations provide for many households. It is a platform that big business emerges and most importantly creates employment (Waliaula, 2013). Additionally, lack of land for farming and as collateral for

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bank loans, land rights, land tenure and distribution, gender inequalities are obstacles. Finance service access strategy requirement is critical to the tea farmer's economic empowerment.

Majority of those who run SMEs are ordinary lot whose educational background is lacking. Hence, they may not well be equipped to carry out managerial routines for their enterprises (King, & McGrath, 2002). Management skills relate to the owner/manager and the enterprise. Desouza and Awazu (2006) argue that management is concerned with the deployment of material, human and finance resources with the design of organisation structure. Hayton (2003) observes that the growth of many enterprises of all sizes suggest that the scarcity of competent managers is a more serious constraint on economic development. As the enterprise becomes larger, the more need for managers to plan, coordinate and control the activities of the enterprise. The application of the BSC (Kaplan, & Horton, 1996) measures is a significant method when all the study objectives are combined and balanced can lead small-scale tea farmers to economic empowerment through financial accessibility strategies.

CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents the procedures adopted for the study. This comprised of the following: research design, area of study, population, sample size and sampling procedure, instrumentation for the data collection, reliability and validity of the instruments, data collection procedures, data analysis, data presentation and ethical considerations.

3.2 Research Design

Research design is the framework or a detailed plan for the study used as a guide in collecting and analysing data. Gill and Johnson (2004) suggest that research design is the road map used to guide the implementation of the study. Therefore, it is a blueprint that is to be followed in completing a study of activities to be carried out systematically to achieve the research objective.

The research design helps the researcher to obtain relevant data to fulfil the objective of the study (Churchill and Iacobucci, 2004). The research is expected to describe the variables in a situation of interest to the researcher. Thus, this study is descriptive in nature. Descriptive study is appropriate because the nature of the problem was well known, and the objectives were clearly specified (Kothari, 2004).

The research was based upon the philosophical and methodological foundations of logical positivism. Logical positivism research deduces and formulates variables, research objectives and operational definitions based on existing theory (Anderson and Huesmann, 2003). Contemporary business statistics and financial research are dominated by logical positivism. This study utilised co relational research design as it described and established the associations among key study variables, namely; accessibility to financial services and economic empowerment. Correlation design is used to describe the statistical association between two or more variables (Kothari, 2006). The design has an advantage because it meets an important need of the researcher where rigorous experimental approach is not possible, and it will help determine the relationship among variables with a high degree of accuracy, Kothari (2006). The design, therefore, was suitable for this study on the evaluation of accessibility to financial services strategies and small-scale tea farmers' economic empowerment in Kisii County. Descriptive survey designs also enabled the researcher to

obtain both paradigms of phenomenological and methodological theory of access to financial services to obtain qualitative and quantitative information.

3.3 Location of the Study

Kisii County is the location of the study, and the study area will be on agriculture (specifically on small-scale tea farmers) in the entire region. Kisii is one of the forty-seven Counties of Kenya. It shares common borders with Nyamira County to the North East, Narok County to the South and Homabay and Migori Counties to the West. The County lies between latitude 00 30'and 100 South and longitude 340 38'and 350 East. It is the second smallest county in Nyanza region after Nyamira County and has an area of 1,317.5km2. Kisii County is divided into 9 Sub-Counties with 45 wards. Based on the 2009 Population and Housing Census, the County population is 1,152,282 comprising 550,464 males and 601,818 females, respectively. This population is projected at 1,236,996 in 2012 consisting of 597,934 males and 639,032 females.

Farm holding size in Kisii County is typically smallholdings, ranging from 0.5 to 4.5 acres of land. The small size holdings are as a result of high population pressure on land, which results in subdivisions and fragmentation of holdings. The landholdings in the county are estimated at over 135,000 which consist of households who engage in mixed farming. The subdivisions have affected agriculture as the mechanisation is not possible hence there is need to discourage such practices by clearly designating residential and agricultural land in the county in order to empower her farmers strategically with food security.

Kisii County exhibits a highland equatorial climate resulting in a bimodal rainfall pattern with an average annual rainfall of 1,500mm. The long rains are between March and June while the short rains are received from September to November; with the months of January and July being relatively dry. The maximum temperatures in the County range between 21°C −30°C, while the minimum temperatures range between15°C and 20°C. The high and reliable rainfall, coupled with moderate temperatures, is suitable for growing crops like tea, coffee, pyrethrum, maize, beans and bananas as well dairy farming. Tea farming is a major source of income in the region, and many depend on it for their economic empowerment. The rationale for choosing this region is that despite the region being endowed with the good climatic conditions, her huge population is hindering their economic empowerment in terms of financial resource, land size as well as infrastructure to meet their basic needs and yet tea is

their main source of income; thus a need for strategies that can help the small-scale farmer with scarce financial resources to empower themselves.

3.4 Target Population

Research population refers to all members, involved in an issue or events that the researcher intends to study and draw conclusions (Vans, 1990). This population should possess the characteristics that are questioned in a study (Castillo, 2009). The target population was 77035 of small-scale tea farmers in Kisii County. The rationale of using this population was that within this population, they are directly involved in tea activities. This population was to provide the researcher with insights about the research problem.

Kisii County is largely an agricultural County endowed with good soils and favourable climatic conditions. However, due to limited access to financial service strategies: poor farming methods, increased sub-division of land into uneconomic parcels and poor access to quality inputs, County has remained food insecure with a food insecurity index of 60 per cent. The poverty levels are still high, with 51 per cent of the population living below the poverty line. This makes it difficult for the region to sustain MDG One, Eradicating Extreme Poverty and Hunger. Kenya Open Data survey report (2010) indicates that there's 54% of unemployment and 54.2% of poverty in Kisii County as at 2006 and Kenya Bureau of Statistics (2015).

Weekly reports on the prices that KTDA factories achieve at the Mombasa auction are shared with farmers. Access to price information as well as farmers' shareholding in tea companies are strong incentives for performance and maintaining a market orientation. However, the majority of small-scale tea farmers are underpowered.

3.5 Sampling procedure and sample size

Sampling involves selecting unit or units of analysis which is referred to as the individual case or group of cases that the researcher wants to express something about when completed and is, therefore, the focus of all data collection efforts (Tashakkori, & Teddlie, 2009). Kothari (2006) defines a sample as a collection of some parts of the population on the basis of which judgment is made, small enough for convenient data collection and large enough to be a true representative of the population from which it has been selected. Sample size refers to a number of items to be selected from the universe to constitute a sample.

Unit of analysis in this study comprise of 77035 tea small-scale farmers in Kisii County; that provided the researchers with the ability to gain answers to research questions set forth in the study. Stratified, purposive and simple random sampling procedure was used to obtain the sample size of small-scale tea farmers respectively. Stratified sampling technique was an appropriate technique because it ensured that all individuals in each category within the organisations had an equal chance of being included in the samples that would yield data that would be generalised within a margin of error that can be determined statistically (Mugenda, & Mugenda, 1999). Purposive sampling is a method in which elements are chosen based on the purpose of the study. It may involve the studying of the entire population of some limited group or a subset of a population.

In this study, the researcher used a sample of 398 respondents. The sample size was described as random sampling techniques due to no known or document universe. 398 tea farmers (respondents) were chosen randomly from the three factories in Kisii County.

The sample size was arrived at using the formula below that the research believes generated sample large enough to reduce random sampling error.

$$n = \frac{N}{1 + N(e^2)}$$ (Yamane, 1967) n was the sample size desired. N was the population size,

and e was the level of precision or the margin of error.

$$n = \frac{77035}{1 + 77035(0.05)^2}$$

$$= \frac{77035}{193.59}$$

$$= 398$$

The figures of the sample population were applied upon each of the 3 factories plus their 3 branches, and their totals under each category determined their respective allocations. Stratified and simple systematic random sampling was applied to select the respondents. From each factory's sample size, two farmers were systematically and randomly selected from their many buying centres which are part of the factories and were issued with questionnaires. The remaining four respondents were purposively selected from other buying centres. See Table 3.1 below.   The population, N, being 77035 for tea farmers generated a

sample size of 398 in that category. The following table illustrates how the respondents were distributed.

Table 3.0.1: How respondents were distributed

Target Population Category	Constituency	Target Population	Sample Size		Selection Method
Nyamache Factory main Nyamche branch-Itumbe	Bobasi	16454	85	85/2=42 Remain 1	Simple purposive and systematic stratified and Randomly selected
		12409	64	64/2=32	
Ogembo main factory Ogembo branch-Eberege	Machoge Chache Machoge	15854	82	82/2=41	
		11805	61	61/2=30 Remain 1	
Kiamokama main factory Branch-Rianyamwamu	Borabu Nyaribari Masaba Nyaribari	12176	63	63/2=31 Remain 1	
	Chache	8337	43	43/2=21 Remain	
Total		77035	398		

Source: KTDA records Region 6, 2017

Note: each factory has more than 50 coded buying centres

3.6 Data Collection Instruments

The questionnaires were used to obtain vital information about the population of the study. Each of the items in the questionnaires was developed to address specific objectives (Saunders, Bendixen, & Abratt, 2007). The researcher used both primary and secondary data to accomplish the research objectives. Primary data was collected by use of structured and unstructured questionnaires and secondary data by use of document analysis, KTDA annual reports, published magazines and journals. Questionnaires were preferred because they were relatively quick to collect the information in a standardised and more objective way certainly

more so than interviews although in some instances it takes longer time especially when it comes to analysing the data collected. The questionnaires helped to make a comparison between financial service access strategies and economic empowerment among tea farmers.

The research was carried out by the researcher individuality where preliminary information was gathered from the County department of agriculture and KTDA region 6 main offices, where the register of tea farmers and records of tea farmers in the region are available. The main data was collected   later with the assistance of six research assistants who were properly briefed on the study and its objectives. The researcher and the assistants administered the questionnaire to tea farmers in their own farms and buying centres by dropping and later collecting them. In instances where the respondents needed clarification, the assistants were available to provide the clarifications sought. The study was conducted over a period of four months starting with enquiries from the factories where a sampling frame of tea farmers was identified from a register. Out of 398 questionnaires administered, 269 were returned.

Observation forms were utilised to record what was observed during data collection. The behaviours observed, and then developed in detailed list of behaviour were defined by the researcher first so as to make it easy during data collection for checks of each as it occurred, this was to give room for the observer to spend time to think about occurrences rather than how to record it and enhance the accuracy of the study. In this case, Likert scale was used that required the observer not only to observe behaviours but also evaluate them on a rating scale.

3.6.1 Pilot Test

Obtaining help with undertaking a pilot study can help researchers to uncover problems in the survey instruments and inform the data analysis process about what data is likely to be most or least useful (Impact, 2005). Wherever possible, an impact assessment methodology should be piloted before full implementation (Hulme, 2000). Given that pilot studies are a well-known phenomenon, and bearing in mind the above, a pilot study was carried out in Nyamira County to test the response to each of the questions and the questionnaire as a whole.

A total of 60 questionnaires were administered, and responses to 56 questionnaires led to further corrections and modifications of the research instrument. For instance, as a result of

the pilot test, questions that were intended to record the actual financial access strategies were changed to inquire into changes in the financial service accessibility strategies because respondents were unable to recall actual financial service access strategies or income a year before the study. However, they were able to answer a question on whether their income had increased, decreased or remained the same through financial service access strategies. Such modifications were carried out on the questionnaire in order to make it easier for respondents without losing sight of the purpose of the study.

3.6.2 Validity

Validity refers to the extent to which an instrument measures what it purports to measure. It had to do with how accurate the data obtained in the study represented the variables of the study. It is also the accuracy and meaningful inferences which were based on the result of the study. It is the degree to which results obtained from the analysis of data actually represents the phenomena under study (Maxwell, 2006). In this study, a pre-test and pilot survey was conducted to test the accuracy, robustness and versatility of the research instrument. Based on the outcome the research tool was revised to address concerns raised by the respondents, and the shortcomings noted. This was done with a view of improving its capacity to elicit empirical responses devoid of ambiguity and bias. (Refer to Appendix iii Pilot study results).

3.6.3 Reliability

Reliability is a measure of the degree at which instruments yield consistent results after repeated trials (Kothari, 2004). The reliability of the instruments was tested using Cronbach's alpha, a method used as a coefficient of internal consistency (Cronbach, 1951). It is commonly used as an estimate of the reliability of a psychometric test for a sample of examinees by checking inter-item correlation matrices and eliminating non-critical items. According to Cohen, Manion and Morrison (2000), alpha value above 0.7 indicates good reliability and internal consistency, and therefore it is considered acceptable for the present study. The actual value obtained when a validity test was carried out for the present study was at an alpha of 0.971, and it was therefore considered suitable and reliable.

3.7 Data collection procedures

The researcher got an introductory letter from the faculty of business studies of Kabarak University that enabled him get permit from the NACOSTI (National Commission for Science, Technology, permission was sought from the Kisii County Commissioner and under

the MOEST (Ministry of Education, Science and Technology) before he proceeded to the field to collect data from the tea grower's household's access to financial services in the county. This was done before administering questionnaires to small-scale tea farmer respondents, Appendix 1.

3.8 Analysis and presentation

Data collected was processed, coded and analysed based on the research objectives. Editing and sorting of data was done with the help of SPSS computer software version 20. The analysis was carried out by use of Pearson's product-moment correlation coefficient to establish the nature of the relationship between financial service access strategies and economic empowerment. Questions were analysed in a tabulated form with the aid of simple percentages, graphs and tables. Simple linear regression was used to model the relationship between financial service access strategies and economic empowerment. Both descriptive and inferential statistics were used. Descriptive statistics involved the use of frequencies, percentages, chi-square and with respective probability values (p-value) to summarise the data while inferential statistics provided a basis for testing the relationships among the studied variables and drew meaningful inferences that were generalised across populations of interest. The inferential statistical methods that were used in the study included; Chi-Square-test for goodness of fit and agreement, correlation coefficients which tested non-causal relationship between study variables, and multiple regression analysis was employed infer individual causal relationship between dependent variable and each of the independent variables respectively by use of beta (β) coefficients values. The formulated research hypotheses were tested at 5% significance level using individual regression models. Data was subjected through econometric tests to ensure assumptions of regression analysis were met. The data collected was checked for linearity, normality, multi-collinearity and heteroskedasticity of residuals.

The regression analysis was run at six levels;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots.i$$

Y   - Economic empowerment

X_1 - Level of access to Financial service Providers

β_1 - Regression coefficient for Level of access to Financial Service Providers

β_0 - Regression Constant

ε - Error term

$$Y = \beta_0 + \beta_2 X_2 + \varepsilon \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\text{ii}$$

Where;

Y   - Economic empowerment

X_2 - Physical proximity

B_2 - Regression coefficients for Physical proximity

β_0 - Regression Constant

ε - Error term

$$Y = \beta_0 + \beta_3 X_3 + \varepsilon \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\text{iii}$$

Where;

Y   - Economic empowerment

X_3 - Economic factors

B_3 - Regression coefficients for Economic factors

β_0 - Regression Constant

ε - Error term

$$Y = \beta_0 + \beta_4 X_4 + \varepsilon \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\text{iv}$$

Where;

Y   - Economic empowerment

X_4 - Social factors

B_4 - Regression coefficients for Economic factors

β_0 - Regression Constant

ε - Error term

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \dots\dots\dots\dots\dots\dots\dots\dots\text{v}$$

Where;

Y   - Economic empowerment

X_1 - Level of access to Financial service Providers

X_2 - Physical proximity

X_3 - Economic factors

X_4 - Social factors

$\beta_1, \beta_2, \beta_3, \beta_4$: Regression coefficients for independent variables

β_0 = regression Constant

ε = error term assumed to be normally distributed

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Z + \varepsilon \dots\dots\dots\dots \text{vi}$$

Where;

Y   - Economic empowerment

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X$_1$ - Level of access to Financial service Providers

X$_2$ - Physical proximity

X$_3$ - Economic factors

X$_4$ - Social factors

Z   - Moderating variable (demographic factors)

$\beta_1, \beta_2, \beta_3, \beta_4,$ - Regression coefficients for independent variables

β_5 -Beta coefficient for moderating variable

β_0 = regression Constant

ε = error term assumed to be normally distributed

3.9   Summary of Model Parameters and statistical tests and diagnostic tests

Table 3.0.2: Summary of Model Parameters and statistical tests and diagnostic tests

No	Objectives	Hypotheses	Type of Analysis	Diagnostic tests	Anticipated results
1.	To analyse the level of financial providers access for economic empowerment among small-scale tea farmers in Kisii County- Kenya.	HO1. There is no significant level of financial providers' access strategy on economic empowerment among tea farmer in Kisii County-Kenya.	Pearson's Product Moment Correlation Coefficient (r), Analysis of the variance (ANOVA), Student t-test, Chi-square tests	Durbin – Watson, Collinearity tests especially the Eingen value, VIF	Reject null hypothesis/Fail to reject the null hypothesis
\ 2.	To identify the physical proximity and awareness of financial service access for economic empowerment among small-scale tea farmers in Kisii county-Kenya.	HO2. Proximity or location of financial service access has no significant influence on economic empowerment among tea farmers in Kisii County-Kenya.			

3.	To establish the effect of economic factors on access to financial service for economic empowerment among small-scale tea farmers in Kisii County- Kenya.	HO3. Economic factors do not affect financial access for economic empowerment among tea farmers in Kisii County- Kenya.
4.	To analyse the influence of social factors on access to financial services for economic empowerment among tea farmers in Kisii County- Kenya.	Ho4. Social factors on access to financial services do not have a significant effect on economic empowerment among tea farmers in Kisii County - Kenya.
5.	To establish the moderating effect of the relationship between financial accessibility and economic empowerment among small-scale tea farmers in Kisii County- Kenya.	Ho5. Financial policies and regulations do not have a moderating effect on the relationship between financial service accessibility and economic empowerment among tea farmers in Kisii County-Kenya.

Source: Researcher (2018)

3.10 Ethical Issues

Due to the sensitivity of some information collected, the researcher held a moral obligation and treated the information with the utmost propriety. The researcher assured the respondents of confidentiality of the information that was given and that the research report was purely for academic purpose. The researcher would avail a copy of the completed thesis to the respondents upon their request.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

In this chapter, the data analysis, presentation, interpretation and discussions of the research findings are presented depicting the results of the analysis using SPSS version 20. The results are within the framework of the study objectives, research questions and hypotheses outlined. The overall interpretation of the results maintains sight of the objective, which analysed financial service accessibility strategies for farmers' economic empowerment in Kenya.

4.2 Descriptive Statistics on Profile of Respondents

This section presents and discusses the results of the descriptive statistics of the profile of respondents. It also presents descriptive analyses of the results of the variables under study. Frequencies and percentages were used to examine the distribution of the respondents.

4.2.1 Response rate

As presented in Table 4.1, the researcher distributed a total of 398 questionnaires to the respondents out of which 269 were correctly filled and returned for analysis. This represented a response rate of 67.6 %. According to (Babbie, 2001) a response rate of 60% is good, 70% very good and 50% adequate for analysis and reporting from manual surveys. Thus, the response rate was deemed sufficient for further analysis of the research objectives.

Table 4.0.1: Response Rate

Response Rate	Frequency	Percent
Returned	269	67.6%
Unreturned	129	32.4%
Total	398	100

Source: (Researcher, 2018)

This section presents the demographic characteristics of the respondents.

4.2.2 Age of Respondents

The study sought to establish the age of the respondents.

Table 4.0.2: Age of the respondents

	Age	Frequency	Per cent
	25-35	12	4.5
	36-46	42	15.6
	47-57	58	21.6
Valid	58-68	93	34.6
	above 69	64	23.8
	Total	269	100.0

Source: (Researcher, 2018)

With regard to the ages of respondents, Table 4.2 shows that 12(4.5%) of the respondents were aged 25-35 years implying that they do not mind carrying out farming activities, some are in school, looking for green pastures in towns and cities while others have no land for cultivation. Those aged 36-46 years were 42(15.6%) implying that they are partially involved in tea farming or rather they lack land for tea growing. Some are not living in their rural areas because they have migrated to urban areas to look for formal employment. Those aged 47-57 years were 58(21.6%). These are the middle-aged group, majority of them are about to retire from formal employment and therefore are preparing for their comfortable retirement and do farming business (informal employment). Also, some may be involved in small-scale tea farming and small business and need more land for tea growing. The majority aged 58-68 years were 93 (34.6%). This implies that majority of small-scale tea farmers are in this age bracket and are active in farming and therefore are fully involved in farming. Majority of them own land and need to be empowered economically to enhance their performance. This is followed by those aged 69 years and above who number 64 (23.8%). In this age group, most are men landowners and possess title deeds. It can be implied that in this age group, the majority are ageing, and they use other age groups to work for them. From the above it can be implied that the responses were not balanced in terms of age category among the respondents.

4.2.3 Respondents' gender
The study sought to establish the gender of the respondents in relation to financial service access in tea farming

Table 4.0.3: Gender of the respondents

Gender		Frequency	Per cent
	Male	175	65.1
Valid	Female	94	34.9
	Total	269	100.0

Source: (Researcher, 2018)

The results in Table 4.3 indicate that the majority 175 (65.1 %) of respondents were men, while 94(34.9%) were female. Although men were the majority, one-third of the respondents were female; thus, there was gender disparity among tea farmers in Kisii County. It can be implied that the responses and perspectives among the respondents were not balanced in terms of gender aspect. However, despite the fact that females are less than men, most of those who do much of the actual work in tea farming are women. It was noted that much of the earnings from tea farming go to male pockets because they own the land.

4.2.4 Education level

The study sought to establish the education level of the respondents

Table 4.0.4: Education level of the respondents

		Frequency	Per cent
	Non-formal	47	17.4
	Primary	98	36.4
Valid	Secondary	104	38.7
	College	15	5.6
	University	5	1.9
	Total	269	100.0

Source: (Researcher, 2018)

With respect to education level, results show that 47(17.4%) are non-formal, 98(36.4%) have primary education, 104(38.7%) have secondary education, 15(5.6%) have a college education, and 5(1.9%) have a university education. It can be implied that the majority of small-scale tea farmers in Kisii County have basic education while the minority have non-formal and post-secondary education, as shown in Table 4.4. Those with non-formal and basic education form the bulk of small-scale tea farmers in Kisii County, but because of their limited educational background, they cannot make informed financial decisions. Thus, they are not able to access financial services for their economic empowerment. Those with post-secondary education make sound financial decisions, but their numbers are negligible and therefore make little impact on financial service accessibility.

4.2.5 How much do you earn approximately from tea?

The study sought to establish how much respondents approximately earned from tea.

Table 4.0.5: How much do you earn approximately from tea?

	Earnings per month	Frequency	Per cent
	0-500	39	14.5
	501-1000	61	22.7
	1001-1500	56	20.8
Valid	1500-2000	74	27.5
	2001-2500	20	7.4
	2501-3000	16	5.9
	above 3001	3	1.1
	Total	269	100.0

Source: (Researcher, 2018)

The results on Table 4.5 indicate that majority of the respondents 39(14.5%) earned below 0-500, 61(22.7%) earned Ksh501-1000, 56(20.8%) earned Ksh 1001-1500, 74(27.5%) earned Ksh 1500-2000, 20(7.4%) earned Ksh2001-2500, 16(5.9%) earned Ksh2501-3000 while only 3(1.1%) earned above Ksh3000 per month from tea farming in Kisii County. This implies that there has been a consistent disparity in earnings along income categories. However, it was observed that those earning Ksh.1500-2000 do not depend on their tea farms alone but also buy/pick tea leaves from hired farms. A paltry 14.4% earned above Ksh.2000.

4.2.6 How much do you earn as yearly bonuses from tea net income?

The study sought to establish how much respondents earned yearly as tea farming bonuses

Table 4.0.6: How much do you earn as yearly bonuses from tea

Bonus earnings per year		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	1, 000-30, 000	68	25.3	25.3	50.6
	31, 000-60, 000	63	23.4	23.4	46.8
	61,000-90,000	48	17.8	17.8	35.6
	91,000-120,000	39	14.5	14.5	33.5
	121,000-150,000	24	8.7	8.9	19.0
	151,000-180,0000	18	6.7	6.7	10'0
	above 181,000	9	3.3	3.3	3.3
	Total	269	100.0	100.0	

Source: (Researcher, 2018)

The results on Table 4.6 indicate that majority of the respondents 68(25.3%) earned Ksh 1,000-30,000, 63(23.4%) earned Ksh 31,000-60,000, 48(17.8%) earned Ksh 61,000-90,000 and 39(14.5%) earned Ksh 91,000-120,000,while a minority 24(8.9%) earned Ksh 121,000-150,000, 18(6.7%) earned Ksh151, 000-180, 000 and 9(3.3%) earned Ksh 181, 000 and above as yearly bonuses in Kisii County. It can be implied that the more the earnings, the lesser the respondents along income categories. This also implies that the bigger the size of land under tea cultivation, the higher the bonuses earned. The minority in Kisii County has bigger land sizes under tea cultivation, and that is the reason why they earn more bonuses than the majority.

4.2.7 Do you save your income?

The study sought to establish whether respondents save their income.

Table 4.0.7: Do you save your income?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	182	67.7	67.7	67.7
	No	87	32.3	32.3	100.0
	Total	269	*100.0*	*100.0*	

Source: (Researcher, 2018)

As shown in Table 4.7, majority of the respondents 182(67.7%) saved their income while 87(32.3%) do not save their income. This implies that the saving behaviour has been inculcated among tea farmers in Kisii County; thus, the respondents were well versed with the topic under study on financial services access.

4.2.8: Where do you save?

The study sought to establish where respondents save their income.

Table 4.0.8: where do you save?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Bank	90	33.5	33.5	33.5
Valid	Sacco	155	57.6	57.6	91.1
	Other	24	8.9	8.9	100.0
	Total	269	100.0	100.0	

Source: (Researcher, 2018)

The results on Table 4.8 indicate that majority of the respondents 155(57.6%) saved with SACCOs, 90(33.5%) saved with commercial and microfinance banks, while 24(8.9%) saved with other channels such as rotating savings and credit associations (ROSCAs). This implies that the majority of respondents prefer SACCOs more due to lower interest rates charged and collaterals across various saving channels which indicated unbalanced responses and perspectives on topic under study.

4.2.9: Where do you borrow money from?

The study sought to establish where respondents borrow money from.

Table 4.0.9: Where do you borrow money from?

	Source of funds	Frequency	Per cent	Valid Percent	Cumulative Percent
	Sacco	146	54.3	54.3	54.3
	Banks	66	24.5	24.5	78.8
Valid	friends and relatives	21	7.8	7.8	86.6
	Others	36	13.4	13.4	100.0
	Total	269	100.0	100.0	

Source: (Researcher, 2018)

The results on Table 4.9 indicate that majority of the respondents 146(54.3%) borrowed from SACCOs, 66(24.5%) borrowed from commercial and microfinance banks, 21(7.8%) borrow from friends and relatives while 36(13.4%) of the respondents borrowed from other sources which included ROSCAs and informal lenders (shylocks). This implies that the respondents borrowed more from SACCOs than other channels due to possibilities of low-interest rates which indicated unbalanced responses and perspectives on topic under study.

4.2.10 Cross-tabulation results

This sought to establish the relationship between how much the respondents earn as yearly bonuses from tea and how much they save from their income.

Table 4.0.10: How much do you earn as yearly bonuses from tea? Do you save your income?

Cross tabulation

			Yes	No	
how much do you earn as yearly bonuses from tea	1, 000-30, 000	Count	7	2	9
		Expected Count	6.1	2.9	9.0
		% within how much do you earn as yearly bonuses from tea	77.8%	22.2%	100.0%
	31, 000-60, 000	Count	12	6	18
		Expected Count	12.2	5.8	18.0
		% within how much do you earn as yearly bonuses from tea	66.7%	33.3%	100.0%
	61,000-90,000	Count	13	11	24
		Expected Count	16.2	7.8	24.0
		% within how much do you earn as yearly bonuses from tea	54.2%	45.8%	100.0%
	91,000-120,000	Count	26	13	39
		Expected Count	26.4	12.6	39.0
		% within how much do you earn as yearly bonuses from tea	66.7%	33.3%	100.0%
	121,000-150,000	Count	35	13	48
		Expected Count	32.5	15.5	48.0

		% within how much do you earn as yearly bonuses from tea	72.9%	27.1%	100.0%
	151,000-180,000	Count	49	14	63
		Expected Count	42.6	20.4	63.0
		% within how much do you earn as yearly bonuses from tea	77.8%	22.2%	100.0%
	above 180,000	Count	40	28	68
		Expected Count	46.0	22.0	68.0
		% within how much do you earn as yearly bonuses from tea	58.8%	41.2%	100.0%
Total		Count	182	87	269
		Expected Count	182.0	87.0	269.0
		% within how much do you earn as yearly bonuses from tea	67.7%	32.3%	100.0%

Source: researcher (2018)

Table 4.10 shows that majority of the respondents (77.8%) who indicated that they save their income, earn Kshs 1, 000-30,000 as yearly bonuses from tea. 66.7% of the respondents who save earn Kshs 31, 000-60, 000, 54.2% of the respondents who save earn Kshs 61,000-90,000, 66.7 % of the respondents who save earn Kshs 91,000-120,000, 72.9% of the respondents who save earn Kshs 121,000-150,000, 77.8% of the respondents who save earn Kshs 151,000-180,000 while 58.8% of the respondents who save earn above Kshs 180,000 as tea bonuses. This implies that there is an association between these variables.

4.2.11 Reliability, Validity and the assumptions of Regression Analysis

The study sought to ensure that the reliability and validity of data collection were ascertained and that the data used met the regression analysis assumptions. This sub-section discusses the results of tests of reliability, validity and assumptions of the regression analysis.

4.2.12 Reliability Test

From the reliability results in Table 4.11, all the research constructs returned alpha values above 0.7 except physical proximity which was slightly low (0.689). The data collection

instruments returned an overall alpha coefficient value of 0.791, which indicated good internal consistency reliability. According to Cohen, Manio and Morriso (2000), alpha value above 0.7 indicates good reliability and internal consistency.

Table 4.0.11: Reliability test results

Constructs	Cronbach's Alpha	Number of items
Level of access to service providers	0.717	9
Physical proximity	0.689	6
Economic factors	0.775	7
Social factors	0.798	10
Economic empowerment	0.714	19
Demographic characteristics	0.721	3
Overall Reliability	**0.791**	**54**

Source: (Researcher, 2018)

4.2.13 Test of Validity

To test construct validity in this study, factor analysis was conducted. Because of the large number of items involved, separate sets of factor analyses were conducted for the items in the research constructs. Factor analysis was used to check the extent to which each item in the scales contributed to the respective factor. Before factor analysis was conducted, assumptions of factor analysis were tested. As a general rule regarding sample size, the minimum is to have at least five times as many observations as the number of variables to be analysed; and the minimum absolute sample size should be 50 observations, but preferably, the sample size should be 100 or larger (Hair et al., 2011). In this study, the sample size requirement was met as 269 tea farmers were studied. Kaiser Meyer-Olkin (KMO) measure of sampling adequacy (MSA) was used to validate factor analysis. A value of 0.5 is a suggested minimum to proceed with factor analysis (Hair et al., 2011). Kaiser-Mayer Olkin (KMO) and Bartlett's test were used to test the appropriateness of the sample from the population and the suitability of factor analysis. A statistically significant Bartlet's test of sphericity indicates that sufficient correlations exist among the variables to proceed with factor analysis (Hair et al., 2011). In this study, Kaiser Meyer-Olkin measure and Bartlet's test of sphericity were employed and the results presented in Table 4.12 the general rule of factor analysis stipulates that only

factor with Eigen value of 1 and above are considered meaningful for interpretation (Anthony and Mustapha, 2010). However, it is important to note that only loadings greater than 0.4 were considered significant after varimax rotation in this research. Mabert et al. (2003), argue that factor loading values that are greater than 0.4 should be accepted.

Table 4.0.12: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.620
	Approx. Chi-Square	4944.336
Bartlett's Test of Sphericity	Df	1431
	Sig.	.000

Source: (Researcher, 2018)

Table 4.12 shows that the Kaiser-Mayer-Olkin measure of sample adequacy gave a value of 0.620. The KMO is close to 1, which represents a perfectly adequate sample, and Bartlett's test of sphericity shows a chi-square of 4944.336, which is statistically significant at 5 per cent. This is an indication of the adequacy of the sample. The results from the two test instruments show that factor analysis can be used for the study.

4.2.14 Factor Analysis on Level of access to financial services providers

Principal component analysis extraction method with varimax rotation method was used where validity was assessed by examining the factor loadings to see if the items in the scale loaded highly on the construct. Table 4.13 presents the results of the analysis for the number of items that had significant loading on each component factor.

Table 4.0.13: Rotated Component Matrix for Measures of Level of financial providers

Level of financial providers items	Component			
	1	2	3	4
a) Small-scale tea farmers in Kisii county depend on the level of financial providers for their economic empowerment	.561			
b) Small-scale tea farmers in Kisii county depend on commercial banks for their economic empowerment				.885

c) Small-scale tea farmers in Kisii county depend on Microfinance (cooperatives, SACCOs, ROSCAs) for their economic empowerment	.693	
d) Small-scale tea farmers in Kisii county depend on remittances from friends and relatives for their economic empowerment		.520
e) Small-scale tea farmers in Kisii county depend on Government, Donors, NGOs for their economic empowerment		.845
f) Small-scale tea farmers in Kisii county depend on Insurance for their economic empowerment		.781
g) Small-scale tea farmers in Kisii county depend on collateral security for their economic empowerment		.583
h) Small-scale tea farmers in Kisii county depend on other financial institutions that have no tailor-made products that suit their needs for their economic empowerment	.727	
i) Small-scale tea farmers in Kisii county depend on interest rates for their economic empowerment	.746	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalisation.

Source: (Researcher, 2018)

The results in Table 4.13 show that the factor loadings of the level of financial providers' items range from 0.520 to 0.885. All the nine items met the loadings cut-off of 0.4 and were thus retained for analysis. Four factors had Eigen values which are greater than 1, and their extraction sums of squared loadings were greater than 1. Factor 1 had the highest extraction sums of squared loadings of 2.586, which represents 28.738 per cent of variation. Factor 4 had the lowest extraction sums of squared loadings of 1.069, representing 11.877 per cent of variance. The extraction sums of squared loadings of other factors were between the range of 2.586 and 0.426. The contributing power of these other factors to the explanation of the variance in the variables was significantly considered. The factors accounted for 67.651 per cent of the variance in the construct (Appendix III, Table A1).

4.2.15 Factor Analysis on Physical proximity

Principal component analysis extraction method with varimax rotation method was used where validity was assessed by examining the factor loadings to see if the items in the scale

loaded highly on the construct. Table 4.14 presents the results of the analysis for the number of items that had significant loading on each component factor.

Table 4.0.14: Rotated Component Matrix for Measures of Physical proximity

Physical proximity items	Component		
	1	2	3
a) Infrastructural development enables tea farmers in Kisii county to easily access financial services for their economic empowerment		.728	
b) Distance affects financial accessibility by small-scale tea farmers in Kisii county and their economic empowerment	.665		
c) Awareness of financial accessibility enhances economic empowerment among small scale tea farmers in Kisii county		.700	
d) ICT facilitates financial accessibility for tea farmers economic empowerment in Kisii county	.511		
e) Mobile phones facilitate financial access for tea farmers in Kisii county for their economic empowerment			.833
f) Banking location in the rural area enables access to financial services for tea farmers economic empowerment	.616		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalisation.

Source: (Researcher, 2018)

The results in Table 4.15 show that the factor loadings of physical proximity items range from 0.511 to 0.833. Except for one item "Road networks hinder farmers' access to financial services for their economic empowerment" which did not meet loading cut off of 0.4, the other six items met the loadings cut-off of 0.4 and were thus retained for analysis. A maximum of three factors was obtained because the three factors had Eigen values which were greater than 1 and their extraction sums of squared loadings were greater than 1. Factor 1 had the highest extraction sums of squared loadings of 1.284, which represents 18.346 per cent of variation. Factor 3 had the lowest extraction sums of squared loadings of 1.033, representing 14.762 per cent of variance. The extraction sums of squared loadings of other factors were between the range of 1.284 and 0.770. The contributing power of these other

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factors to the explanation of the variance in the variables was significantly considered. The factors accounted for 49.895 per cent of the variance in the construct (Appendix III, Table A2).

4.2.16 Factor Analysis on Economic factors

Principal component analysis extraction method with varimax rotation method was used; validity was assessed by examining the factor loadings to see if the items in the scale loaded highly on the construct. Table 4.15 presents the results of the analysis for the number of items that had significant loading on each component factor after varimax rotation.

Table 4.0.15: Rotated Component Matrix for Measures of Economic factors

Economic factors items	Component		
	1	2	3
a) Land size is a limiting factor to financial access by tea farmers for their economic empowerment in Kisii county		.856	
b) Land ownership is a challenge to financial accessibility by tea farmers in Kisii county for their economic empowerment	.846		
c) Land rights enable financial service access by tea farmers in Kisii county for their economic empowerment		.870	
d) Entrepreneurial ability enables tea farmers in Kisii county to access financial services for their economic empowerment	.720		
e) Limited education among smallholder tea entrepreneurs hinder financial access for their economic empowerment			.843
f) High taxation among tea farmers in Kisii county is a hindrance to financial accessibility for their economic empowerment			.610
g) High Cost of production by tea farmers in Kisii county is a challenge to financial accessibility for their economic empowerment	.814		
Extraction Method: Principal Component Analysis.			
Rotation Method: Varimax with Kaiser Normalisation.			

Source: (Researcher, 2018)

The rotated component matrix in Table 4.15 shows that all the factor loadings of economic factors items ranged from 0.610 to 0.870. All the seven items met loading cut off of 0.4 and were thus retained for analysis. A maximum of three factors was obtained, the three initial factors had Eigen values greater than 1, and their extraction sums of squared loadings were greater than 1. Factor 1 had the highest extraction sums of squared loadings of 2.360, representing 33.715 per cent of the variance. Factor 3 had the least extraction sums of squared loadings of 1.407, which represents 20.103 per cent of variance. Other factors extraction sums of squared loadings were between the range of 2.360 and 0. 238. The contributing power of these other factors to the explanation of the variance in the variables was considered very significant. The factors accounted for 76.013 per cent of the variance of the construct (Appendix III, Table A3).

4.2.17 Factor Analysis on social factors

Principal component analysis extraction method with varimax rotation method was used, and validity was assessed by examining the factor loadings to see if the items in the scale loaded highly on the construct. Table 4.17 presents the results of the analysis for the number of items that had significant loading on each component factor after varimax rotation.

Table 4.0.16: Rotated Component Matrix for Measures of Social factors

Social factors items	Component			
	1	2	3	4
a) The educational level of tea farmers determines their financial accessibility for economic empowerment			.872	
b) Knowledge and experience of tea farmers in Kisii county enables them to access financial services for their economic empowerment	.519			
c) Financial literacy is key to financial accessibility for tea farmers economic empowerment in Kisii county	.650			
d) Training of tea farmers in financial management is key to financial accessibility for their economic empowerment	.594			
e) Farm field schools boost financial accessibility to tea farmers for economic empowerment				.898
f) Gender equity to financial resources hinders financial accessibility by tea farmers in Kisii county for their economic empowerment		.790		
g) Illiteracy among women tea farmers in Kisii county hinders financial accessibility for their economic empowerment	.747			
h) Women access to financial services promotes economic empowerment to tea farmers in Kisii county	.687			
i) Gender involvement in decision making leads to financial accessibility among tea farmers in Kisii for their economic empowerment		.674		
j) Equal rights to property ownership enhance financial accessibility by tea farmers in Kisii county for their economic empowerment		.727		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalisation.

Source: (Researcher, 2018)

The rotated component matrix in Table 4.16 shows that all the factor loadings of social factors items ranged from 0.519 to 0.898. All the ten items met loading cut off of 0.4 and

were thus retained for analysis. A maximum of four factors was obtained, the four initial factors had Eigen values greater than 1, and their extraction sums of squared loadings were greater than 1. Factor 1 had the highest extraction sums of squared loadings of 2.748, representing 27.479 per cent of variance. Factor 4 had the least extraction sums of squared loadings of 10.018, which represent 10.182 per cent of variance. Other factors extraction sums of squared loadings were between the range of 2.748 and 0.408. The contributing power of these other factors to the explanation of the variance in the variables was considered very significant. The factors accounted for 62.966 per cent of the variance of the construct (Appendix III, Table A4).

4.2.18: Factor Analysis on Economic empowerment

Principal component analysis extraction method with varimax rotation method was used, and validity was assessed by examining the factor loadings to see if the items in the scale loaded highly on the construct. Table 4.17 presents the results of the analysis for the number of items that had significant loading on each component factor after varimax rotation.

Table 4.0.17: Rotated component Matrix for Measures of Economic Empowerment

Economic Empowerment items	1	2	3	4	5	6	7	8	9
a) The house I occupy and my household are self-purchased							.796		
b) Access to financial services has enabled myself purchase a motor vehicle						.694			
c) Access to financial services has enabled myself purchase a refrigerator								.871	
d) Access to financial services has enabled myself purchase a television set				.779					
e) Access to financial services has enabled myself purchase a washing machine						.737			
f) Access to financial services has					.659				

enabled myself acquire a computer

g) Access to financial services has enabled myself own a gas cooker   .802

h) Access to financial services has enabled myself own a motorcycle   .626

i) Through access to financial services I have been able to invest in shares in listed companies   .902

j) Through access to financial services I have been able to invest in bonds   .932

k) Access to financial services has enabled myself invest in short-term debt instruments (treasury bill, commercial papers)   .956   .676

l) Access to financial services has enabled myself invest in local currency term deposits

m) Access to financial services has enabled myself invest in foreign currency term deposits   .951

n) Access to financial services has enabled myself in insurance policies   .954

o) Access to financial services has enabled myself buy shares in SACCOs   .618

p) Access to financial services has enabled myself purchase land   .723

q) Access to financial services has enabled myself own commercial premises   .694   .636

r) Access to financial services has

enabled myself acquire livestock	
s) Access to financial services has enabled myself acquire storage facilities for farm produce.	.642

Source: (Researcher, 2018)

The results in Table 4.17 show that the factor loadings of economic empowerment items range from 0.618 to 0.956. Except for two items, "access to financial services has enabled myself purchase farm equipment" and "access to financial services has enabled myself own residential properties", which did not meet loading cut off of 0.4; the other nineteen items met the loadings cut-off of 0.4 and were thus retained for analysis. A maximum of nine factors was obtained because the nine factors had Eigen values which were greater than 1 and their extraction sums of squared loadings were greater than 1. Factor 1 had the highest extraction sums of squared loadings of 4.635, which represents 22.072 per cent of variation. Factor 9 had the lowest extraction sums of squared loadings of 4.902, representing 69.806 per cent of variance. The extraction sums of squared loadings of other factors were between the range of 4.635 and 0.029. The contributing power of these other factors to the explanation of the variance in the variables was significantly considered. The factors accounted for 69.806 per cent of the variance in the construct (Appendix III, Table A5).

4.2.19 Factor Analysis on moderating factors
Principal component analysis extraction method with varimax rotation method was used, and validity was assessed by examining the factor loadings to see if the items in the scale loaded highly on the construct. Table 4.18 presents the results of the analysis for the number of items that had significant loading on each component factor after varimax rotation

Table 4.0.18: Rotated Component Matrix for Measures of moderating factors

Moderating effect of Demographic items	Component	
	1	2
Age	.775	
Education		.907
Gender	.735	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalisation.

Source: (Researcher, 2018)

The rotated component matrix in Table 4.18 shows that all the factor loadings of moderating factors items ranged from 0.735 to 0.907. All the three items met loading cut off of 0.4 and were thus retained for analysis. A maximum of two factors was obtained, the two initial factors had Eigen values greater than 1, and their extraction sums of squared loadings were greater than 1. Factor 1 had the highest extraction sums of squared loadings of 1.143, representing 38.116 per cent of variance. Factor 2 had the least extraction sums of squared loadings of 1.055, which represent 35.166 per cent of variance. Other factors extraction sums of squared loadings were between the range of 1.143 and 0.802. The contributing power of these other factors to the explanation of the variance in the variables was considered very significant. The factors accounted for 73.281 per cent of the variance of the construct (Appendix III, Table A6).

4.2.20 Test for the Assumptions of Regression Analysis

The regression analysis assumptions of heteroscedasticity, normality and multicollinearity were tested. This section presents the results of the tests.

4.2.21 Test of Normality

Normality test of data is applied to determine whether a data is well-modelled by a normal distribution or not.

4.2.22 Skewness and Kurtosis Results for economic empowerment

According to Kothari and Garg (2014), measurement of skewness is based on mean and median while that of kurtosis measures the peaked-ness of the curve of the frequency distribution. The results presented in Table 4.19 show that a skewness coefficient of -0.055 and kurtosis coefficient of -0.610. Based on these results, it was concluded that data was normally distributed since their statistic values were between -1 and +1.

Table 4.0.19: Skewness and Kurtosis Test

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
economic empowerment	269	-.055	.149	-.610	.296
Valid N (listwise)	269				

Source: (Researcher, 2018)

4.2.23 Skewness and Kurtosis Results for Level of Financial Providers

Measurement of skewness is based on mean and median while that of kurtosis measures the peaked-ness of the curve of the frequency distribution (Kothari, & Garg, 2014) The results presented in Table 4.20 show that a skewness coefficient of - 0.389 and kurtosis coefficient of -0.527. Based on these results, it was concluded that data was normally distributed since their statistic values were between -1 and +1.

Table 4.0.20: Skewness and Kurtosis Test

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Level of Financial Providers	269	-.389	.149	-.527	.296
Valid N (listwise)	269				

Source: (Researcher, 2018)

4.2.24 Skewness and Kurtosis Results for Physical Proximity

According to Kothari and Garg (2014), measurement of skewness is based on mean and median while that of kurtosis measures the peaked-ness of the curve of the frequency distribution. The results presented in Table 4.21 show that a skewness coefficient of 0.142

and kurtosis coefficient of -0.527. Based on these results, it was concluded that data was normally distributed since their statistic values were between -1 and +1.

Table 4.0.21: Skewness and Kurtosis Test

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Physical Proximity	269	.142	.149	-.537	.296
Valid N (listwise)	269				

Source: (Researcher, 2018)

4.2.25 Skewness and Kurtosis Results for Economic Factors

Measurement of skewness is based on mean and median while that of kurtosis measures the peaked-ness of the curve of the frequency distribution (Kothari, & Garg, 2014) The results presented in Table 4.22 show that a skewness coefficient of 0.10 and kurtosis coefficient of 0.146. Based on these results, it was concluded that data was normally distributed since their statistic values were between -1 and +1.

Table 4.0.22: Skewness and Kurtosis Test

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Economic Factors	269	.010	.149	.146	.296
Valid N (listwise)	269				

Source: (Researcher, 2018)

4.2.26 Skewness and Kurtosis Results for Social Factors

According to Kothari and Garg (2014), measurement of skewness is based on mean and median while that of kurtosis measures the peaked-ness of the curve of the frequency distribution. The results presented in Table 4.23 show that a skewness coefficient of -0.103 and kurtosis coefficient of -0.097. Based on these results, it was concluded that data was normally distributed since their statistic values were between -1 and +1.

Table 4.0.23: Skewness and Kurtosis Test

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Social Factors	269	-.103	.149	-.097	.296
Valid N (list wise)	269				

Source: (Researcher, 2018)

4.2.27 Skewness and Kurtosis Results for Demographic factors

Measurement of skewness is based on mean and median while that of kurtosis measures the peaked-ness of the curve of the frequency distribution (Kothari, & Garg, 2014) The results presented in Table 4.24 show that a skewness coefficient of -0.055 and kurtosis coefficient of -0.284. Based on these results, it was concluded that data was normally distributed since their statistic values were between -1 and +1.

Table 4.0.24: Skewness and Kurtosis Test

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Demographic Factors	269	-.055	.149	-.284	.296
Valid N (list wise)	269				

Source: (Researcher, 2018)

4.2.28 Test of Multicollinearity

Multicollinearity means that there is a linear relationship between explanatory variables which may cause the regression model to be biased (Gujarati, 2003). VIF is a statistic calculated for each variable in the model to test Multicollinearity. Theoretically, a VIF greater than 5 may suggest that the concerned variable is multi-collinear with others in the model and may need to be excluded from the model (Gujarati, 2003). Hence, as presented in Table 4.25, the VIF results indicate there was no collinearity in the explanatory variables. Moreover, a tolerance of greater than 0.2 indicates non-existence of multicollinearity. Tolerance and VIF results indicate there was no collinearity in the explanatory variables.

Table 4.0.25: Multicollinearity Test

		Collinearity Statistics	
Model		Tolerance	VIF
1	Level of Financial Providers	.957	1.044
	Physical Proximity	.947	1.056
	Economic Factors	.811	1.234
	Social Factors	.819	1.222

a. Dependent Variable: economic empowerment

Source: (Researcher, 2018)

4.2.29 Test of Heteroscedasticity

Heteroscedasticity is a systematic pattern in the errors where the variances of the errors are not constant (Gujarati, 2003). Heteroscedasticity makes ordinary least square estimators not efficient because the estimated variances and covariance of the coefficients (βi) are biased and inconsistent, and thus, the tests of hypotheses are no longer valid. Levene Statistic was used to test the hypothesis for the homogeneity of variance that is, the error variances are all equal or homoscedastic. Table 4.26 shows Levene Statistic of 4.642 with an associated p-value of.000. Since the probability associated with the Levene Statistic is 0.000, which is less than 0.05 level of significance, we fail to reject the hypothesis and conclude that the variance of the dependent variable was homogeneous.

Table 4.0.26: Test of homogeneity of variances

Leven statistic	Sig
4.642	0.000

Source: (Researcher, 2018)

4.3 Descriptive statistics and discussions on variables under study

Descriptive statistics analysis for variables under study and discussions are presented in this section. The independent variables were; level of access to financial providers, physical proximity, economic factors and social factors while economic empowerment was the dependent variable.

4.3.1 Level of access to financial services providers

Respondents were asked to indicate the extent to which they agreed with the level of access to financial service providers' statements in influencing economic empowerment. The responses were analysed using frequencies and percentages. Table 4.27 presents the results of the analysis.

Table 4.0.27: Descriptive analysis for the level of access to financial providers

Measurable indicators	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Small-scale tea farmers in Kisii County depend on the level of financial providers for the economic empowerment	31 (11.5%)	65 (24.2%)	52 (19.3%)	105 (39.1%)	16 (5.9%)
Small-scale tea farmers in Kisii County depend on commercial banks for their economic empowerment	103 (38.3%)	79 (29.4%)	60 (22.3%)	14 (5.2%)	13 (4.8%)
Small-scale tea farmers in Kisii County depend on Microfinance (Cooperatives, SACCOs, ROSCAs) for their economic empowerment	22 (8.2%)	9 (3.3%)	37 (13.7%)	97 (36.1%)	104 (38.7%)
Small-scale tea farmers in Kisii County depend on remittances from friends and relatives for their economic empowerment	109 (40.5%)	98 (36.4%)	31 (11.6%)	20 (7.4%)	11 (4.1%)
Small s scale tea farmers in Kisii County depend on Government Donors, NGOs for their economic empowerment	47 (17.5%)	152 (56.5%)	47 (17.4%)	8 (3.0%)	15 (4.6%)
Small s scale tea farmers in Kisii County depend on Insurance for their economic	60 (22.3%)	409 (14.9%)	141 (52.4%)	18 (6.7%)	10 (3.7%)

empowerment

Small s scale tea farmers in Kisii County depend on collateral security for their economic empowerment	2 (0.7%)	102 (37.9%)	30 (11.2%)	60 (22.3%)	75 (27.9%)
Small s scale tea farmers in Kisii County depend on other financial institutions that have no tailor-made products that suit their economic empowerment	42 (15.6%)	54 (20.1%)	116 (43.1%)	40 (14.9%)	17 (6.2%)
Small s scale tea farmers in Kisii County depend on interest rates for their economic empowerment	63 (23.4%)	73 (27.1%)	116 (43.1%)	3 (1.2%)	105.206

Source: (Researcher, 2018)

On the level of access to financial services providers, the results on Table 4.27 indicate that majority of respondents (44.9%) agree that small-scale tea farmers depend on the level of financial providers for their economic empowerment. The results are in agreement with those of (Thinkii, 2014) that a reasonable number of the population relies on lending institutions for capital. Diagne et al. (2000) those financial services such as credit contribute greatly to the growth of individuals, sectors and countries, and have positive effects on poor people's livelihoods.

While 67.7% of the respondents disagreed that small-scale tea farmers depend on commercial banks for their economic empowerment. The results are in agreement with those of Thinkii (2014) that the majority of the population does not depend on banks for capital as the interest rates are very high and they lack security for borrowing. According to Henry and Schimmel (2011), formal financial providers neglect the rural areas because they find it too costly to operate in such areas, and therefore anticipate low level of economic return in the form of profit for the financial institution. According to Richter (2011), rural areas are highly

underserved by formal financial service providers because they either avoid such areas or fail to offer relevant sustainable financial services to rural people.

A larger majority of respondents (74.8%) agreed that small-scale tea farmers depend on microfinance (cooperatives, SACCOs, ROSCAs) for their economic empowerment. The results are in agreement with those of (Paudel, 2011) that Cooperatives provide access to microfinance to rural people, accelerate agricultural production and ultimately empower rural people, including women. He said that cooperatives provide microfinance in the form of credit to individuals and groups with limited resources.

Nippierd (2002) observed that cooperatives have contributed to improved livelihood and better economic decision making of women. Majurin (2012) revealed that cooperatives are also effective points of entry for addressing a broad range of gender equality issues such as unpaid work, shared responsibilities and gender-based violence. Cooperative societies constitute an avenue through which cheap credit is channelled to the rural areas and especially when it is supported by international donors and governments (Huppi, & Feder, 1990). Financial cooperatives are described by (Larocque et al., 2002) as an avenue for those without access to commercial banking services to gain access to financial services that may include savings deposit, productive credit, consumer credit and loan. Thinkii (2014) asserts that the majority of the population rely on cooperatives for capital. This is because they are aware of their benefits for example dividends, the interest rates are lower, the source is readily available, they too own accounts with the banks, Sacco's and cooperatives and; the dividends from them are rewarding. The words of Thinkii were uttered by most of the respondents confirming the statement that most of the small-scale tea farmers depend on cooperatives and money lenders for their economic empowerment in Kisii County.

Akoten (2007), conducted a survey with owners of small enterprises in Kenya and found ROSCAs to be the most important source of credit in terms of loan size. Kan (2000) found ROSCAs to be an important source of funds for capital accumulation in Taiwan between 1972 and 1992. The result contradicted those of Birchall and Ketilson (2009), increasing the role of women in the economy is important for economic resilience and growth; however, their integration into the formal sector is still constrained by limited access to credit, property, technology and technical skills. According to USAID (2015), women's active involvement and leadership in agricultural cooperatives continue to be rather low.

76.9% of the respondents were in disagreement that small-scale tea farmers depend on remittances from friends and relatives on their economic empowerment. The results are in disagreement with those of (Robertson, 2001) friends and neighbours from whom those in need can borrow, although primarily for emergencies or special purposes rather than for ongoing working capital needs. In this situation, lenders tend to provide small loans at no or low interest, but they may expect non-financial obligations in return for their credit. Kiriti-Nganga (2012) conducted a study on global Financial Crisis and Remittances, findings revealed that remittances have been shown to smoothen consumption (food) on the part of recipients and recipients also use the remittances to pay for health services, built new houses, improve old ones, buy livestock and buy other household assets.

 74% of the respondents were also in disagreement that small-scale tea farmers depend on government, donors, NGOs for their economic empowerment. These statements contradicted those of Kabeer (2012) that NGOs relayed some of the ways in which they attempted to expand new forms of collective action among the women. Through their strategies, they tried to foster feelings of courage and solidarity, and an awareness that strength lies in numbers. The result contradicted those of (Irene, 2009) in that the majority (88.5%) relied entirely on Youth Fund as a source of capital; while those that sought additional funding did not consider sources like banks, microfinance institutions or group members but the alternative sources of funds were grants from various organisations including the Ministry of Agriculture, National Aids Control Council and politicians.

There was neutrality among the respondents on whether small-scale tea farmers depend on insurance for their economic empowerment. According to 52.4% of the respondents, ILO cited in (OLAL, 2009, p.3) that, only 20% of the world's population has adequate social protection like health care and pension facility. According to Babara (2011) agriculture is subjected to vagaries of adverse weather conditions which results in volatility in farm production and income, which in turn may adversely influence the food security of a nation. Zimmerman and Carter (2003), that mechanisms can be somewhat successful in addressing the asymmetric information and transaction costs problems that plague formal insurance markets, but they tend to break-down when spatially covariate shocks occur. Sadoulet and De Janvry (1995), risk has a negative effect on welfare, under the situation of isolated markets; there is a negative correlation between the individual's own production and the market price.

With a fair majority (50.2%) being in agreement that small-scale tea farmers depend on collateral security for their economic empowerment. These statements were in agreement with those of (Garrett, 2009) that SMEs, in particular, provide security in the form of properties such as houses, the businesses, the car, and anything that could actually bring back the principal in case of default on loans. Kihimbo et al. (2012) pointed out that moral hazard issues can be reduced by collateral requirements by increasing and adding a potential cost to borrowers when those are not making their best effort. He noted that sometimes the borrowers extract the funds provided by the lenders for their own personal and private use. Therefore, the collateral requirements when in place can reduce negative consequences that can arise due to improper utilisation of the funds by SMEs.

It was not clear among a fair majority of the respondents (43.1%) on whether small-scale tea farmers depended on other financial institutions that have no tailor-made products that suit their needs. According to Meyer (2002) evidence from Asia and Latin America illustrates that the major constraint for accessing credit was product design; as such products need to be tailored specifically to the needs of the borrowers. According to Hudon (2004), the poor require flexible and inexpensive products that match their capacity to borrow, and address their needs for them to cope with crisis; thus, there is a strong need for credit. The challenge for MFI's is to design credit products tailored to respond to different client needs. Similarly, these products should be easily accessible (opening hours and proximity), with reasonable interest charged and more attractive terms than what they already access. According to Laforet and Li (2005), consumer segments are unique in terms of demographic, cultural and economic factors and these influence perception towards banking products by the poor.

With 50.5% of the respondents being in disagreement that small-scale tea farmers in Kisii County depend on interest rates for their economic empowerment. The results are in agreement with those of (Mutua, & Oyugi, 2005) that interest in access to finance has increased significantly in recent years, as growing evidence suggests that lack of access to credit prevents lower-income households and small firms from financing high return investment projects, having an adverse effect on growth and poverty alleviation. They further argued that high-interest rates affect access to agricultural finance negatively with the number of borrowers reducing with reducing amounts borrowed especially from the formal financial sector.

Basu and Srivastava (2005) highlighted the negative effect of interest rates on borrowers by stating that poor borrowers are cut off by high formal sector interest rates from access to agricultural finance and end up paying higher interest rates to informal lenders. Muhammad (2011), accused MFIs of exploiting the poor and charging outlandish interest rates. He argued that interest rates among MFIs should be capped at the cost of funds (the amount MFIs have to pay to acquire the money they lend out) plus 15 per cent. The results contradicted with CBK (2016) that interest rates charged by commercial banks were lowered to 14% in order to empower Kenyans to borrow at cheap rates for their economic empowerment. From the resource-based view theory as coined by (Wernerfelt, 1984; Maijoor, & Witteloostuijn 1996) it was concluded that financial resources are important for tea farmers economic empowerment, because farmers access funds from financial providers such as Sacco's, commercial banks, money lenders and remittances to empower themselves economically in financial perspective as coined by Kaplan and Horton (1996) in the balance scorecard.

4.3.1.1 Discussions on Level of access to financial services providers' strategy

Level of access to financial providers 44.9% of the respondents agrees, while 19.3% are neutral and 35.7% disagree. 45% of the total respondents agree that they depend on the level of Financial access to financial services provided whereas; they are closely followed by those who disagree by 35.7% of the respondents. It is clear that the understanding of the level of access is equal to low; that is why 19.3% of the respondents are neutral.

It is true that small-scale tea farmers in Kisii County do not depend on commercial banks for their financial needs. 67.7% disagree that commercial banks play any part in their economic empowerment. However, they get the funds from microfinance institutions SACCOs and ROSCAs. 22.3% are neutral, while 10% agree. The 10% reflects those who get some assistance from commercial banks.

It is clear that small-scale farmers in Kisii depend on micro-finance (Cooperatives, Sacco and ROSCAs) for their, financial requirements. This is because it is easier to borrow than larger institutions processing of finances from these institutions is faster, and the proximity to them is closer, and interest rate is low and educating farmers on financial matters is cheap. A small fraction of the farmers in Kisii depends on remittances from friends and relatives. They source their funds from other providers. 76.9% do not benefit from this source. 74% of the respondents clearly indicate that hardly do they depend on NGO's, donors and government

for their financial access. Only 8.6% of respondents acknowledge that they depend on government, donors, NGO's which are not very significant. 52.4% of the respondents are neutral, which means that they do not understand about insurance. 37.2% disagree. This is because they do not know all they have been told and they do not want.

However, a small fraction of 10.4% agrees that insurance can play an important part in their economic empowerment. This population has been reached by insurance. 50.2% of the respondents agree that they used collateral security to access finance. The collateral security mentioned here is a mortgage on property, vehicles or motorcycles, individual guarantors, lean on future tea suppliers. However, 38.6% of the respondents disagreed. These are people who want to get easier ways of getting financial assistance from the formal sector. These people have had a bad experience when defaulting in payment of their previous loans, and they do not want to put any collateral to be followed later, and no one would lend them.

43.1% of the respondents are neutral meaning they may not be aware of tailor-made products from financial institutions. 35.7% of the respondents disagree that they depend on tailor-made products that suit their needs. 21.2% of the respondents agree that they depend on other financial institutions that have no tailor-made products that suit their needs. It is clear that interest rates do not affect small-scale tea farmers in Kisii County. 50.5% disagree that interest rates have a part to play in their economic empowerment. 43.0% are neutral. It is true that various interest rates paid on various loans borrowed by the farmers are as high as 120% and yet the net profit is less than 15%. This means that the farmers are clearly affected by interest rates though they do not respond so.

4.3.2 Physical proximity of access to financial services

Respondents were asked to indicate the extent to which they agreed with the physical proximity of access to financial services in influencing economic empowerment. The responses were analysed using frequencies and percentages. Table 4.28 presents the results of the analysis.

Table 4.0.28: Descriptive Analysis for physical proximity of access to financial services

Measurable indicators	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Infrastructural development enables tea farmers in Kisii County to easily access financial services for their economic empowerment	72 (26.8%)	69 (25.7%)	26 (9.7%)	67 (24.8%)	35 (13.0%)
Distance affects financial accessibility by small-scale tea farmers in Kisii County and their economic empowerment	16 (5.9%)	51 (19.0%)	91 (33.8%)	60 (22.3%)	51 (19.0%)
Information of financial accessibility enhances economic empowerment among small-scale tea farmers in Kisii County.	58 (21.6%)	48 (17.8%)	18 (6.7%)	89 (33.1%)	56 (20.8%)
ICT Facilitates financial accessibility for tea farmers' economic empowerment in Kisii County.	66 (24.5%)	71 (26.4%)	53 (19.7%)	44 (16.1%)	36 (13.4%)
Mobile phones facilitate financial access for tea farmers in Kisii County for their economic Empowerment	51 (19.0%)	55 (20.0%)	33 (12.3%)	65 (24.5%)	65 (24.2%)
Banking Location in rural areas enables access to financial services for tea farmers economic Empowerment	76 (28.3%)	75 (27.9%)	35 (13.0%)	48 (17.8%)	35 (13.0%)

Source: (Researcher, 2018)

On physical proximity of access to financial services, the results in Table 4.28 indicate that the majority of respondents (52.5%) were in disagreement that infrastructural development enables tea farmers to access financial services easily. The results are in agreement with those of Ndebele (2011) who posited that development of an efficient road network facilitates the movement of goods from farms to markets, makes social interaction easier and may change the land use and settlement pattern of an area by attracting settlements and economic activity

to develop along major roads. World Bank (2013) observed that financing agriculture-related infrastructure, such as rural roads, port facilities, and loading terminals, is needed in most of the poorest countries. According to KTDA (2015), poor infrastructure, unreliable electricity, high costs of fuel and packaging materials further increase production costs. Thinkii (2014) observed that poor roads are a challenge, as in most cases; there are those who walk long distances to the factory.

According to a fair majority (43.1%) of the respondents, distance affects financial accessibility among small-scale tea farmers. The results are in agreement with those of Hussein (2007), who asserted that farm households are discouraged from borrowing from the credit sector if it is located farther. Ghosh (2012), as a consequence, noted that many low-income people in remote areas where such facilities are not available within a reasonable distance tend to rely more on informal markets. Bigsten (2003) stated that in developing countries asymmetric information, high risks, lack of collateral, lender-borrower distance, small and frequent credit transactions of rural households make real costs of borrowing vary among different sources of credit.

Awareness of financial accessibility enhances economic empowerment among small-scale tea farmers, as agreed by 53.9% of the respondents. The results are in agreement with those of (Kumar et al., 2012) on the analysis of farmer's perception and awareness towards crop insurance as tool for risk management in Tamil Nadu-India, revealed that most farmers (65%) are aware of risk mitigation measures of the government, however only half of them were found aware of crop insurance scheme products. Othieno (2010) asserted that financial institutions require information to enable them to evaluate the potential risks associated with the SMEs that apply for bank financing and also to access the location where the same SMEs will be operating and its market segments.

Bazibu (2005) observed that information asymmetries are actually concerned with the two players in the financial market, the borrowers who know more about their business cases and the bankers who may not know more about it on the one hand. On the other hand, it entails the lack of timely, accurate, quality, quantity, and completes information regarding the ability of the applicants to repay back the loan and to access financial products from the banking institutions. Girabi and Mwakaje (2013) observed that one of the major factors constraining access to credit by smallholder farmers was lack of microfinance credit information.

According to 50.9% of the respondents, ICT does not facilitate financial accessibility among tea farmers economic empowerment in Kisii County. These statements were in agreement with those of Nam and Ellinger, 2008). The advent of communication technologies has helped to reduce transactions costs associated with banking activities. However, Porteous (2006) observed that a number of emerging mobile financial tools had been developed including the M-Pesa in Kenya, MTN Mobile Money in South Africa and privately-operated mobile money transfers in Rwanda. Kaynak and Harcar (2005) an important realisation, however, is that rural consumers are in themselves very diverse with differing needs and thus constituting varying marketing segments. Adoption of electronic banking is a function of service quality, gender, education, risk, convenience, deposit rates, security, computer skills and image (Berndt et al., 2010; Nam, & Ellinger, 2008; Gan et al., 2006; Kaynak, & Harcar, 2005).

A larger majority of the respondents (80.7%) agreed that mobile phones facilitate financial access among tea farmers. The results are in agreement with those of Nam and Ellinger (2008), the advent of communication technologies have helped to reduce transactions costs associated with banking activities. However, Porteous (2006) observed that a number of emerging mobile financial tools had been developed including the M-Pesa in Kenya, MTN Mobile Money in South Africa and privately-operated mobile money transfers in Rwanda.

56.2% of the respondents were in disagreement that banking location in the rural area enables access to financial services among tea farmers in Kisii County. The results are in agreement with those of Kumar et al. (2003). There are indeed differences between the availability of financial services between regions of the country, placing financial institutions in each region or municipality in itself is not a sufficient condition for broadening access. The physical accessibility of formal financial is one of the barriers to enter formal financial services for low income. They adversely highlighted that lack of bank branches in the neighbourhood can prevent the unbanked from gaining access to formal financial sector services. The World Bank report (2008) deemed that physical access is one of the major constraints to financial access. According to Hussein (2007), farm households are discouraged from borrowing from the credit sector if it is located farther. Burges and Pande (2006) pointed out that a major challenge for empirical research on financial access is the paucity of micro-level data and the non-random nature of bank expansion.

4.3.2.1 Discussions on Physical proximity of access to financial services

Infrastructure development enables small-scale tea farmers to easily access financial services for their economic empowerment. 52.5% of the respondents disagreed, 9.7% were neutral, and 37.8% agreed. Infrastructural development is necessary for accessing financial services. No bank or financial providers will move to where there is no infrastructural development.

Distance affects financial accessibility. Majority of the respondents agree with the study, which reflects the true position of financial access. 41.3% agreed 33.8% are neutral and 24.9% disagreed. 53.9% of the respondents agreed that awareness of financial accessibility is necessary for small-scale tea farmers' economic empowerment. This is true as no one will go to borrow unless he or she is aware of the products offered and explained properly on the implications of not honouring commitments between the financier and the borrowers.

ICT facilitates financial accessibility. 50.9% disagreed, 19.7% were neutral, and 29.4% agreed. The main reason for this though ICT facilitators are almost everywhere, these farmers are not aware of the use of ICT facilities. They need training in ICT and its usage. ICT makes it easier for financial institutions to access finance and large volumes of work which otherwise would be done manually taking space, energy and time, which can be done easily and economically using ICT.

Mobile phones facilitate financial access for tea small-scale farmers' economic empowerment. Majority of them agreed. 48.7% acknowledged that mobile phones facilitate financial access. Mobile platforms like M-Pesa, Airtel Money, M-Akiba and M-Shwari, are now very common in Kisii County. However, 39% of the respondents did not agree. These are mainly those farmers who are not registered to the above platforms.

Although 56.2% of the respondents do not agree that banking location enables access to financial access to the farmers, 30.8% of the respondents agree. It is worth mentioning that a closer location of banking and financial institutions to these farmers would increase access to financial services. However, it should be understood that 56.2% of the respondents are engaged in the unregulated financial institution, which is detrimental to their farming businesses. For example, there are those charging up to 50% or 100% interest but have no idea whether the returns will agree with the interest charged on this money.

4.3.3 Economic factors on access to financial services

Respondents were asked to indicate the extent to which they agreed with economic factors on access to financial services statements in influencing economic empowerment. The responses were analysed using frequencies and percentages. Table 4.29 presents the results of the analysis.

Table 4.0.29: Descriptive Analysis for economic factors on access to financial services

Measurable indicators	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Land size is a limited factor to financial access by tea farmers for their economic empowerment in Kisii County	41 (15.2%)	12 (4.5%)	49 (18.2%)	112 (41.6%)	55 (20.4%)
Land ownership is a challenge to financial accessibility by tea farmers in Kisii County for their economic empowerment	2 (0.7%)	104 (38.7%)	12 (4.5%)	58 (21.6%)	93 (34.6%)
And rights enable financial service access by tea farmers in Kisii County for their economic empowerment	18 (6.7%)	56 (20.8%)	101 (37.5%)	56 (20.8%)	38 (14.1%)
Entrepreneurial ability enables tea farmers in Kisii County to access financial services for their economic empowerment	39 (14.5%)	34 (12.6%)	92 (34.2%)	93 (34.6%)	11 (4.1%)
Limited education among small-scale tea entrepreneurs hinder financial access for their economic empowerment	15 (5.6%)	93 (34.6%)	19 (7.1%)	79 (29.3%)	63 (23.4%)
High taxation among tea farmers in Kisii County is a hindrance to financial accessibility for their economic empowerment.	17 (6.3%)	116 (43.1%)	15 (5.6%)	80 (29.7%)	41 (15.3%)

High Cost of production by tea farmers in Kisii County is a challenge to financial accessibility for their economic empowerment	4 (1.5%)	33 (12.3%)	79 (29.4%)	94 (34.9%)	59 (21.9%)

Source: (Researcher, 2018)

As far as economic factors on access to financial services are concerned, the results on Table 4.29 show that majority of respondents (62%) agreed that land size was a limiting factor to financial access among tea farmers on their economic empowerment. The results are in agreement with those of (Nkonya et al., 1997; Okwu, & Lorkaa, 2011) Land size is often used as an indicator of wealth and proxy for social status and influence. Farmers with large farms are likely to be better informed, richer, and keener in searching for information on improved technologies. According to IFAD (2001), access to land and ownership of assets (endowments) is fundamental to livelihoods.

Further Cotula et al. (2004) pointed out that rural poverty is strongly associated with poor access to land, either in the form of landlessness or because of insecure and contested land rights. Increased land access for the poor can also bring direct benefits of poverty alleviation, not least by contributing directly to increased household food security. Evidence from Ethiopia, as asserted by Nega et al. (2003) indicates that intensification can also be hindered by diminutive holdings, production for subsistence, insecure land rights and archaic institutional arrangements. Mbugua (2013) revealed that Production is carried out on farms averaging 0.2–3 ha, mostly on a commercial basis. Binswanger et al. (1986) state that land has been the most important collateral for formal credit and he also argued that farmers with more land are more likely to seek credit and as long as the exploitation requires more capital.

With a fair majority (56.2%) also agreeing that land ownership was a challenge to financial accessibility among tea farmers for their economic empowerment. The results are in agreement with those of McKinsey Global Institute (2016) in profit stimulates business investment, the macroeconomic outlook and aggregate demand need to improve first.

37.5%) of the respondents were neutral on whether land rights enable financial service access by tea farmers for their economic empowerment. The results are in agreement with those of

Samuel (2001) who pointed out that lack of secure property rights affects the household investment. Secure land tenure provides an incentive and authority for farmers to adopt technologies. Several studies show that individual rights to own land influence rural financial markets; although land is a source for potential wealth for rural households, some countries restrict land property rights to only use rights for an extended period (Besley, 1995; Lamberte et al., 2006; Gonzalez-Vega, 2003).

According to 38.7% of the respondents, entrepreneurial ability enables them to access financial services for their economic empowerment. Rambo (2013) asserted that the Government of Kenya has put in place the Micro and Small Enterprises Act as an initiative aimed at encouraging all Kenyans in establishing SMEs by creating an enabling environment for small businesses to thrive and enhance access to funding. IPEME (2013) asserts that SMEs generate in total more jobs than larger companies and are fundamental to the competitiveness of the country as well as in stimulating innovation.

Limited education among tea farmers was found to hinder financial access for economic empowerment as reported by 52.8% of the respondents. The results are in agreement with those of Kyale (2013). In his study on the impact of microfinance institutions on economic empowerment, he observed that provision of financial management skills by microfinance institutions helped the MFIs owners to be better placed in managing their finances hence growth was realised. Kibas (2006) in addition, eludes that lack of opportunities for management training; financial management and people management have hampered women and their organisations from effectively engaging on enterprise development. Satakwowa (2014) argues that poor saving culture among the tea farmers was due to low literacy levels, poor funds management and low-income levels among other contributing factors.

High taxation is a hindrance to financial accessibility for economic empowerment among tea farmers as indicated by 49.4% of the respondents. The study showed that the respondents had not received a tax incentive for the tea business from the Government. The study further established that it was not easy to access single business permit from the Government. The study also showed that the respondents had not received a tax incentive for the tea business from the Government.

Majority of respondents (56.8%) agreed that the high cost of production was a challenge to financial accessibility for economic empowerment among tea farmers in Kisii County. The results are in agreement with those of SOMO (2006) and Doward et al., 1998) who argued that the major reasons are purchased seasonal inputs and requisite labour which is rarely affordable by farmers on a "cash" basis. In a nutshell, resources and capabilities are considered as the product of a history of strategic choices and resource commitments made by the firm and guided by economic rationality and by motives of effectiveness and profitability (Conner, 1991).

4.3.3.1 Discussions on Economic factors on access to financial services

19. 7 % of respondents disagreed. These are people who are locked out from financial services either through lack of information, low literacy levels or the rate of awareness which is very low in relation to land use. To the other extent, they ignore information or financial advice because their land size is small and they are ignorant. If they agree to the advice given, then that can help them improve productivity, for instance, production of purple tea which has high yields and returns than green tea. 18% of the respondents were neutral. They were either informed or not on how the advice can affect them but are ignorant that they can improve their production. However, they are not bothered to increase their funds through high yields, and some are not interested in financial information about land use and their income. 62% of the respondents understand that land size is a limiting factor to financial access because they are aware of what financial institutions are offering and financial providers are within their reach. They are also educated, and therefore the rate of awareness is high, and that is reason why land size is a limiting factor to their financial access**.** According to observations majority are aware that land size is a limiting factor for their financial access. Most of them with financial institutions have not come together to address this problem.

Over 39.4 who disagreed that land ownership is not a challenge are those who have their land titles and still cry that they do not get financial service. Surprisingly 56.2% of respondents have land challenges with land ownership in Kisii County that is family conflicts and succession problems. These large respondents hardly can have access to finance due to land ownership challenges. They are the people who hire land or contract land for tea farming and picking. However, a majority of these groups are aware of services offered by financial providers.

27.5% of the respondents disagreed that land rights do not affect their financial accessibility. These groups are neither women nor youths denied land rights. In Kisii county land right is a problem to most women who are denied a right to own land and youths have no access to title deeds. The young people find it easier to sell land to get quick money and spend, and this is the reason why some are denied title deeds. When old people die subdivision or succession is done to get title deeds and this is a common problem in Kisii County.

37.5% of the respondents do not even understand their rights, and so they would not know how these rights are affecting their financial accessibility. This can be explained by the fact that many young people are beggars on the roads and markets due to laziness and illiteracy. On the other hand, some old people have not accepted to give land to their wives or young ones in general. 34.9% of the respondents agreed that land rights enable them access finance for their economic empowerment. This is the group which understands land rights and is fighting for these rights. Most of them have benefited from land titles and subdivisions in their favour, which enables them to access financial requirements.

Whereas 27.1% of the respondents disagree that entrepreneurial ability enables small-scale tea farmers to access financial services for their economic empowerment, this is because they lack knowledge. This is because they have never been exposed to entrepreneurial training on how they can be able to maximise profits for their economic empowerment. While 42% who were neutral may be affected by the above factors, for instance, land size, land ownership and rights are the reason as to why they are neither against nor for.

Limited education among small-scale tea farmers as indicated by majority 52.7% of the respondents agrees that it hinders financial accessibility of small-scale tea farmers in Kisii County for their economic empowerment. It is true that high taxation is not a factor hindering financial access to small-scale tea farmers as indicated by 49.4% of the respondents. 5.6% of the respondents were neutral. This is so because most of the respondents do not see or understand the positive effects of taxation, though taxation is a big component of their earning deductions.

The high cost of production is a challenge to small-scale tea framers in Kisii County, as indicated by 56.8% of the respondents who agreed. This can be explained by the fact that

costs such as fertilisers, labour, transportation, processing, packaging, marketing and corruption make farmers fear taking credit from financial institutions because if they do not pay the loans, they will risk selling their land or auction.

4.3.4 Social factor influences on financial service access strategy

Respondents were asked to indicate the extent to which they agreed with social factors statements in influencing economic empowerment. The responses were analysed using frequencies and percentages.

Table 4.0.30: Presents the results of the analysis

Social Economic Factors items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Educational level of tea farmers determines the financial accessibility for economic empowerment	9 (3.3%)	8 (3.0%)	88 (32.7%)	67 (24.9%)	97 (36.1%)
Knowledge and experience of tea farmers in Kisi County enables them to access financial services for their economic empowerment	38 (14.1%)	20 (7.4%)	187 (69.5%)	15 (5.6%)	9 (3.4%)
Training of Tea farmers in financial management is key to financial accessibility for their economic empowerment	40 (14.9%)	40 (14.9%)	169 (62.8%)	13 (4.8%)	4 (1.5%)
Farm field schools boost financial accessibility to tea farmers for economic empowerment	78 (29.0%	161 (59.9%)	22 (82%)	4 (1.5%)	4 (1.5%)
Gender equity to financial resources hinders financial accessibility by tea farmers in Kisii County for their economic empowerment.	62 (23.0%)	3 (1.1%)	135 (50.2%)	5 (1.9%)	64 (23.8%)
Illiteracy among women tea farmers in Kisii County hinders financial accessibility for their economic	25 (9.3%)	37 (13.8%)	34 (12.6%)	109 (40.5%)	64 (23.8%)

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empowerment

Women access to financial services promotes economic empowerment to tea farmers in Kisii County	20 (7.4%)	26 (9.7%)	17 (6.3%)	123 (45.7%)	83 (30.9%)
Gender involvement in decision making leads to financial accessibility among tea farmers in Kisii for their economic empowerment	34 (12.6%)	62 (23.0%)	166 (61.7%)	2 (0.8%)	5 (1.9%
Equal rights to property ownership enhance financial accessibility by tea farmers in Kisii County for their economic empowerment	53 (19.7%)	67 (24.9%)	143 (53.2%)	3 (1.1%)	5 (1.1%)

 Source: (Researcher, 2018)

On social factors on access to financial services, the results on Table 4.30 show that majority of respondents (61%) agreed that educational level determines tea farmers' financial accessibility. The results are in agreement with those of Mohammed Tamim who believe that economic empowerment is measurable in educational level from primary school to the university. They noticed that wherever the educational level is raised, the level of development is also raised. Campbell (2006) argues that with financial education, poor financial decisions are likely to be reconciled with economic theory given that households have been found to make sub-optimal decisions which deviate from what economic theory suggests. He posits that households with higher education levels (high school, college, graduate school) are likely to be more active in capital markets due to reduced information asymmetry.

69.5% of the respondents held a neutral opinion on whether knowledge and experience enable tea farmers to access financial services. The results are in agreement with those of Hilgert et al. (2003), asserts that financial knowledge appears to be directly correlated with self-beneficial financial behaviour. Greenspan (2002) argues that financial literacy helps to inculcate individuals with the financial knowledge necessary to create household budgets, initiate savings plans, and make strategic investment decisions. Proper application of that

knowledge helps households to meet their financial obligations through wise planning and resource allocation so as to derive maximum utility. Courchane and Zorn (2005) established that behaviour which is influenced by knowledge had a direct positive relationship with credit outcomes. While mistakes in making personal finance decisions are considered real, the study argued that lack of knowledge about key personal finance issues contributes to these mistakes, calling for knowledge acquisition to counter this, hence empowering the tea farmers.

According to 74.3% of the respondents, financial literacy is key to financial accessibility. The results are in agreement with those of Greenspan (2002) who argued that financial literacy helps to inculcate individuals with the financial knowledge necessary to create household budgets, initiate savings plans, and make strategic investment decisions. Proper application of that knowledge helps households to meet their financial obligations through wise planning and resource allocation so as to derive maximum utility. KTDA (2015) and IFC (2015) shows that improved financial literacy will help farmers to manage the farms, income, improve productivity per bush and establish alternative income streams. Given the current challenges leading to decreased productivity for most crops, it is critical that farmers are able to wisely manage the money received from tea as well as be guided to make decisions on other sources of income.

A larger majority of respondents (62.8%) held a neutral opinion on whether training of tea farmers on financial management was key to financial accessibility. The results are in agreement with those of Mamun et al. (2010). In his study, he found out that the followers of Grameen Bank group used micro-credit model to provide training in order to improve micro-enterprises management skills to enable their clients to take advantage of income and employment generating opportunities. Kyale (2013) in his study on the impact of microfinance institutions on economic empowerment, observed that provision of financial management skills by microfinance institutions helped the MFIs owners to be better placed in managing their finances hence growth was realised.

Beijing and Beyond (2004) argue that training enables women and men to access capital and to expand their own income-generating micro-enterprises which, in turn, will expand household income, while 88.9% of the respondents disagreed that farm field schools boost financial accessibility among tea farmers. The results are in contradiction with those of Braun

and Duveskog (2008) and Waddington et al. (2014). They argue that FFSs are currently one of the most common approaches to rural adult education and agricultural extension and have reached an estimated 10–20 million people in over 90 countries

A fair majority of the respondents held a neutral opinion on whether gender equity to financial resources hinders financial accessibility among tea farmers. The results are in agreement with those of World Bank (2015). The average age of farmers around the world is rising as agriculture is not appealing to young people. Women in agriculture do not have the same access to technology, finance and extension as men do, which results in lower yields and income. Campbell (2006) pointed out that, for most families, decision-making processes are mainly informed by the household heads, most of whom are men.

Kibere et al. (2014) asserts that although women provide the largest share of agricultural labour in rural Kenya, as well as domestic duties, they are continuously discriminated against in access to and control over agricultural benefits. Illiteracy among women hinders financial accessibility according to 64.3% of the respondents. The results are in agreement with those of Schultz (1979), who found that literate farmers in developing countries are more productive than illiterate farmers. They, therefore, recommend investing in human capital as an effective strategic tool for economic development.

A larger majority of the respondents (76.6%) were in agreement that women access to financial services promotes economic empowerment among tea farmers. The results are in agreement with those of World Bank report (2001), which pointed that promoting women's empowerment is essential because in most cases women are responsible for their children and for their family, thus empowering women is empowering the society at large. Mariam (2014) asserted that women empowerment and economic development in Pakistan, Male ego and lack of education in women are the barriers to women empowerment

While 61.7% showed neutrality on whether gender involvement in decision making leads to financial accessibility, the results are in agreement with those of Mariam, (2014) who studied women empowerment and economic development in Pakistan who found out that male ego and lack of education in women are the barriers in getting women empowerment. Kabeer (2012) observed that a strong instrumental rationale for ensuring women's participation in processes of growth would contribute to the inclusiveness of growth, not merely because

women constitute 50% of the world's population, but also because women's access to economic resources improves distributional dynamics within the household.

Moreover, a fair majority (53.2%) of the respondents were neutral on whether equal rights to property ownership enhance financial accessibility among tea farmers in Kisii County. The results are in agreement with those of Freidenberg (2013) in that women are sometimes denied titles of land ownership, and this increases their dependability upon men in the household. Ongile (1999) observed that, in tea production, men control the cash crop since they are, traditionally, the head of the household, while women are identified with household duties and food production.

Ellis et al. (2000) pointed out that, missing legal protection, outdated labour laws and unequal access to resources are still negatively affecting women's ability to profit from agricultural benefits and operate on an equal level with their male counterparts. In summary, resources that are critical for innovation like human resources which provide skills, education, training, information and technology; financial resources can expand farmers' capacity to support their innovative activities (Lee et al., 2001). For effective farmers, economic empowerment learning perspective is vital (Kaplan, & Horton, 1996).

4.3.4.1 Discussions on Social factors influences on financial service access strategy

The educational level of small-scale tea farmers determines their financial accessibility as agreed by 61% of the respondents in Kisii County. 32.7% of the respondents are neither agreeing nor disagreeing. This is a larger number of respondents. Either they did not understand the question, or they are not educated. Surprisingly in Kisii County knowledge and experience as indicated by the majority of 69.5% are on the borderline, meaning they are either in support or against. But this is a factor that affects their access to financial services. However, 74.4% of the respondents strongly agreed that financial literacy in Kisii County is a key factor in financial access for their economic empowerment.

Majority of small-scale tea farmer (62.8 %) of the respondents were neutral that training does or does not lead to financial access for their economic empowerment. This can be explained by the fact that they do not even know that financial management is a key factor in accessing financial services. Farm field schools boost financial access, 88.9% of the respondents disagreed. This is one of the factors affecting the framers from accessing finance. Training of

farmers and farm field schools are equally important in equipping the farmers before they even go out to look for money.

24.1% of the respondents disagreed that gender equity to financial resources hinders financial accessibility. This can be explained by the fact that this number has land and titles and have no problem with land. 50.2% are neutral, meaning they are not worried about the benefits they get from farming. The land challenges do not bother them because they are satisfied with the earnings that they receive from farming, whether hired or owned land. 25.7% of the respondents agreed that gender equity hinders accessibility. This is true because factors such as gender discrimination are still common in Kisii County. Majority of the people do not own land, but they have hired from owners.

Illiteracy among women hinders financial access. 64.3% of the respondents totally agreed that illiteracy amongst women tea farmers in Kisii County hinders financial accessibility. Women are the largest group of small-scale farmers in the county. This can be explained by the fact that most ladies do not finish school. Many get married before completing school, and at home, they are involved more in raising children and grandchildren, tea picking and transportation to buying centres and hardly do they have any financial education or training. 76.6% of the respondents agreed that women access to financial services promotes economic empowerment. Small-scale farming in Kisii County consists of mainly women and youths to some extent. So empowering women is equal to empowering everyone.

Although 35.6% of the respondents disagreed and 61.7% are neutral, gender involvement in decision making is necessary in order for them to obtain necessary finances from the institution while avoiding friction in families. Equal rights to property ownership enhance financial accessibility. Majority of landowners in Kisii are married men, whereas the majority of small-scale tea farmers are women and youth. 44.6% of the respondents disagreed, while 53.2% are neutral. It is possible that the landowners voted against equal rights to property and are the majority who hire land, they work on farms of owners, and they do not see the need for supporting equal property rights until the other factors above are sorted.

4.3.5 Effect of Moderating Demographic factors

Respondents were asked to indicate the extent to which they agreed with demographic characteristics statements in moderating the relationship between financial services accessibility and economic empowerment. Table 4.31 presents the results of the analysis.

Table 4.0.31: Descriptive Analysis for moderating Demographic factors

Measurable indicators	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Age	22 (8.2%)	29 (10.8%)	70 (26.0%	106 (39.4%)	42 (15.6%)
Education	29 (10.8%)	50 (18.6%)	43 (16.0%)	85 (31.6%)	62 (23.0%)
Gender	11 (4.1%)	27 (10.0%)	95 (35.3%)	101 (37.5%)	35 (13.0%)

Source: (Researcher, 2018)

On moderating factors, the results on Table 4.31 show that majority of respondents (55%) agreed that age moderates the relationship between financial accessibility and economic empowerment. The results are in agreement with those of Padmaavathy and Brindha (2014), Sharma and Prasad (2014), Ram and Subudhi (2014) and Ramayah et al. (2003) who also confirmed that age, education, gender, location, service quality are useful indicators in consumer decision making.

Education was also found to be a moderating factor between financial accessibility and economic empowerment, as agreed by 54.6% of the respondents. The results are in agreement with those of Ramayah et al. (2003) who argue that education is a useful indicator in consumer decision making. Hall (2001) agreed that basic education enhances the overall quality of the business owner by providing basic numeric and literacy skills, thus increasing the chance of survival. Moreover, according to most respondents (50.5%), gender was also an important factor in moderating the relationship between financial accessibility and economic

empowerment. Despite these findings, consumer segments are unique in terms of demographic, cultural and economic factors and these influence perception towards banking products by the poor (Laforet, & Li, 2005).

On the gender of the entrepreneur, Kentor (2001) reported that most SMEs firms owned by men were bound to perform better than those owned by women. This could be attributed to the following factors: limited access to finance; stringent collateral requirements and women's double duties (Carter & Jones-Evans, 2000). Basic education enhances the overall quality of the business owner by providing basic numeric and literacy skills, thus increasing the chance of survival (Carter, & Jones-Evans (2000). Some studies state that the fact that a business owner has a higher level of education seems to stimulate the growth and better performance of the firm, thus having an impact on survival, growth and performance (Hall, 2001).

4.3.6 Economic Empowerment

Respondents were asked to indicate their agreement on economic empowerment statements. The responses were analysed using frequencies and percentages. Table 4.32 presents the results of the analysis.

Table 4.0.32: Descriptive Analysis for Economic Empowerment

Measurable indicators	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The house my households currently occupy is self-purchased	10 (3.8%)	1 (0.4%)	1 (0.4%)	153 (57%)	103 (39%)
Access to financial services have enabled myself purchase a motor vehicle	71 (26.4%)	82 (30.5%)	21 (7.8%)	53 (19.7%)	42 (15.6%)
Access to financial services have enabled myself purchase a refrigerator	92 (34.2%)	85 (31.6%)	28 (10.4%)	37 (13.8%	27 (10.0%)
Access to financial services have enabled myself purchase a television set	68 (25.3%)	40 (14.9%)	25 (9.3%)	59 (21.9%)	77 (28.6%)

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Access to financial services have enabled myself purchase a washing machine	109 (40.5%)	105 (39.0%	21 (7.8%)	18 (6.7%)	16 (5.9%)
Access to financial services have enabled myself acquire a computer	115 (42.8%)	100 (37.2%)	18 (6.7%)	21 (7.8%)	15 (5.6%)
Access to financial services have enabled myself own a gas cooker	80 (29.7%)	70 (26.0%)	5 (1.9%)	79 (29.4%)	35 (13.0%)
Access to financial services have enabled myself own a motor cycle	76 (28.3%)	61 (22.7%)	11 (4.1%)	75 (27.9%)	46 (17.1%)
Through access to financial services I have been able to invest in shares in listed companies	115 (42.8%	82 (30.5%)	28 910.4%)	28 (10.4%)	16 (5.9%)
Through access to financial services I have been able to invest in bonds	122 (45.5%)	86 (32.0%)	25 (9.3%)	23 (8.6%)	13 (4.8%)
Access to financial services have enabled myself invest in short-term debt instruments (treasury bill, commercial papers)	128 (47.6%)	91 (33.8%)	24 (8.9%)	17 (6.3%)	9 (3.3%)
Access to financial services have enabled myself invest in local currency term deposits	65 (24.2%)	60 (22.3%)	61 (22.7%)	28 (10.4%)	55 (20.4%)
Access to financial services have enabled myself invest in foreign currency term deposits	123 (45.7%	93 (34.6%)	24 (8.9%)	19 (7.1%)	19 (3.7%)
Access to financial services have enabled myself in insurance policies	124 (46.1%)	90 (33.5%)	25 (9.3%)	20 (7.4%)	10 (3.7%)
Access to financial services have enabled myself buy shares in SACCOs	36 (13.4%)	57 (21.2%)	10 (3.7%)	87 (32.3%)	79 (29.4%)
Access to financial services have enabled myself purchase land	48 (21.6%)	55 (20.4%)	12 (4.5%)	82 (30.5%)	62 (23.0%)
Access to financial services have enabled myself own commercial	115 942.8%)	117 (43.5%)	14 (5.2%)	14 (5.2%)	9 (3.3%)

premises

Access to financial services have enabled myself acquire livestock	65 (24.2%)	56 (20.8%)	7 (2.6%)	99 (36.8%)	42 (14.6%)
Access to financial services have enabled myself acquire storage facilities for farm produce.	116 (43.1%)	99 (36.8%)	11 (4.1%)	24 (8.9%)	19 (7.1%)

Source: (Researcher, 2018)

On economic empowerment, the results on Table 4.32 show that majority of respondents (57.6%) agreed that the houses' their households currently occupy were self-purchased. The results are in agreement with those of Henry and Schimmel (2011) access to finance in rural areas creates an opportunity for rural people to increase their productivity and income through Purchase of goods and services. Paudel (2011) opined that cooperatives provide microfinance in the form of credit to individuals and groups with limited resources. Microfinance has improved the family wellbeing by increasing household's food sufficiency level, assets accumulation and children's education. And therefore 57% of small-scale tea farmers were able to purchase households and own their own houses.

56.9% of the respondents disagreed that access to financial services had enabled them to purchase a motor vehicle. The results are in agreement with those of Chiumya (2006) argued that the majority of low-income households, in all parts of the world, historically have not had access to formal financial service; because most formal financial service providers regard low-income earners and households in rural areas as too poor financially, having no access to surplus funds to either save with or borrow from their institutions. This implies that they cannot purchase households by themselves due to limited financial service access strategies. Kiplangat (2014) further revealed some group members did not necessarily invest but used the money to meet other needs for like buying of family accessories, clothes, paying of school fees, or taken by their spouses.

65.8% disagreed that access to financial services had enabled themselves to purchase a refrigerator. The results are in agreement with those of Richter (2011) who argued that rural areas are highly underserved by formal financial service providers because they either avoid such areas or fail to offer relevant sustainable financial services to the rural people. Access to

financial services has enabled tea farmers to purchase television set according to 50.5% of the respondents. The results are in agreement with those of Henry and Schimmel (2011) who argued that access to finance in rural areas creates an opportunity for rural people to increase their productivity and income through Purchase of goods and services.

A larger majority of respondents (79.6%) disagreed that access to financial services had enabled them to purchase a washing machine. The results are in agreement with those of Chiumya (2006)who asserted that the majority of low-income households, in all parts of the world, historically have not had access to formal financial service; because most formal financial service providers regard low-income earners and households in rural areas as too poor financially, having no access to surplus funds to either save with or borrow from their institutions. Richter (2011), argued that rural areas are highly underserved by formal financial service providers because they either avoid such areas or fail to offer relevant sustainable financial services to rural people.

80% of the respondents were in disagreement that access to financial services had enabled them to acquire computers. Chiumya (2006) argues that the majority of low-income households, in all parts of the world, historically have not had access to formal financial service; because most formal financial service providers regard low-income earners and households in rural areas as too poor financially, having no access to surplus funds to either save with or borrow from their institutions.

There was disagreement among the respondents on whether through access to financial services, they have been able to invest in shares of listed companies as reported by 73.3% of the respondents. The statements contradicted those of Richter (2011) who asserts that rural areas are highly underserved by formal financial service providers because they either avoid such areas or fail to offer relevant sustainable financial services to the rural people.

There was disagreement among the respondents on whether through access to financial services, they have been able to invest in bonds as reported by 77.4% of the respondents. The results are in agreement with those of Deakins (2008). There are two external financings that are most important for financing businesses. The first is the equity financing which is provided in the form of venture capital and available for new small businesses. Kiplangat (2014) further argued that the group leaders said that members made contributions every

month in order to increase their shares so that they are able to get higher loans to advance their economic activities.

According to a larger majority of respondents (81.4%), access to financial services has not enabled investment in short-term debt instruments such as treasury bills and commercial papers among the tea farmers. These statements contradict those of Garrett (2009) who said that SMEs, in particular, provide security in the form of properties such as houses, the businesses, the car, and anything that could actually bring back the principal in case of default on loans. Demirgüç-Kunt and Levine (2008) argued that to enable risk diversification across firms and industries. Financial systems can influence the allocation of resources and hence, economic growth; financial markets and intermediaries also mitigate liquidity risk and induce savers to invest in high-return projects requiring a long-term commitment of capital. Highly liquid markets for stocks, bonds, and demand deposits transform these financial instruments into investments and into high-return, long-term projects. Therefore, access to finance can contribute to narrow economic growth and broader social development.

Most respondents (44.6%) held the opinion that access to financial services had enabled them to invest in local currency term deposits. The results are in agreement with those of Diagne et al. (2000), financial services such as credit contribute greatly to the growth of individuals, sectors and countries, and have positive effects on poor people's livelihoods.

Mohamed (2003) asserted that credit is a powerful instrument to help poor people invest and break out of a 'vicious cycle' of poverty because it has the potential to improve the users' incomes and savings, and consequently, enhance investment and reinforce high incomes. Lianto (1987) agreed that the provision of credit could encourage the farmers to use modern technologies and procure inputs for farm use, thus bringing them to a higher level of productivity and increasing their incomes. A larger majority (80.3%) disagreed that access to financial services had enabled them to invest in foreign currency term deposits. Williams and Nguyen (2005) demonstrate that foreign ownership did not lead to performance improvements at privatised banks.

The results contradicted those of Diagne et al. (2000) who argued that financial services such as credit contribute greatly to the growth of individuals, sectors and countries, and have positive effects on poor people's livelihoods. Agricultural credit is an important element in

the agricultural production process, which allows producers to satisfy the capital needs of the production cycle.

Hence, credit is a powerful instrument to help poor people invest and break out of a 'vicious cycle' of poverty because it has the potential to improve the users' incomes and savings, and consequently, enhance investment and reinforce high incomes, Mohamed (2003).The provision of credit can encourage the farmers to use modern technologies and procure inputs for farm use, thus bringing them to a higher level of productivity and increasing their incomes Lianto (1987).

As far as investment in insurance policies is concerned. 79.6% of the respondents disagreed. Price variability leads to income problems for farmers, while inter-annual price variability makes planning difficult by introducing uncertainty. Sadoulet and De Janvry (1995) believe that risk has a negative effect on welfare, under the situation of isolated markets; there is a negative correlation between the individual's own production and the market price. By enabling risk diversification across firms and industries, financial systems can influence the allocation of resources and hence economic growth financial markets and intermediaries also mitigate liquidity risk, and induce savers to invest in high-return projects requiring a long-term commitment of capital. Highly liquid markets for stocks, bonds, and demand deposits transform these financial instruments into investments and into high-return, long-term projects. Therefore, access to finance can contribute to narrow economic growth and broader social development Demirgüç-Kunt & Levine, (2008).

Moreover, (61.7%) of the respondents agreed that access to financial services had enabled tea farmers in Kisii to buy shares in SACCOs. The results are in agreement with those of Demirgüç-Kunt and Levine (2008) who argue that by enabling risk diversification across firms and industries, financial systems can influence the allocation of resources and hence economic growth; financial markets and intermediaries also mitigate liquidity risk, and induce savers to invest in high-return projects requiring a long-term commitment of capital. 53.5% of the respondents agreed that access to financial services had enabled many respondents to purchase land. The results are in agreement with those of   Kiplangat (2014) on women group contribution in the economic empowerment of rural women in Kericho.

According to Diagne et al. (2000), financial services such as credit contribute greatly to the growth of individuals, sectors and countries, and have positive effects on poor people's livelihoods. In the case of agriculture, credit is an important element in the agricultural production process, which allows producers to satisfy the capital needs of the production cycle. Lianto (1987) further argues that the provision of credit can encourage the farmers to use modern technologies and procure inputs for farm use, thus bringing them to a higher level of productivity and increasing their incomes.

However, a larger majority of respondents (86.3%) were in disagreement that access to financial services had enabled themselves own commercial premises. The results are in agreement with those of Richter (2011) who asserted that rural areas are highly underserved by formal financial service providers because they either avoid such areas or fail to offer relevant sustainable financial services to the rural people. These statements are contradictory with those of Garrett (2009) who argued that SMEs, in particular, provide security in the form of properties such as houses and anything that could actually bring back the principal in case of default on loans.

While 52.4% agreed that through access to financial services, they have been able to own livestock, the study further revealed and noted that some group members did not necessarily invest but used the money to meet other needs for like buying of family accessories, clothes, paying of school fees, or taken by their spouses. This was affirmed by two members interviewed who said that there was a major concern on how women were balancing family needs and investing in income-generating activities.

Finally, respondents reported that they have been able to acquire storage facilities for farm produce through access to financial services, thus enhancing their economic empowerment. The results are in agreement with those of Larocque et al. (2002) as an avenue for those without access to commercial banking services to gain access to financial services that may include savings deposit, productive credit, consumer credit and loan. Diagne et al. (2000) assert that financial services such as credit contribute greatly to the growth of individuals, sectors and countries, and have positive effects on poor people's livelihoods. In the case of agriculture, credit is an important element in the agricultural production process, which allows producers to satisfy the capital needs of the production cycle.

4.3.6.1 Discussions on Economic Empowerment

96% of the respondents agreed that their households currently occupied are self-purchased/constructed houses which is a true reflection in Kisii because each individual operates from their own houses with exceptional few who stay in hired premises in market or shopping centres. 56.9% of the respondents disagreed that access to financial services enabled them to purchase motor vehicles. Most of the people do not have funds to purchase vehicles, but those who have purchased second hand used vehicles in cash. 35.3% of the respondents agreed that they access financial services to purchase any vehicle either new or used one.

It is clear that respondents disagree that they have not purchased personal assets from finances given by financial companies. Access to financial resources has not created much impact on economic empowerment. However, that is the way forward. Other than television and construction, the respondents did not agree that access to finance has been of any significance. Majority75 % of small-scale tea farmers have not purchased financial assets as a result of access to financial services as indicated from the above majority of the respondents other than SACCOs where it is compulsory. This may be attributed to the fact that their finances are low and appropriate education has not reached this segment. Their current needs far exceed their finances or returns.

On investments in non-financial assets, access to financial services has contributed up to 32.5%. Majority of the respondents have not benefited, and this is mainly due to the fact that returns are very low and therefore concentrate on immediate needs (62.5%). The insignificant neutral is an undecided lot. It can be said that limited investments in financial and non-financial assets are due to low returns, education and awareness, low financial inclusivity, land-related issues, corruption in the departmental offices, very high or uncontrolled interest rates, stringent conditions by financial institutions, lack of infrastructure and communication and are the major factors affecting the uptake of credit by this segment.

4.4 Inferential Statistics

This section presents inferential statistics tools that were used, namely; Pearson correlation coefficient and regression analysis.

4.4.1 Chi-square Test for Goodness of Fit Analysis

The Chi-square test for equal proportions is a statistical test used to investigate whether the proportions of responses in each category are equal or whether there are statistically significant differences in the proportions of responses in each category. The null hypothesis of the Chi-square test is that the proportion of responses that fall into each of these categories is equal and any differences observed are due to chance or random variation. If the null hypothesis is true, then we cannot conclude anything based on the responses we observe, as these are essentially due to chance. We reject this null hypothesis of equal proportions at the 5% significance level (95% confidence) if the p-value of the test for that question is less than or equal to 0.05. The results on Table 4.33 shows that the Chi-square probability values was less than the conventional probability value of 0.05 ($\chi^2=205.104^a$, $p<0.05$), ($\chi^2=501.706^b$, $p<0.05$), ($\chi^2=278.810^c$, $p<0.05$), ($\chi^2=193.123^d$, $p<0.05$, $\chi^2=168.130^e$, $p<0.05$) and ($\chi^2=258.888^f$, $p<0.05$) respectively. It can be inferred that the results obtained were statistically significant, showing dominant and equal perception of respondents regarding the said questions.

Table 4.0.33: Chi-square test for goodness of fit

	Level of Financial Providers	Physical Proximity	Economic Factors	Social Factors	Moderating Factors	economic empowerment
Chi-Square	205.104^a	501.706^b	278.810^c	193.123^d	168.130^e	258.888^f
Df	33	39	42	2	3	17
Asymp. Sig.	.000	.000	.000	.000	.000	.000

Source: (Researcher, 2018)

4.4.2 Correlation Analysis

Devore and Peck (2006) recommend a guideline for assessing resultant correlation coefficients as; correlation coefficients less than 0.5 represent a weak relationship, correlation coefficients greater than 0.5, but less than 0.8, represent a moderate relationship whereas correlation coefficients greater than 0.8 represent a strong relationship. The Results are between -1 and 1. A result of -1 means that there is a perfect negative correlation between the two values, while a result of 1 means that there is a perfect positive correlation between the two variables. Result of 0 means that there is no correlation between the two variables

(Gujarati, 2004). Before carrying out a test on research' hypotheses, the study examined how the variables of the study were related. Correlation results are presented in Table 4.34.

Table 4.0.34: Correlation Matrix for Level of Financial Providers, Physical Proximity, Economic Factors and economic empowerment

Correlations

		Level of Financial Providers	Physical Proximity	Economic Factors	Social Factors	economic empowermen
Level of Financial Providers	Pearson Correlation	1	.221[**]	.033	-.079	.323[**]
	Sig. (2-tailed)		.000	.593	.197	.000
	N	269	269	269	269	269
Physical Proximity	Pearson Correlation	.221[**]	1	.047	-.049	.361[**]
	Sig. (2-tailed)	.000		.442	.428	.000
	N	269	269	269	269	269
Economic Factors	Pearson Correlation	.033	.047	1	.415[**]	.557[**]
	Sig. (2-tailed)	.593	.442		.000	.000
	N	269	269	269	269	269
Social Factors	Pearson Correlation	-.079	-.049	.415[**]	1	.363[**]
	Sig. (2-tailed)	.197	.428	.000		.000
	N	269	269	269	269	269
economic empowerment	Pearson Correlation	.323[**]	.361[**]	.557[**]	.363[**]	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	269	269	269	269	269

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

Source: (Researcher, 2018)

On correlation, the results on Table 4.34 show a statistically significant weak positive relationship between the level of access to financial services providers and economic and economic empowerment ($r = 0.323$, $p < 0.05$). This implies that when the level of access to financial services providers increases, economic empowerment among tea farmers in Kisii County improves. The results also show that there exists a statistically significant weak positive relationship between physical proximity on access to financial services and economic empowerment ($r = 0.361$, $p < 0.05$). This means that when the physical proximity of financial services is enhanced, economic empowerment among tea farmers in Kisii County improves. The correlation results also reveal that there is a statistically significant moderate positive relationship between economic factors on access to financial services and economic empowerment ($r = 0.557$, $p < 0.05$). This implies that when economic factors of production are enhanced, economic empowerment among tea farmers in Kisii County improves. Further, the results show a statistically significant weak positive relationship between social factors on access to financial services and economic empowerment among tea farmers in Kisii County ($r = 0.363$, $p < 0.05$). These results indicate that when social factors of access to financial services are enhanced, economic empowerment among tea farmers in Kisii County increases. The results are in agreement with those of Henry and Schimmel (2011) who said that access to finance in rural areas creates an opportunity for rural people to increase their productivity and income through Purchase of goods and services.

The results agree with the financial inclusion theory observation that the process of ensuring access to appropriate financial services and products needed by all sections of the society including the vulnerable groups such as weaker sections and low-income groups, at an affordable cost, in a fair and transparent manner, by mainstream financial services providers (Chakrabarty, 2011) leads to economic empowerment. Also, results agree with United Nations (2006) that an inclusive financial sector that provides access to credit for all bankable people and firms, insurance for all insurable people and firms, savings and payment services for everyone.

The result agrees with the financial theory developed by Shaw (1973) that, Financial Deepening is a necessary pre-condition for economic growth. For a financial sector to be said to have deepened the following should be evident; increase in the range of financial services, regulations and stability of the financial sector is improved, the extent to which the capital is allocated to private sector household is increased and the amount of cash intermediated is

increased (Shaw,1973). FD accelerates economic empowerment since it increases the size of the financial system and its role in financing with a wider choice of services geared towards economic empowerment.

Levine (2002) summarises as follows, countries with better functioning banks and financial markets grow faster because it enables the external financing constraints that impede SMEs expansion to be reduced, and in so doing creates an environment for SMEs' success or growth. Levine further believes that the most important role of the financial sector in facilitating growth is to reduce information, enforcement, and transaction costs. This is achieved through a number of specific functions that the financial sector performs. Therefore, he identified five key functions that a financial system provides in facilitating growth such as mobilising and pooling savings, producing information about possible investments and allocating capital, monitoring investments and exerting corporate governance, facilitating the trading, diversification and management of risks and facilitating the exchange of goods and services.

Financial institutions development also disproportionately affected small firms. Beck et al. (2007) besides confirming the aforementioned views, also suggest that financial institutions development boosts the growth of SMEs that rely heavily on external finance by reducing the transaction costs and informational barriers and supports more the industries that comprise small firms. Imperfect Information Theory postulated by Lofgren et al. (2002) demonstrated how imperfect information could produce adverse selection in the markets. He argued that when a lender or a buyer has imperfect information, a borrower with weak repayment prospects or a seller of low quality may crowd out everyone else from their side of the market thereby hindering mutually advantageous transactions.

A recent study by Finan et al. (2005) shows that the ability of a household to generate sufficient economic livelihood may depend on land endowment, with access to a small amount of land able to permit the mobilisation of family assets to create large income gains, even among the poor. Holden et al. (2008) noted that insufficient access to land and low productivity of land are considered to be major causes of rural poverty and food insecurity. Several recent studies by Riethmuller (2003), Ellis and Freeman (2004), Kristjanson et al.(2004) also show that an increase in access to land and non-land assets, when combined with the diversification of enterprises, can boost incomes of rural households and their abilities to secure better living standards. Owino et al. (2013) made a similar observation that

government regulation about wages; taxation, licensing and others are among the important reasons why informal sector business develops.

Meeme (2013) argued that education on smallholder farmers is of paramount importance. She argues that better-equipped farmers with financial skills will be better placed to form trusting relationships with the sales banking institution. Kimanjara (2013) posited that the main causes of failure of small enterprises are lack of planning, improper financing and poor management. The United Nations (2009) pointed out that women access to and control over economic resources is critical for the achievement of gender equality and empowerment of women as well as for equitable and sustainable economic growth. Osmani (2007) described how poor women could be empowered through participation in microcredit programs. First, microcredit enables poor women to earn an independent income and contribute financially to their families, which immediately raises their self-esteem as well as their esteem in the eyes of others.

Women's lower level of education and skills again limit their access to resources and negatively affect their incentive to become increasingly involved in agricultural production and receive benefits from it (Suda, 2002). Bank (2001) asserts that promoting women's empowerment is essential because in most cases, women are responsible for their children and for their family, thus empowering women is empowering the society at large.

4.4.3 Test of Research Hypotheses

After carrying out preliminary diagnostic tests and confirming that the data complied with the prerequisite assumptions, regression analyses were run to test the formulated research hypotheses. The unstandardised betas values were used to determine the influence of predictor variables on the dependent variable. Unlike standardised beta, unstandardised beta coefficients explain how the dependent variable varies as a result of a unit change in the independent variables.

4.4.3.1 Level of access to financial service providers and economic empowerment

The first objective of the study was to analyse influence of level of access to financial service providers on economic empowerment among small-scale tea farmer in Kisii County-Kenya. To influence, the following hypothesis was tested.

Ho₁*: level of access to financial service providers has no significant influence on economic empowerment among tea farmer in Kisii County-Kenya.*

Regression results in Table 4.35 show an R squared (R^2) of 0.104 which indicates 10.4 per cent of the variation in economic empowerment among tea farmer in Kisii County-Kenya is explained by the level of access to financial service providers.

Table 4.0.35: Model Summary for influence of level of access to financial service providers on economic empowerment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
					Change Statistics				
1	.323[a]	.104	.101	.70253	.104	31.015	1	267	.000

a. Predictors: (Constant), Level of Financial Providers

Source: (Researcher, 2018)

Results in Table 4.35 shows the regression line fits the actual data since the mean square of the residuals is very small (0.494) compared to the mean square of the regression (15.308). The F-statistics of the regression result, $F_{(1, 267)} = 31.015$ is statistically significant ($p < 0.05$), proving there is a significant relationship between the study variables. Thus, the model is good and significantly fitted and that the coefficients of the model are not equal to zero.

Table 4.0.36: ANOVA[a] for influence of level of access to financial service providers on economic empowerment

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	15.308	1	15.308	31.015	.000[b]
	Residual	131.778	267	.494		
	Total	147.086	268			

a. Dependent Variable: economic empowerment

b. Predictors: (Constant), Level of Financial Providers

Source: (Researcher, 2018)

On the level of access to financial service providers, the unstandardised beta coefficients give a measure of the influence of the independent variable to the model and indicate how much

the dependent variable was held constant. The results in Table 4.36 indicate that there exists a statistically significant positive relationship between level of access to financial service providers and economic empowerment among small-scale tea farmer in Kisii County-Kenya (β =0.411, $p<0.05$). Numerically, the 0.411 beta coefficient implies that for every single increase in level of access to financial service providers, economic empowerment among tea farmer in Kisii County-Kenya increases by 0.411 units. Thus, the study, therefore, fails to accept the null hypothesis (H_{01}) at 95% confidence interval and concludes that there is significant influence of level of access to financial services providers on economic empowerment among tea farmer in Kisii County-Kenya. The results are in agreement with those of World Bank (2008) access to finance and an inclusive financial system which caters for all groups of people has been advocated as a means to reduce inequalities and poverty in developing countries. Bastakoti (2011), asserts that cooperative run agro-marketing for equality production and marketing the products internally and externally to realise the better price to the farmers to uplift the socio-economic condition of women. Selhausen (2011) showed that SACCOs have been instrumental in mobilising savings of Mpanga tea farmers in Uganda considering that the SACCOs offer a wide range of products that cater for all groups of customers including those that are side-lined by the mainstream banks because of small deposits (Sebatta et al., 2014). Increased access to rural finance, therefore, should focus on improving access to banking services and credit in rural areas so that farmers will economically be empowered. The results contradicted those of Peacock et al. (2004) who argued that micro-finance institutions had taken financial services to millions of previously un-bankable clients due to innovative instruments; they have so far largely failed to reach poorer rural areas and/or smallholder agricultural producers whose livelihoods are characterised by highly seasonal investments, risks, and returns.

Richter (2011) asserted that rural areas are highly underserved by formal financial service providers because they either avoid such areas or fail to offer relevant sustainable financial services to rural people.

Table 4.0.37: Coefficients[a] for influence of level of access to financial service providers on economic empowerment

Model		Unstandardised Coefficients		Standardised Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.696	.249		6.819	.000
	Level of Financial Providers	.411	.074	.323	5.569	.000

a. Dependent Variable: economic empowerment

Source: (Researcher, 2018)

The following regression equation was obtained:

ECOEMP =1.696+ 0.411 LAFSP +ε

Where;

ECOEMP   -Economic empowerment

LAFSP   - Level of access to Financial service Providers

4.4.4 Physical proximity on access to financial services and economic empowerment

The second objective of the study was to identify the influence of physical proximity of access to financial services on economic empowerment among small-scale tea farmers in Kisii county-Kenya. To identify this influence, the following hypothesis was tested.

H0$_2$: Physical proximity to financial services has no significant influence on economic empowerment among tea farmer in Kisii County-Kenya.

Regression results in Table 4.38 show an R squared (R^2) of 0.130 which indicates 13.0 per cent of the variation in economic empowerment among tea farmer in Kisii County-Kenya is explained by physical proximity to financial services.

Table 4.0.38: Model Summary for influence of physical proximity of access to financial services on economic empowerment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.361[a]	.130	.127	.69214	.130	40.034	1	267	.000

a. Predictors: (Constant), Physical Proximity

Source: (Researcher, 2018)

Results in Table 4.38 shows the regression line fits the actual data since the mean square of the residuals is very small (0.479) compared to the mean square of the regression (19.179). The F-statistics of the regression result, $F_{(1, 267)} = 40.034$ is statistically significant ($p<0.05$), proving there is a significant relationship between the study variables. Thus, the model is good and significantly fitted and that the coefficients of the model are not equal to zero.

Table 4.0.39: ANOVA[a] for influence of physical proximity of access to financial services on economic empowerment

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.179	1	19.179	40.034	.000[b]
	Residual	127.907	267	.479		
	Total	147.086	268			

a. Dependent Variable: economic empowerment

b. Predictors: (Constant), Physical Proximity

Source: (Researcher, 2018)

On physical proximity of access to financial services, the unstandardised beta coefficients give a measure of the influence of the independent variable to the model and indicate how much the dependent variable was held constant. The results on Table 4.39 indicate that there exists a statistically significant positive relationship between physical proximity and awareness of access to financial services and economic empowerment among tea farmer in Kisii County-Kenya ($\beta = 0.487$, $p<0.05$). Numerically, the 0.487 beta coefficient implies that for every single increase in physical proximity and awareness of access to financial services, economic empowerment among tea farmer in Kisii County-Kenya increases by 0.487 units. Thus, the study, therefore, fails to accept the null hypothesis (H_{02}) at 95% confidence interval and concludes that there is significant influence of the physical proximity and awareness of access to financial services on economic empowerment among small-scale tea farmer in Kisii County-Kenya.

The results are consistent with those of Brune et al. (2011) who found out that increased financial access through commitment saving account in rural Malawi improves the well-being of poor households as it provides access to their savings for agricultural input use. The

physical distance of farm households from formal lending institutions is one of the factors that influence access to formal credit. According to Hussein (2007), farm households are discouraged from borrowing from credit sector if it is located farther. Kumar et al. (2003) asserts that there are indeed differences between the availability of financial services between regions of the country, placing financial institutions in each region or municipality in itself is not a sufficient condition for broadening access. Even if there is a financial institution present in a given location, its clients may be biased towards the better off institutions.

Duncombe and Boateng (2009) argued that technological innovations, such as prepaid cards to distribute loan payments and mobile phone plans to make loan payments and transfer cash, make it easier for women to gain access to capital by reducing the need for women to travel long distances, allowing them to sidestep social constraints that restrict the areas women can visit or the people with whom they can interact. World Bank (2013) observed that financing agriculture-related infrastructure, such as rural roads, port facilities, loading terminals, etc., is needed in most of the poorest countries. Othieno (2010) argued that financial institutions require information to enable them to evaluate the potential risks associated with the SMEs that apply for bank financing and also to access the location where the same SMEs will be operating and its market segments.

Baloyi (2010) made a similar conclusion that access to market alone is not good enough, but market information is also necessary. Babara (2011) revealed that farmers do not have in-depth awareness about crop insurance scheme. Nam and Ellinger (2008), the advent of communication technologies have helped to reduce transactions costs associated with banking activities. Tobbin (2012) explored the possibility of adopting mobile banking in rural Ghana and showed that perceived usefulness, ease of use and trust were essential factors underlying consumers' decisions

Table 4.0.40: Coefficients[a] for influence of physical proximity of access to financial services on economic empowerment

Model		Unstandardised Coefficients		Standardised Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.516	.248		6.119	.000
	Physical Proximity	.487	.077	.361	6.327	.000

a. Dependent Variable: economic empowerment
Source: (Researcher, 2018)

The following regression equation was obtained:

ECOEMP = 1.516 + 0.487 PYPRO +ε

Where;

ECOEMP   - Economic empowerment

PYPRO   - Physical proximity

4.4.5 Economic factors on access to financial services and economic empowerment

The third objective of the study was to establish the influence of economic factors on access to financial services on economic empowerment among tea farmers in Kisii county-Kenya. To establish this influence, the following hypothesis was tested.

$H0_3$: *Economic factors on access to financial services have no significant influence on economic   empowerment among tea farmer in Kisii County-Kenya*

Regression results in Table 4.41 show an R squared (R^2) of 0.311 which indicates 31.1 per cent of the variation in economic empowerment among tea farmer in Kisii County-Kenya is explained by economic factors on access to financial services.

Table 4.0.41: Model Summary for influence of economic factors on access to financial services on economic empowerment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
					Change Statistics				
1	.557[a]	.311	.308	.61622	.311	120.346	1	267	.000

a. Predictors: (Constant), Economic Factors

Source: (Researcher, 2018)

Results on Table 4.41 shows the regression line fits the actual data since the mean square of the residuals is very small (0.380) compared to the mean square of the regression (45.699). The F-statistics of the regression result, $F_{(1, 267)}$ =120.346 is statistically significant ($p<0.05$), proving there is a significant relationship between the study variables. Thus, the model is good and significantly fitted and that the coefficients of the model are not equal to zero.

Table 4.0.42: ANOVA[a] for influence of economic factors on access to financial services on economic empowerment

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.699	1	45.699	120.346	.000[b]
	Residual	101.387	267	.380		
	Total	147.086	268			

a. Dependent Variable: economic empowerment

b. Predictors: (Constant), Economic Factors

Source: (Researcher, 2018)

On economic factors on access to financial services, the unstandardised beta coefficients give a measure of the influence of the independent variable to the model and indicate how much the dependent variable was held constant. The results in Table 4.42 indicate that there exists a statistically significant positive relationship between economic factors on access to financial services and economic empowerment among tea farmer in Kisii County-Kenya ($\beta = 0.443$, $p<0.05$). Numerically, 0.443 beta coefficients imply that for every single increase in economic factors on access to financial services, economic empowerment among tea farmer in Kisii County-Kenya increases by 0.443 units. Thus, the study, therefore, fails to accept the null hypothesis (H_{03}) at 95% confidence interval and concludes that there is a significant influence of economic factors on economic empowerment among tea farmer in Kisii County-Kenya.

The results are in agreement with those of Cotula et al. (2004) who argued that rural poverty is strongly associated with poor access to land, either in the form of landlessness or because of insecure and contested land rights. Increased land access for the poor can also bring direct benefits of poverty alleviation, not least by contributing directly to increased household food security. In countries where agriculture is a main economic activity, access to land is a fundamental means whereby the poor can ensure household food supplies and generate income. Okwu and Iorkaa (2011) and Nkonya et al., (1997) said that land size is often used as an indicator of wealth and proxy for social status and influence. Farmers with large farms are likely to be better informed, richer and keen in searching for information on improved technologies. Kimaru and Jama (2005) in Uganda, for example, argued that land degradation

was estimated to lead to annual losses of up to 12% of GDP. They further argued that while such losses are not reflected in GDP, they reduce living standards and slow development.

Table 4.0.43: Coefficients[a] for influence of economic factors on access to financial services on economic empowerment

Model	Unstandardised Coefficients		Standardised Coefficients		
	B	Std. Error	Beta	T	Sig.
1 (Constant)	1.643	.134		12.217	.000
Economic Factors	.443	.040	.557	10.970	.000

a. Dependent Variable: economic empowerment

Source: (Researcher, 2018)

The following regression equation was obtained:

ECOEMP = 1.643 + 0.443 ECOFA +ε

Where;

ECOEMP   - Economic empowerment

ECOFA   - Economic factor

4.4.6 Social factors on access to financial services and economic empowerment

The fourth objective of the study was to assess the influence of social factors on access to financial services on economic empowerment among tea farmers in Kisii county-Kenya. To assess this influence, the following hypothesis was tested.

$H0_4$: Social factors on access to financial services have no significant influence on economic empowerment among tea farmer in Kisii County-Kenya

Regression results in Table 4.44 show an R squared (R^2) of 0.132 which indicates 13.2 per cent of the variation in economic empowerment among tea farmer in Kisii County-Kenya is explained by social factors on access to financial services.

Table 4.0.44: Model Summary for influence of social factors on access to financial services on economic empowerment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
					Change Statistics				
1	.363[a]	.132	.129	.69145	.132	40.643	1	267	.000

a. Predictors: (Constant), Social Factors

Source: (Researcher, 2018)

Results on Table 4.44 shows the regression line fits the actual data since the mean square of the residuals is very small (0.478) compared to the mean square of the regression (19.432). The F-statistics of the regression result, $F_{(1, 267)} = 40.643$ is statistically significant ($p<0.05$), proving there is a significant relationship between the study variables. Thus, the model is good and significantly fitted and that the coefficients of the model are not equal to zero.

Table 4.0.45: ANOVA[a] for influence of social factors on access to financial services on economic empowerment

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.432	1	19.432	40.643	.000[b]
	Residual	127.654	267	.478		
	Total	147.086	268			

a. Dependent Variable: economic empowerment

b. Predictors: (Constant), Social Factors

Source: (Researcher, 2018)

On social factors on access to financial services, the unstandardised beta coefficients give a measure of the influence of the independent variable to the model and indicate how much the dependent variable was held constant. The results on Table 4.45 indicate that there exists a statistically significant positive relationship between social factors on access to financial services and economic empowerment among tea farmer in Kisii County-Kenya (β = 0.552, p<0.05). Numerically, 0.552 beta coefficients imply that for every single increase in social factors on access to financial services, economic empowerment among tea farmer in Kisii County-Kenya increases by 0.552, units. Thus, the study, therefore, fails to accept the null

hypothesis (H_{04}) at 95% confidence interval and concludes that there is a significant influence of social factors on economic empowerment among tea farmer in Kisii County-Kenya.

The results are consistent with those of Seguino (2000) who asserts that micro-level evidence suggests that not only does women's access to employment and education opportunities reduce the likelihood of household poverty but resources in women's hands have a range of positive outcomes for human capital and capabilities within the household. Women access to, and control over economic resources is critical for the achievement of gender equality and empowerment of women as well as for equitable and sustainable economic growth (UN, 2009). Kabeer (2012) observed that a strong instrumental rationale for ensuring women's participation in processes of growth would contribute to the inclusiveness of growth, not merely because women constitute 50% of the world's population, but also because women's access to economic resources improves distributional dynamics within the household. Adeleke et al. (2010) argue that for investment, smallholder farmers in all four countries of East Africa depend on savings from their low incomes, which limits opportunities for expansion. Because of the lack of collateral and/or credit history, most farmers are bypassed not only by commercial and national development banks but also by formal micro-credit institutions. In addition to own sources, farmers thus rely on incomes of friends and relatives, remittances, and informal money lenders.

Studies in India, Pakistan and Malaysia have also confirmed that age, education, gender, governance, customer satisfaction, interest rates, location, service quality are useful indicators in consumer decision making (Padmaavathy, & Brindha, 2014; Sharma, & Prasad, 2014; Ram, & Subudhi, 2014; Ramayah et al., 2003). Miller et al. (2009) and Kevin (2014). It aims to collaborate the efforts of public, private and non-profit sector organisations to improve farmers' financial literacy levels, to provide support for their financial decision-making, and over time, to contribute to their financial well-being. Lee et al. (2003) argues that, the income-based approach is a prospective method that evaluates human capital based on the earning power or expected returns to investment in individuals that are considered to be influenced by acquired skills and education and is able to compute human capital as the sum of all the future income streams that an individual expects to earn in his or her lifetime. The education units of time are, therefore transformed and expressed as the human capital stock value in terms of money (Wößmann, 2003). In this thesis, the income-based approach is

utilised to compute small-scale tea farmers' household human capital based on the individual earnings that are also influenced by acquired skills and education level.

Table 4.0.46: Coefficients[a] for influence of social factors on access to financial services on economic empowerment

Model		Unstandardised Coefficients		Standardised Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.576	.237		6.663	.000
	Social Factors	.552	.087	.363	6.375	.000

a. Dependent Variable: economic empowerment

Source: (Researcher, 2018)

The following regression equation was obtained:

ECOEMP = 1.576 +0.552 SOCFA +ε

Where;

ECOEMP   - Economic empowerment

SOCFA   - Social factors

4.4.7 Joint influence of financial service accessibility on economic empowerment

The fifth objective of the study was to examine the joint influence of financial service accessibility on economic empowerment among small-scale tea farmers in Kisii County-Kenya. To examine this joint influence, the following hypothesis was tested.

H0₅: Financial service accessibility does not have a significant joint influence on economic empowerment among tea farmers in Kisii County -Kenya.

The multiple regression results on Table 4.4.7, shows that the overall R^2 of 0.516 indicated that 51.6 % of the variance in economic empowerment among tea farmers in Kisii County could be attributed to financial service accessibility factors that were included in the model, while the remaining percentage could be explained by other factors not included in this study denoted by (**ε)** in the model.

Table 4.0.47: Model Summary for influence of financial service accessibility on economic empowerment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	df2	Sig. F Change
1	.718[a]	.516	.509	.51929	.516	70.360	4	264	.000

a. Predictors: (Constant), Social Factors, Physical Proximity, Level of Financial Providers, Economic Factors

Source: (Researcher, 2018)

The results of the ANOVA performed on the independent and dependent variables are summarised in Table 4.47. The results show that the regression line fits the actual data since the mean square of the residuals is very small (0.270) compared to the mean square of the regression (18.974). The F-statistics of the regression result is $F_{(4, 264)} = 70.360$ while the reported p-value=0.000, which is less than the conventional probability value 0.05. The model applied can thus significantly predict the change of the dependent variable as result of the independent variables in the model. Thus, the coefficients of the model are not equal to zero, suggesting that the model fits the data significantly.

Table 4.0.48: ANOVA[a] for influence of financial service accessibility on economic empowerment

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75.895	4	18.974	70.360	.000[b]
	Residual	71.191	264	.270		
	Total	147.086	268			

a. Dependent Variable: economic empowerment

b. Predictors: (Constant), Social Factors, Physical Proximity, Level of Financial Providers, Economic Factors

Source: (Researcher, 2018)

The beta coefficient for the level of access to financial service providers was 0.331 with p<0.05. This indicates that a statistically significant influence between the level of access to financial service providers and economic empowerment among tea farmers exist. These

findings supported the rejection of $H0_1$. The beta coefficient for physical proximity was 0.395 with a $p<0.05$. This supported the rejection of $H0_2$. The beta coefficient for economic factors was 0.355 with a $p<0.05$. This supported rejection of $H0_3$. While the beta coefficient for social factors was 0.323 with a $p<0.05$ and this supported rejection of $H0_4$. Since all the beta coefficients were statistically significant, this study, therefore, fails to accept the null hypothesis ($H0_5$) at 95% confidence interval and concludes that there is significant joint influence of financial services accessibility on economic empowerment among tea farmer in Kisii County-Kenya.

Table 4.0.49: Coefficients[a] for influence of financial service accessibility on economic empowerment

Model		Unstandardised Coefficients		Standardised Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.296	.306		4.241	.000
	Level of Financial Providers	.331	.056	.260	5.899	.000
	Physical Proximity	.395	.059	.293	6.657	.000
	Economic Factors	.355	.038	.447	9.450	.000
	Social Factors	.323	.072	.213	4.488	.000

a. Dependent Variable: economic empowerment

Source: (Researcher, 2018)

The overall regression Model was summarised as follows:

ECOEMP = 1.296 + 0.331 LAFSP + 0.395 PYPRO + 0.355 ECOFA + 0.323 SOCFA+ ε

Where;

ECOEMP   - Economic empowerment

LAFSP   - Level of access to Financial service Providers

PYPRO   - Physical proximity

ECOFA   **-** Economic factors

SOCFA   - Social factors

4.4.8 Moderating Effect of the Demographic factors on economic empowerment

The sixth objective of the study was to establish a moderating influence of demographic factors on the relationship between financial service accessibility and economic empowerment among small-scale tea farmers in Kisii County-Kenya. To establish this moderating influence, the following hypothesis was tested.

H0₆: Demographic factors do not have a significant moderating influence on the relationship between financial service accessibility and economic empowerment among tea farmers in Kisii County-Kenya

In examining the interaction effect, hierarchical multiple regressions were applied as presented in Table 4.50. The R Square change shows the increase in variation explained by the addition of the interaction term (i.e., the change in R^2). The change in R^2 was reported at 2.4%, which was the percentage increase in the variation explained by the addition of the interaction term. The results also indicate that this increase was statistically significant ($p < 0.05$). Therefore, it can be implied that demographic characteristics do significantly moderate the relationship between financial services accessibility and economic empowerment. The R2 in the moderated model changed from 0.516 to 0.540, indicating a 0.024 increase in variation as a result of the interaction effect of the moderating variable (demographic factors).

Table 4.0.50: Model Summary for moderation effect of demographic factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	df2	Sig. F Change
1	.718ᵃ	.516	.509	.51929	.516	70.360	4	264	.000
2	.735ᵇ	.540	.531	.50741	.024	13.504	1	263	.000

a. Predictors: (Constant), Social Factors, Physical Proximity, Level of Financial Providers, Economic Factors

b. Predictors: (Constant), Social Factors, Physical Proximity, Level of Financial Providers, Economic Factors, Moderating Factors

Source: (Researcher, 2018)

The results in Table 4.50 indicate that the two models were statistically significant. Model 1 had $F_{(4, 264)} = 70.360$, $p<0.05$ while model 2 had $F_{(5, 263)} = 61.655$, $p<0.05$. The mean square

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of the residuals reduced from 0.270 in Model 1 to 0.257 in model 2. Thus, the ANOVA results in the moderated model indicate that the model was significant

Table 4.0.51: ANOVA[a] for moderation effect of demographic factors

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75.895	4	18.974	70.360	.000[b]
	Residual	71.191	264	.270		
	Total	147.086	268			
2	Regression	79.372	5	15.874	61.655	.000[c]
	Residual	67.714	263	.257		
	Total	147.086	268			

a. Dependent Variable: economic empowerment

b. Predictors: (Constant), Social Factors, Physical Proximity, Level of Financial Providers, Economic Factors

c. Predictors: (Constant), Social Factors, Physical Proximity, Level of Financial Providers, Economic Factors, Moderating Factors

Source: (Researcher, 2018)

The results on Table 4.51 indicate that the beta coefficients of level of access to financial service providers ($\beta = 0.291$, $p<0.05$), physical proximity ($\beta = 0.389$, $p<0.05$), economic factors ($\beta = 0.336$, $p<0.05$) and social factors ($\beta=0.294$, $p<0.05$) were statistically significant in the moderated model. Moreover, the moderating variable (demographic factors) beta coefficient ($\beta=0.176$, $p<0.05$) was also statistically significant. This supported the rejection of Ho_6; concluding that demographic factors have a significant moderating influence on the relationship on financial service accessibility and economic empowerment among tea farmers in Kisii County-Kenya.

These findings are in agreement with those of Kurosaki and Khan (2006) that there may be a threshold level of education below which rural households experience a meaningful response to agriculture productivity, while a household with more educated members may choose to allocate their labour to non-farm activities in relation to their comparative advantage. Jolliffe (2002; Kurosaki and Khan (2006) human capital theory suggests that education raises incomes by increasing the productivity of workers. The accumulation of human capital can

improve the efficiency of labour input in terms of quality; it can also boost overall technical efficiency in production and locative efficiency of the household.

Table 4.0.52: Regression Coefficients[a] for moderation effect of demographic factor

Model		Unstandardised Coefficients		Standardised Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.296	.306		4.241	.000
	Level of Financial Providers	.331	.056	.260	5.899	.000
	Physical Proximity	.395	.059	.293	6.657	.000
	Economic Factors	.355	.038	.447	9.450	.000
	Social Factors	.323	.072	.213	4.488	.000
2	(Constant)	1.595	.310		5.154	.000
	Level of Financial Providers	.291	.056	.228	5.198	.000
	Physical Proximity	.389	.058	.289	6.707	.000
	Economic Factors	.336	.037	.422	9.053	.000
	Social Factors	.294	.071	.194	4.163	.000
	Moderating Factors	.176	.048	.161	3.675	.000

a. Dependent Variable: economic empowerment

Source: (Researcher, 2018)

The following regression model was obtained after moderation:

$$ECOEMP = 1.595 + 0.291LAFSP + 0.389PYPRO + 0.336ECOFA + 0.294SOCFA + 0.223Z + \varepsilon$$

Where;

ECOEMP   - Economic empowerment

LAFSP   - Level of access to Financial service Providers

PYPRO   - Physical proximity

ECOFA   - Economic factors

SOCFA   - Social factors

Z   - Moderating variable (demographic factors)

4.4.9 The summary of the results of the test of hypotheses are presented in Table 4.53.

Table 4.53: Summary of the results of the test of hypotheses

Hypothesis	Results	Conclusion
Ho_1: Level of access to financial service providers has no significant influence on economic empowerment among tea farmers in Kisii County-Kenya.	Positive statistically significant influence of level of access to financial service on economic empowerment among tea farmers in Kisii County-Kenya ($\beta =0.411$, $p<0.05$).	H_{01} Rejected
H02: Physical proximity of access to financial services has no significant influence on economic empowerment among tea farmers in Kisii County-Kenya.	Positive statistically significant influence of physical proximity of access to financial services on economic empowerment among tea farmers in Kisii County-Kenya ($\beta = 0.487$, $p<0.05$).	H_{02} Rejected
$H0_3$: Economic factors on access to financial services have no significant influence on economic empowerment among tea farmers in Kisii County-Kenya	Positive statistically significant influence of economic factors on access to financial services on economic empowerment among tea farmers in Kisii County-Kenya ($\beta = 0.443$, $p<0.05$).	H_{03} Rejected
$H0_4$: Social factors on access to financial services have no significant influence on economic empowerment among tea farmers in Kisii County-Kenya	Positive statistically significant influence of social factors on access to financial services on economic empowerment among tea farmers in Kisii County-Kenya ($\beta = 0.552$, $p<0.05$).	H_{04} Rejected
H05: Financial service accessibility does not have a significant joint influence on economic empowerment among tea farmers in Kisii County - Kenya.	Positive statistically significant joint influence of financial service accessibility on economic empowerment among tea farmers in Kisii County, Kenya ($\beta =0.331$, $p<0.05$; $\beta =0.395$, $p<0.05$; $\beta =0.355$, $p<0.05$; $\beta =0.323$, $p<0.05$).	H_{05} Rejected

H0$_6$: Demographic factors do not have a significant moderating influence on the relationship between financial service accessibility and economic empowerment among tea farmers in Kisii County-Kenya.	Positive statistically significant moderating influence on the relationship between financial service accessibility and economic empowerment among tea farmers in Kisii County-Kenya (β=0.176, p<0.05)	H$_{06}$ Rejected

Source: (Researcher, 2018)

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarises the research findings regarding the research objectives and hypotheses. The chapter also contains the study conclusions, recommendations, Contribution to Knowledge and recommendations for Further Research.

5.2 Summary of Findings

This study sought to examine the influence of financial services accessibility on economic empowerment among small-scale tea farmers in Kisii County, Kenya. Data for the study was collected using structured questionnaires from 269 respondents in Kisii County. Descriptive and inferential statistics were used to summarise and analyse the data. The response rate was 67.6%. This section summarises the research findings of the study on the basis of formulated research objectives and hypotheses.

5.2.1 Influence of Level of access to financial providers on economic empowerment among small-scale tea farmers

The first objective of the study was to analyse the influence of level of access to financial providers on economic empowerment among small-scale tea farmers in Kisii County. Majority of respondents agreed that small-scale tea farmers depend on the level of financial providers for their economic empowerment. The respondents disagreed that small-scale tea farmers depend on commercial banks for their economic empowerment. In addition, respondents agreed that small-scale tea farmers depend on microfinance (cooperatives, SACCOs, ROSCAs) for their economic empowerment with some of the respondents being in disagreement that small-scale tea farmers depend on remittances from friends and relatives for their economic empowerment. The findings revealed that small-scale tea farmers do not depend on government, donors, NGOs for their economic empowerment. There was neutrality among the respondents on whether small-scale tea farmers depend on insurance for their economic empowerment with a fair majority being in agreement that small-scale tea farmers depend on collateral security for their economic empowerment. Further, it was not clear among respondents on whether small-scale tea farmers depended on other financial institutions that have no tailor-made products that suit their needs while some respondents were in disagreement that small-scale tea farmers in Kisii County depend on interest rates for their economic empowerment. Level of access to financial services providers has a

significant individual influence on economic empowerment among tea farmers in Kisii County. This was evidenced by the statistically significant positive relationship, as shown in the individual regression model. The correlation between the influence of level of access to financial services providers and economic empowerment was found to be moderate, positive statistically significant.

5.2.2 Influence of physical proximity of access to financial services on economic empowerment among small-scale tea farmers in Kisii county-Kenya

The study sought to identify the influence of physical proximity of access to financial services on economic empowerment among tea farmers in Kisii County. The research findings indicate that respondents were in disagreement that infrastructural development enables tea farmers to access financial services easily. Majority of the respondents held the opinion that distance affects financial accessibility among small-scale tea farmers while awareness of financial accessibility was found to enhance economic empowerment among small-scale tea farmers. In addition, respondents were in disagreement that ICT do not really facilitate financial accessibility among tea farmers economic empowerment in Kisii County. Moreover, a larger majority of the respondents agreed that mobile phones facilitate financial access among tea farmers, and they disagreed that banking location in rural area enables access to financial services among tea farmers in Kisii County. There exist statistically significant, positive relationships between physical proximity and awareness of access to financial services and economic empowerment among tea farmers in Kisii County, according to the coefficient results of the individual regression model. Moreover, there exists a weak, positive significant correlation between physical proximity and awareness of access to financial services and economic empowerment among tea farmers.

5.2.3 Influence of economic factors on economic empowerment among tea farmers

The study sought to establish the influence of economic factors on economic empowerment among small-scale tea farmers in Kisii County. The research findings revealed that land size was not a limiting factor to financial access among tea farmers for their economic empowerment with the majority of the respondents agreeing that land ownership was a challenge to financial accessibility among tea farmers for their economic empowerment. As a result of neutrality among respondents, it was not clear whether land rights enable financial service access by tea farmers for their economic empowerment. Moreover, it was revealed that entrepreneurial ability enables access to financial services for their economic

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empowerment while limited education among tea farmers was a hindrance to financial services access. High taxation is not a hindrance to financial accessibility for economic empowerment among tea farmers while the high cost of production was found to pose a challenge in financial accessibility for economic empowerment among tea farmers in Kisii County. The correlation between the influences of economic factors and economic empowerment among tea farmers was found to be weak and statistically significant. The individual regression results also indicate that economic factors have a significant positive influence on economic empowerment among small-scale tea farmers based on the beta coefficient.

5.2.4 Influence of social factors on economic empowerment among tea farmers

The study sought to assess the influence of social factors on economic empowerment among small-scale tea farmers in Kisii County. According to the research findings, educational level determines farmers financial accessibility; due to the nature of neutrality among the respondents, it was not clear whether knowledge and experience enable tea farmers to access financial services and whether training of tea farmers on financial management was key to financial accessibility. Respondents agreed that financial literacy was significant in enhancing financial accessibility among tea farmers. Farm field schools do not boost financial accessibility among tea farmers while it was not clear among respondents on whether gender equity to financial resources hinders financial accessibility among tea farmers due to neutrality in responses.

Illiteracy among women hinders financial accessibility with women access to financial services promoting economic empowerment among tea farmers. Respondents were neutral on whether gender involvement in decision making leads to financial accessibility and whether equal rights to property ownership enhances financial accessibility among tea farmers in Kisii County. There exist statistically significant, positive relationships between social factors and economic empowerment among tea farmers in Kisii County, according to the coefficient results of the individual regression model. Moreover, there exists a weak, positive significant correlation between social factors and economic empowerment among tea farmers.

5.2.5 Influence of demographic factors in moderating the relationship between financial accessibility and economic empowerment among tea farmers

The study sought to examine the moderating influence of demographic factors on the relationship between financial accessibility and economic empowerment among tea farmers in Kisii County Kenya. The research findings indicate that respondents agreed that age, education and gender were moderating factors in the relationship between financial accessibility and economic empowerment among tea farmers in Kisii County Kenya. It was established that these demographic factors (age, education and gender) have a significant moderating influence on the relationship between financial service accessibility and economic empowerment among tea farmers.

5.3 Conclusions

Based on the research findings of the study, the following conclusions were drawn. The study found that those below 46 years of age do not take farming seriously because some are in school, job seekers in towns and cities, lack land for tea farming and land rights. Those above 46 years are more involved in tea farming while those above 69 years are ageing and therefore will not carry on farming effectively, even if they have land. Those with non-formal and basic education form the bulk of small-scale tea farmers and are not able to make sound financial decisions. It can also be concluded that the majority of small-scale tea farmers save or invest and borrow from Sacco's which do not require much collateral and interest is cheaper for them more than other financial institutions. Even though much of the tea farm work is done by women, the earnings from tea go to men pockets because men own land and have land titles. There is consistent disparity in net earnings along income categories monthly payment and yearly bonuses.

5.3.1 Level of access to financial providers on economic empowerment among tea farmers

It was concluded that the influence of the level of access to financial providers has a significant influence on economic empowerment among tea farmers. There exists a significant positive relationship between the level of access to financial service providers and economic empowerment among tea farmers. It can be concluded that the level of access to financial service providers is a significant aspect in enhancing economic empowerment among tea farmers in Kisii County.

According to Henry and Schimmel, (2011) formal financial providers neglect the rural areas because they find it too costly to operate in such areas, and therefore anticipate low level of economic return in the form of profit for the financial institution. Commercial and microfinance banks have not deeply ensured financial inclusion among tea farmers with a majority of tea farmers indicating that they have majorly depended on SACCOs and ROSCAs for financial services thus enhancing the wellbeing of the tea farmers in terms of economic empowerment. Nyoro, (2002), lack of access to credit facilities has been highlighted as a key constraint to farmers' investment. It can be concluded that there has not been dependence among small-scale tea farmers on remittances from friends and relatives for their economic empowerment. Moreover, conclusions can be made that most financial institutions have not absolute tailor-made financial products which suit the needs of small-scale tea farmers.

5.3.2 Physical proximity of access to financial services on economic empowerment among tea farmers

It can be concluded that the influence of physical proximity of access to financial services has a significant influence on economic empowerment among small-scale tea farmers. Physical accessibility of formal financial is one of the barriers to enter formal financial services for low income. World Bank (2013) observed that financing agriculture-related infrastructure, such as rural roads, port facilities and loading terminals is needed in most of the poorest countries. The results reveal that there exists a positive statistically significant relationship between influence of physical proximity of access to financial services and economic empowerment among tea farmers. Conclusions can be made that there is inadequate infrastructure development in the rural areas thus affecting financial accessibility among tea farmers in Kisii County. Moreover, distance and location of financial services providers inconvenience, tea farmers in terms of timely accessibility of financial services thus affecting financial accessibility among small-scale tea farmers. It can be concluded that although financial service providers have adopted technology in service delivery to enhance financial inclusion, the same has not really achieved the desired results in terms of enhancing the financial accessibility among tea farmers in Kisii County. Tobbin (2012) explored the possibility of adopting mobile banking in rural Ghana and showed that perceived usefulness, ease of use and trust were essential factors underlying consumers' decisions. It can be concluded that mobile banking has enhanced financial services accessibility in Kisii County, thus ensuring financial inclusion among tea farmers in Kisii County.

5.3.3 Influence of economic factors on economic empowerment among tea farmers

It can be concluded that economic factors have a positive statistically significant influence on economic empowerment among tea farmers. IFAD (2001) access to land and ownership of assets (endowments) is fundamental to livelihoods as there exists, a positive significant correlation between influence of economic factors and economic empowerment among small-scale tea farmers in Kisii County, Kenya. It can be concluded that influence of land ownership was a challenge to financial accessibility among small-scale tea farmers for their economic empowerment. This means that tea farmers may not be able to use land as collateral to secure credit facilities from financial institutions due to ownership challenges. Moreover, land rights may be an enabling factor in enhancing financial services accessibility among small-scale tea farmers which influence their economic empowerment. Samuel (2001) lack of secure property rights affects the household investment. Secure land tenure provides an incentive and authority for farmers to adopt technologies. Conclusions can be made that entrepreneurial ability is significant in enabling access to financial services for economic empowerment. This is because by possessing the entrepreneurial ability, tea farmers are able to attract potential financial services providers who might be willing to fund viable economic activities. Further, high cost of production poses a challenge in financial accessibility as farmers incur high labour costs and transportation costs for green tea to KTDA factories.

5.3.4 Influence of social factors on economic empowerment among tea farmers

It can be concluded that social factors have a positive statistically significant influence on economic empowerment among tea farmers; as argued by Greenspan, (2002) that financial literacy helps to inculcate individuals with the financial knowledge necessary to create household budgets, initiate savings plans, and make strategic investment decisions. There exists a positive significant correlation between influence of social factors and economic empowerment among tea farmers in Kisii County, Kenya. Further, conclusions can be made that educational level determines tea farmers' financial accessibility. This is because when tea farmers are educated, they are able to process financial market information relating to financial inclusion. Moreover, financial literacy is a significant factor in enhancing financial accessibility among tea farmers. Illiteracy among women hinders financial accessibility with women access to financial services promoting economic empowerment among tea farmers. Accumulation of human capital can improve the efficiency of labour input in terms of quality; it can also boost overall technical efficiency in production and allocative efficiency

of the household (Jolliffe, 2002; Kurosaki, & Khan 2006). When women literacy level increases, they are able to process information of financial nature relating to borrowing, investing and credit management. UN (2009) Women access to, and control over economic resources is critical for the achievement of gender equality and empowerment of women as well as for equitable and sustainable economic growth.

5.3.5 Influence of demographic factors in moderating the relationship between financial accessibility and economic empowerment among tea farmers

It can be concluded that demographic factors (age, education and gender) have a significant moderating influence on the relationship between financial service accessibility and economic empowerment among tea farmers. Lee et al. (2003) observed that exogenous threats referring to disadvantages of demographic development such as ageing of population or higher female to male ratios due to war and epidemics cuts the supply of labour and blocks rural development. Examples of these exogenous threats refer to disadvantageous demographic developments.

5.4 Recommendations of the study

Based on the research objectives and findings it can be recommended that financial service accessibility strategies for farmers economic empowerment be enhanced; based on the level of access to financial services providers, physical proximity, economic factors of production, social factors and effect of moderating factors of access to financial services and other strategies if available to increases incomes among farmers, so as to improve their livelihoods as postulated by Beijing and Beyond (2004), World Bank (2013), Kumar et al. (2012), Nega, et al. 2003 and Diagne et al. (2000) and evidenced on the findings as shown in Table 4.4.2 , on the relationship between financial service accessibility strategies for farmers empowerment.

5.4.1 Policy recommendations for the study

Based on the research findings and conclusions, the following recommendations were made;
It was recommended that commercial banks and microfinance banks should develop financial products that are tailor-made to the needs of tea farmers to increase financial inclusion among rural-based farmers. Through need-based product development, the commercial banks will be able to attract potential tea farmers as clients. The findings indicate tea farmers are oriented towards SACCOs for financial services accessibility. It was recommended that tea farmers

should take crop insurance policies to cushion themselves against probable losses that may enhance their economic empowerment since they will receive compensation in case of any uncertainty.

It was recommended that the county and national government should ensure infrastructural development such as the road network to enable tea farmers to easily access financial services with ease, thus enhancing farmers' economic welfare. Financial institutions such as SACCOs which are majorly preferred by tea farmers according to the research findings should ensure adoption of reliable technology which will be able to enhance financial inclusivity among tea farmers. Through the use of ICT, financial institutions will be able to provide financial services to tea farmers hence enhancing paperless and branchless banking services. This will ensure even those in rural areas get access to financial services through the financial institutions' ICT online platform.

It was recommended that the national government through the ministry of lands and the national land commission should ensure that land ownership challenges are addressed so that those lands can be used for economic purposes which include using the title deeds for securing credit facilities from financial institutions to enhance their economic welfare. It was recommended that national and county government should roll out programs in conjunction with KTDA carry out financial education. This will aggravate the uptake of financial services for investment purposes among small-scale tea farmers in a bid to improve their economic welfare. It was recommended that through collaboration between KTDA and financial institutions, tea farmers should regularly organise workshops training on financial literacy to create awareness on financial management and opportunities on their economic empowerment.

Policies that should encourage and promote ICT, product, process and partnership-level innovations that improve the delivery of demand-driven, customer-centric financial products and services and increase access for a broad spectrum of rural population with a particular focus on traditionally excluded segments, including farming families, small- and medium enterprises, women and the youth carrying out farming activities.

Financial service access strategies for farmers' economic empowerment Policies should be designed to improve the access that women have to financial services. They should be

culturally appropriate, taking into account the socio-economic conditions that shape the financial needs of women and the constraints that prevent financial institutions from supporting their work.

5.4.2 Recommendations for Further Research

The study employed a case study approach of Kisii County; it is recommended that this study be carried on a broader scale in Kenya. Yin (2003) asserts that a single case study finding cannot be generalised   compared to multiple case studies. In the determination of measurable indicators under each variable of the study, qualitative research was used. The study employed a case study approach of Kisii County; it is recommended that this study be carried on a broader scale in Kenya. The study recommends further research to test and validate the research findings using a quantitative approach.

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APPENDICES

APPENDIX I:

A. LETTER OF INTRODUCTION

This is an academic research carried out as part of my work towards fulfilling the requirements for the award of Doctor of Philosophy degree in Strategic Management. The research is intended to solicit your views and opinions on "Accessibility to financial Services among tea farmers for their Economic empowerment in Kisii County" Your responses and views to be expressed are solely meant for academic purposes. You are hereby assured of utmost Confidentiality.

Thank you for your participation.

B. INSTRUMENTS: QUESTIONNAIRE

SECTION A: General Questionnaire for Respondents (small-scale tea farmers)

Instructions: Please respond to all items.

1. Factory name: _____County: _____

2. KTDA administrative region: _____

3. Gender (Tick one): a) [ ] Male   b) [ ] Female

4. Age bracket: (25-35) (36-46) (47-57) (58-68) (69 and above)

5. Education level (Tick one)   a) [ ] Non-formal,   b) [ ] Primary,   c) [ ] Secondary   d) [ ] College   e) [ ] University,) [ ] Others (specify) _____

6. How much do you earn approximately from Tea per month? (Tick) (Kshs) (0-500), (501-1000), (1001-1500), (1501-2000), (2001—2500), (2001-3000), (Above 3001-...)

7. Yearly bonuses from tea in Ksh. (1,000-30,000, (31,000-60,000), (61,000-90,000), (91,000-120,000), (121,000-150,000), (151,000-180000), (181,000-210,000), (Above 211,000)

8. Do you save your income? Yes........ No........

9. Where do you save? (a) Bank...... (b) Sacco.... (c) Other (specify)................................

10. Where do you borrow money from? (a)Saccos, (b) Banks, (c) friend and relatives, (d) others

SECTION B: 1. Level of financial providers

In your opinion, indicate your agreement with the statements below relating to the extent to which the level of access to financial providers for economic empowerment among small-scale tea farmers in Kisii County-Kenya. Use a scale of 1-5, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

		1	2	3	4	5
A	Small-scale tea farmers in Kisii county depend on the level of financial providers for their economic empowerment					
B	Small-scale tea farmers in Kisii county depend on commercial banks for their economic empowerment					
C	Small-scale tea farmers in Kisii county depend on Microfinance (cooperatives, SACCOs, ROSCAs) for their economic empowerment					
D	Small-scale tea farmers in Kisii county depend on remittances from friends and relatives for their economic empowerment					
E	Small-scale tea farmers in Kisii county depend on Government, Donors, NGOs for their economic empowerment					
F	Small-scale tea farmers in Kisii county depend on Insurance for their economic empowerment					
G	Small-scale tea farmers in Kisii county depend on collateral security for their economic empowerment					
H	Small-scale tea farmers in Kisii county depend on other financial institutions that have no tailor-made products that suit their needs for their economic empowerment					
I	Small-scale tea farmers in Kisii county depend on interest rates for their economic empowerment					
J	Small-scale tea farmers in Kisii county depend on factors other than those stated above for their economic empowerment					

SECTION B: 2 Physical proximity of financial access

Indicate your level of agreement with the following aspects of physical proximity and awareness of financial access for economic empowerment among small-scale tea farmers by using a scale of 1-5 as above, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

		1	2	3	4	5
A	Infrastructural development enables tea farmers in Kisii county to easily access financial services for their economic empowerment					
B	Distance affects financial accessibility by small-scale tea farmers in Kisii county and their economic empowerment					
C	Awareness of financial accessibility enhances economic empowerment among small scale tea farmers in Kisii county					
D	ICT facilitates financial accessibility for tea farmers economic empowerment in Kisii county					
E	Mobile phones facilitate financial access for tea farmers in Kisii county for their economic empowerment					
F	Banking location in the rural area enables access to financial services for tea farmers economic empowerment					
G	Road networks hinder farmers access to financial services for their economic empowerment					

SECTION B: 3 Influence of economic factors on financial access

In your opinion, indicate your level of agreement with the statements below relating to economic factors of production influence on financial accessibility among small-scale tea farmers? Use a Scale of 1-5, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree

		1	2	3	4	5
A	Land size is a limiting factor to financial access by tea farmers for their economic empowerment in Kisii County					
B	Land ownership is a challenge to financial accessibility by tea farmers in Kisii county for their economic empowerment					
C	Land rights enable financial service access by tea farmers in Kisii county for their economic empowerment					
D	Entrepreneurial ability enables tea farmers in Kisii county to access financial services for their economic empowerment					
E	Limited education among small-scale tea entrepreneurs hinder financial access for their economic empowerment					
F	High taxation among tea farmers in Kisii county is a hindrance to financial accessibility for their economic empowerment					
G	High Cost of production by tea farmers in Kisii county is a challenge to financial accessibility for their economic empowerment					

SECTION B: 4. Influence of social factors on access to financial services

In your opinion, indicate your level of agreement with the statements below relating to the influence of social factors on access to financial services for economic empowerment among tea farmers in Kisii County- Kenya. Use a Scale of 1-5, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree

		1	2	3	4	5
a	Educational level of tea farmers determines their financial accessibility for economic empowerment					
b	Knowledge and experience of tea farmers in Kisii county enables them to access financial services for their economic empowerment					
c	Financial literacy is key to financial accessibility for tea farmers economic empowerment in Kisii county					
d	Training of tea farmers in financial management is key to financial accessibility for their economic empowerment					
e	Farm field schools boost financial accessibility to tea farmers for economic empowerment					
f	Gender equity to financial resources hinders financial accessibility by tea farmers in Kisii county for their economic empowerment					
g	Illiteracy among women tea farmers in Kisii county hinders financial accessibility for their economic empowerment					
h	Women access to financial services promotes economic empowerment to tea farmers in Kisii county					
i	Gender involvement in decision making leads to financial accessibility among tea farmers in Kisii for their economic empowerment					
j	Equal rights to property ownership enhance financial accessibility by tea farmers in Kisii county for their economic empowerment					

SECTION B: 5. MODERATING EFFECT OF DEMOGRAPHIC FACTORS

5.1. To what extent does the moderating effect of demographic factors influence the relationship between financial service accessibility and economic empowerment among tea farmers in Kisii County Kenya? Use a Scale of 1-5, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree

		1	2	3	4	5
A	Age					
B	Education					
C	Gender					

SECTION C: Economic Empowerment

In your opinion indicate your agreement with the statements below relating to the extent to which economic empowerment among small-scale tea farmers in Kisii depend on financial Accessibility strategies. Use a scale of 1-5, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

		1	2	3	4	5
1	The house I occupy currently and my households is self-purchased					
2	Access to financial services has enabled myself purchase a motor vehicle					
3	Access to financial services has enabled myself purchase a refrigerator					
4	Access to financial services has enabled me purchase a television set					
5	Access to financial services has enabled myself purchase a washing machine					
6	Access to financial services has enabled myself acquire a computer					
7	Access to financial services has enabled me own a gas cooker					
8	Access to financial services has enabled me to own a motorcycle					
9	Through access to financial services I am able to invest in bonds					
10	Through access to financial services I am able to invest in shares in listed companies					
11	Access to financial services has enabled me to invest in short term debt instruments					
12	Access to financial services has enabled me invest in foreign currency term deposits					
13	Access to financial services has enabled me in local currency term deposits					
14	Access to financial services has enabled myself invest in insurance policies					
15	Access to financial services has enabled myself buy shares in SACCOs					
16	Access to financial services has enabled myself purchase land					
17	Access to financial services has enabled me own commercial premises					

18	Access to financial services has enabled myself acquire livestock					
19	Access to financial services has enabled me purchase farm equipment					
20	Access to financial services has enabled myself acquire storage facilities for farm produce					
21	Access to financial services has enabled me own other assets					
22	Access to financial services has enabled myself own residential buildings					

APPENDIX II: STATISTICAL OUTPUT

TABLE A1: Total Variance Explained for Level of access to financial services providers

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.586	28.738	28.738	2.586	28.738	28.738	1.840	20.448	20.448
2	1.242	13.800	42.538	1.242	13.800	42.538	1.798	19.976	40.424
3	1.191	13.237	55.775	1.191	13.237	55.775	1.257	13.963	54.387
4	1.069	11.877	67.651	1.069	11.877	67.651	1.194	13.264	67.651
5	.765	8.504	76.156						
6	.665	7.392	83.547						
7	.544	6.040	89.587						
8	.511	5.678	95.265						
9	.426	4.735	100.000						

Extraction Method: Principal Component Analysis.

TABLE A2: Total Variance Explained for Physical proximity and awareness

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.284	18.346	18.346	1.284	18.346	18.346	1.233	17.611	17.611
2	1.175	16.787	35.133	1.175	16.787	35.133	1.199	17.127	34.738
3	1.033	14.762	49.895	1.033	14.762	49.895	1.061	15.157	49.895
4	.988	14.112	64.007						
5	.889	12.703	76.709						
6	.861	12.294	89.003						
7	.770	10.997	100.000						

Extraction Method: Principal Component Analysis.

TABLE A3: Total Variance Explained for Economic factors

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.360	33.715	33.715	2.360	33.715	33.715	2.095	29.933	29.933
2	1.554	22.195	55.910	1.554	22.195	55.910	1.775	25.359	55.292
3	1.407	20.103	76.013	1.407	20.103	76.013	1.451	20.722	76.013
4	.684	9.772	85.786						
5	.486	6.940	92.725						
6	.271	3.869	96.595						
7	.238	3.405	100.000						

Extraction Method: Principal Component Analysis.

TABLE A4: Total Variance Explained for Social factors

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.748	27.479	27.479	2.748	27.479	27.479	2.177	21.770	21.770
2	1.360	13.601	41.080	1.360	13.601	41.080	1.846	18.460	40.230
3	1.170	11.703	52.783	1.170	11.703	52.783	1.168	11.678	51.907
4	1.018	10.182	62.966	1.018	10.182	62.966	1.106	11.058	62.966
5	.837	8.365	71.331						
6	.736	7.364	78.695						
7	.637	6.365	85.060						
8	.595	5.951	91.011						
9	.491	4.911	95.922						
10	.408	4.078	100.000						

Extraction Method: Principal Component Analysis.

TABLE A5: Total Variance Explained for Economic empowerment

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.635	22.072	22.072	4.635	22.072	22.072	4.562	21.724	21.724
2	1.532	7.295	29.367	1.532	7.295	29.367	1.463	6.965	28.689
3	1.424	6.781	36.148	1.424	6.781	36.148	1.361	6.481	35.170
4	1.377	6.557	42.705	1.377	6.557	42.705	1.350	6.428	41.598
5	1.262	6.011	48.716	1.262	6.011	48.716	1.300	6.190	47.788
6	1.170	5.574	54.290	1.170	5.574	54.290	1.213	5.777	53.566
7	1.143	5.443	59.733	1.143	5.443	59.733	1.204	5.732	59.298
8	1.086	5.171	64.904	1.086	5.171	64.904	1.111	5.291	64.589
9	1.030	4.902	69.806	1.030	4.902	69.806	1.096	5.217	69.806
10	.979	4.664	74.470						
11	.861	4.100	78.570						
12	.852	4.059	82.629						
13	.800	3.808	86.436						
14	.736	3.503	89.939						
15	.626	2.981	92.920						
16	.530	2.525	95.446						
17	.483	2.301	97.747						
18	.279	1.328	99.075						
19	.116	.551	99.625						
20	.049	.235	99.861						
21	.029	.139	100.000						

Extraction Method: Principal Component Analysis.

TABLE A6: Total Variance Explained for Moderating Variable (Demographic Factors)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.143	38.116	38.116	1.143	38.116	38.116	1.141	38.045	38.045
2	1.055	35.166	73.281	1.055	35.166	73.281	1.057	35.237	73.281
3	.802	26.719	100.000						

Extraction Method: Principal Component Analysis.

INSTITUTE OF POST GRADUATE STUDIES

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22nd *May, 2018*

Ministry of Higher Education Science and Technology,
National Council for Science, Technology & Innovation,
P.O. Box 30623 – 00100,

Dear Sir/Madam,

RE: RESEARCH BY THOMAS OMBUI NYAKWEBA-GDB/M/1213/09/13

The above named is a student at Kabarak University taking PHD Degree in Business Administration. He is carrying out research entitled *"Financial Service Accessibility Strategies for Farmers Economic Empowerment in Kenya: A Case of Agricultural Tea Farmers in Kisii."*

The information obtained in the course of this research will be used for academic purposes only and will be treated with utmost confidentiality.

Please provide the necessary assistance.

Thank you.

Yours Faithfully
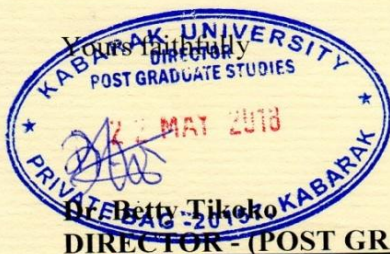
Dr.Betty Tikoko
DIRECTOR - (POST GRADUATE STUDIES)

Kabarak University Moral Code

As members of Kabarak University family, we purpose at all times and in all places, to set apart in one's heart, Jesus as Lord. (1 Peter 3:15)

Kabarak University is ISO 9001:2015 Certified

Appendix II C: Letter from NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax: +254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/18/20402/23153**

Date: **12ᵗʰ June, 2018**

Thomas Ombui Nyakweba
Kabarak University
Private Bag - 20157
KABARAK.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"Financial service accessibility strategies for farmers economic empowerment in Kenya: Case of agricultural tea farmers in Kisii County,"* I am pleased to inform you that you have been authorized to undertake research in **Kisii County** for the period ending **11ᵗʰ June, 2019.**

You are advised to report to **the County Commissioner and the County Director of Education, Kisii County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

DR. STEPHEN K. KIBIRU, PhD.
FOR: DIRECTOR-GENERAL/CEO

COUNTY COMMISSIONER
KISII COUNTY

20/06/2018

Copy to:

The County Commissioner
Kisii County.

The County Director of Education
Kisii County.

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REPUBLIC OF KENYA

MINISTRY OF EDUCATION
State Department for Early Learning and Basic Education

Telegram: "EDUCATION"
Telephone: 058-30695
Email address: cdekisii@gmail.com
When replying please quote

COUNTY DIRECTOR OF EDUCATION
KISII COUNTY
P.O. BOX 4499 - 40200
KISII.

REF: CDE/KSI/RESECH/82

Date: 20th June, 2018

Thomas Ombui Nyakweba
Kabarak University
Private Bag -20157
**KABARAK.**

RE: RESEARCH AUTHORIZATION.

Following your research Authorization vide your letter **Ref. NACOSTI/P/18/20402/23153,** to carry out research in Kisii County, this letter refers.

I am pleased to inform you that you can carry out your research in the County on *"Financial Service accessibility strategies for farmers economic empowerment in Kenya: Case of Agricultural tea farmers in Kisii County.",* for a period ending *11th June, 2019.*

Wish you a successful research.

Dr. William Sugut
County Director of Education
KISII COUNTY.

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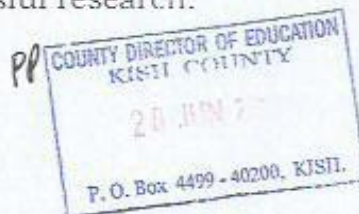
CONDITIONS

1. The License is valid for the proposed research, research site specified period.
2. Both the Licence and any rights thereunder are non-transferable.
3. Upon request of the Commission, the Licensee shall submit a progress report.
4. The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.
5. Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.
6. This Licence does not give authority to transfer research materials.
7. The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.
8. The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice.

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No.A 18896

CONDITIONS: see back page

THIS IS TO CERTIFY THAT:
MR. THOMAS OMBUI NYAKWEBA
of KABARAK UNIVERSITY, 0-40200
KISII,has been permitted to conduct
research in *Kisii County*

on the topic: *FINANCIAL SERVICE ACCESSIBILITY STRATEGIES FOR FARMERS ECONOMIC EMPOWERMENT IN KENYA:CASE OF AGRICULTURAL TEA FARMERS IN KISII COUNTY*

for the period ending:
11th June,2019

Permit No : NACOSTI/P/18/20402/23153
Date Of Issue : 12th June,2018
Fee Recieved :Ksh 2000

....
Applicant's Signature

....
Director General
National Commission for Science, Technology & Innovation

Appendix III-A   Map of Kisii county tea growing areas

APPENDIX III-B   LIST OF PUBLICATIONS

1. Determination on whether there is any correlation between the levels of Strategic planning on marketing, Technological and financial performance of Bank of Baroda Kenya, East Africa. *Journal of Advanced Research in Business, management and Accounting. SSN:2456-3544. Volume-1/Issue-9/November, s2015/paper-1.*

2. Analysis of Social Factors Financial Services Access Strategy on Farmers Economic Empowerment in Kenya. A case of agricultural Tea Farmer's in Kisii County. World Journal of Innovative Research (WJIR) ISSN: 2454-8236, Volume-5, Issue-3, September,2018 Pages 12-17

3. Physical proximity and Awareness of Financial Service Access Strategy on Farmers Economic Empowerment in Kenya. A case of Small Scale Agricultural Ta Farmers in Kisii County. World Journal of Innovative Research (WJIR) ISSN: 2454-8236, Volume-5, Issue-4, October 2018 Pages17-23