

**FACTORS INFLUENCING SAVING BEHAVIOUR AMONG COFFEE FARMERS; A
CASE OF MANYATTA SUBCOUNTY, EMBU COUNTY KENYA**

BY

DAVID M. NJAMWEAH

**A Research Project Report Submitted in Partial Fulfilment of the Requirement for the
Award of the Degree of Master of Arts in Project Planning and Management of the
University of Nairobi**

2018

DECLARATION

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

SIGNATURE: -----

DATE: -----

DAVID NJAMWEAH

L50/62335/2013

This project report has been submitted for examination with my approval as University Supervisor.

SIGNATURE-----

DATE -----

PROF. HARRIET KIDOMBO

ODeL Campus

University of Nairobi

DEDICATION

I dedicate this piece of work to my wife Nancy Wanjiku Karanja and my two children Joan Njoki and Lenny Karanja for their moral support and encouragement throughout my study.

ACKNOWLEDGEMENT

I thank God for granting me His grace and mercy to pursue my studies and the far He has taken me in the course of this postgraduate studies period the University of Nairobi Extra Mural department as a postgraduate student. Special appreciation and gratitude to my project supervisor Prof. Harriet Kidombo for her constant guidance through her valuable advice and constructive comments and suggestions throughout the research

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	ix
LIST OF FIGURES	x
ABBREVIATIONS AND ACRONYMS	xi
ABSTRACT	xii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background to the Study	1
1.2 Statement of the Problem	3
1.3 Purpose of the Study	4
1.4 Objective of the Study	4
1.5 Research Questions.....	5
1.6 Significance of the Study	5
1.7 Delimitation of the Study.....	5
1.8 Limitations of the Study.....	6
1.9 Assumption of the Study.....	6
1.10 Definition of Significant Terms.....	6
1.10 Organization of the Study	7
CHAPTER TWO	8
LITERATURE REVIEW	8

2.1 Introduction	8
2.2 Global Review of Saving Behaviour Among Coffee Farmers.....	8
2.3 Coffee Production in Kenya.....	10
2.4 Farmers income level and saving behaviour among coffee farmers	13
2.5 Governance in Coffee Cooperatives and Saving Behaviour Among Coffee Farmers	14
2.6 Farmers financial education and saving behaviour among coffee farmers.....	15
2.7 Individual future expectations and saving behaviour among coffee farmers	16
2.8 Theoretical Framework.....	17
2.8.1 The Life-Cycle Hypothesis (LCH)	17
2.9 Conceptual Framework.....	18
2.10 Summary and Research Gap	19
CHAPTER THREE	21
RESEARCH METHODOLOGY	21
3.1 Introduction	21
3.2 Research Design	21
3.3 Target Population	21
3.4 Sample Size and Sampling Procedures.....	22
3.4.1 Sample Size	22
3.4.2 Sampling Procedures	22
3.5 Data Collection Instruments.....	23
3.5.1 Validity of the Instruments.....	23
3.5.2 Reliability of the Instrument.....	23
3.6 Data Collection Procedures.....	23
3.7 Data Processing and analysis.	24
3.8 Ethical Consideration.....	24
3.9 Operational definition of variables	24
CHAPTER FOUR.....	26
DATA ANALYSIS, PRESENTATION AND INTERPRETATION.....	26

4.1 Introduction	26
4.2.1 Response rate.....	26
4.2.2 Gender of the Participants	27
4.2.3 Age of the Respondents	27
4.2.4 Highest Level of Education.....	28
4.2.5 Years in Coffee Business	28
4.3 Farmers income level and saving behaviour among coffee farmers in coffee cooperative societies	29
4.3.2 Extent to which farmers income level influence saving behaviour among coffee farmers in coffee cooperative societies.	30
4.4 Governance in coffee cooperative and saving behaviour among coffee farmers.....	31
4.4.1 Extent to which Governance in coffee cooperative influence saving behaviour among coffee farmers.....	32
4.5 Farmers financial education and saving behaviour among coffee farmers.....	33
4.5.1 Extent to which farmers financial education influence saving behaviour among coffee farmers	34
4.6 Individual Future Expectation and Saving Behaviour Among Coffee Farmers	35
4.6.1 Extent to which individual future expectationand saving behaviour among coffee farmers	36
CHAPTER FIVE.....	38
SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS ANDRECOMMENDATIONS.....	38

5.1	Introduction	38
5.2	Summary of the Findings	38
5.2.1	Farmers income level and saving behaviour among coffee farmers in coffee cooperative societies 38	
5.2.2	Governance in coffee cooperative and saving behaviour among coffee farmers.....	38
5.2.3	Farmers financial education and saving behaviour among coffee farmers.....	39
5.2.4	Individual future expectationand saving behaviour among coffee farmers	39
5.3	Discussions of Findings	39
5.3.1	Farmers Income Level and Saving Behaviour Among Coffee Farmers in Coffee Cooperative Societies	39
5.3.2	Governance in Coffee Cooperative and Saving Behaviour Among Coffee Farmers	40
5.3.3	Farmers Financial Education and Saving Behaviour Among Coffee Farmers	40
5.3.4	Individual future expectation and saving behaviour among coffee farmers	41
5.4	Conclusion.....	41
5.5	Recommendation	42
5.6	Suggestion for Further Studies	42
	REFERENCES.....	43
	APPENDICES	50
	Appendix I: Letter of Introduction	50
	Appendix II: Questionnaire for Respondents.....	51
	Appendix III: Interview Schedule For Employees.....	56
	Appendix IV: Work Plan	57
	Appendix V: Krejcie & Morgan (1970) Population Sampling Table	58

LIST OF TABLES

Table 3. 1: Target Population	21
Table 3. 2: Sample Size.....	22
Table 3. 3: Operational Definition of Variables	24
Table 4. 1: Questionnaire Return Rate.....	26
Table 4. 2: Gender of the Participants.....	27
Table 4. 3: Age of the Respondents	27
Table 4. 4: Highest Level of Education.....	28
Table 4. 5: Years in Coffee Business	28
Table 4. 6: Farmers Income Level and Saving Behaviour Among Coffee Farmers in Coffee Cooperative Societies.....	29
Table 4. 7: Extent to which Farmers Income Level Influence Saving Behaviour Among Coffee Farmers in Coffee Cooperative Societies.....	30
Table 4. 8: Governance in Coffee Cooperative and Saving Behaviour Among Coffee Farmers..	31
Table 4. 9: Extent to which Governance in Coffee Cooperative Influence Saving Behaviour Among Coffee Farmers	32
Table 4. 10: Farmers Financial Education and Saving Behaviour Among Coffee Farmers	33
Table 4. 11: Extent to Which Farmers Financial Education Influence Saving Behaviour Among Coffee Farmers	34
Table 4. 12: Individual Future Expectation and Saving Behaviour Among Coffee Farmers	35
Table 4. 13: Extent to Which Individual Future Expectation and Saving Behaviour Among Coffee Farmers	36

LIST OF FIGURES

Figure 2. 2: Conceptual Framework	19
---	----

ABBREVIATIONS AND ACRONYMS

EFINA: Enhancing Financial Innovation & Access

FAO: Food and Agricultural organization

GDP: Gross Domestic Product

ICA: International Cooperative Alliance

LCH: Life-Cycle Hypothesis

NGO: Non-Government Organizations

UNCTAD: Nations Conference on Trade and Development).

ABSTRACT

The main purpose of this study was to establish factors influencing saving behaviour among coffee farmers in coffee cooperative societies in Kenya; a case of Manyatta Sub-county, Embu County. The study was guided by the following objectives; To determine how farmers income level influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county; To establish how governance in coffee societies influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county; To examine how farmers financial education influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county and to establish how individual future expectations influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county. The study embraced descriptive survey designed and target a population of 12,340 registered farmers in three coffee cooperatives and 44 employees. Based on the population size under consideration; 6,045 registered members(farmers) in Gakundu FCS the corresponding sample size are at least 357, New Kapingazi (1150) at 278 and Kibugu FCS ltd (5145) at 357, with a 95% confidence level and 5% percent margin of error. The study captured the entire population of employees which was 44. Therefore, the study interviewed a total sample size of 1036 respondents. Stratified random sampling was used in this study to identify the participants as it gives everyone in the population an equal chance to be selected as part of the sample that was ultimately used. Data was collected using structured questionnaires and interview schedules and generated both qualitative and quantitative data. Quantitative data was coded and entered into Statistical Packages for Social Scientists (SPSS Version 21.0) and analysed using descriptive statistics. The study found out that individual future expectation influenced savings behaviour among coffee farmers in coffee cooperatives societies most with 723(100%), followed by governance in coffee cooperatives 715(99%), then farmers financial education 707(98%) and lastly farmers income levels 679 (93%). The study concludes that most of the respondents saved one way or the other be it formal or informal. Their trust in financial institutions played a major role too in where they saved. Many of the respondents believed that their individual expectation, income level and financial literacy levels played a critical role towards their savings behaviour. The study recommends that there is a still need for coffee cooperatives continue providing financial literacy programs which can encourage the respondents to save.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Savings has variously been noted as important component to developing a strong rural financial system (Gonzalez-Vega 2003). Its mobilization by peasant farmers in agriculture has been difficult because of peculiarities of the sector and the conditions of small scale farmers. Agriculture is characteristically risky and the transaction cost of providing financial services to these farmers by formal financial institutions has remained high. This has led to the exclusion of small scale farmers by formal financial institutions. Savings is important for accumulation of capital required to generate future income, enable future consumption and to provide mechanism for managing risks.

Saving has a positive impact on the economy because funds that are placed in financial assets are then channelled through financial intermediaries to fund investments by firms. Subsequently, investments by firms will ultimately benefit the nation through higher productivity and economic growth. Furthermore, high savings can also hedge countries against economic downturns and financial crisis. One of the avenues to boost national saving is by encouraging individuals to increase personal saving (Davis & Hu, 2005). This can be achieved by implementing financial educational programs to increase individuals' financial literacy, i.e. to heighten understanding of their own financial circumstances, enable them to make financial plans, and choose the most appropriate financial instrument that will help them achieve their financial goals (Jonubi & Abad, 2013)

In the last decades, global inequality between the developed and the developing world has been the focus theme amongst scholars, newspapers, international organisations and celebrities in order to raise public awareness of this worldwide problem. The major gap between the income levels around the world and the increasing poverty rate have been the leading factors on global campaigns intended to half those figures. The benchmark of a daily income less than \$2 per person is created in order to categorise the world's poor people. In 2002, the World Bank announced that 2.5 billion people are living at this benchmark of \$2 a day, which counts for two-

fifths of the world population and 1.1 billion people of this category has to live on less than \$1 a day (Collins et al. 2009)

In recent years, economists, policy makers and governments in developing countries have recognised the increasing need to mobilize deposits, not only to boost domestic savings but also to spur and strengthen domestic financial institutions (Besley, 1995). This is informed by the fact that savings have long been alluded to as critical component of economic growth in any economy without which development is elusive. Indeed, savings have been assumed to have positive effects on economic growth, (Baharumshahet. Al 2003). The importance of savings in economic growth has been sustained from the classical times, where it is factored as one of the critical determinants of growth.

Globally, Coffee production is the mainstay of millions of people, the majority of who are found in the poorest countries of the world. Therefore, addressing the issue of equitable trading from lessons learnt in the past and considering the present and the future situations, throws a big challenge to all of us. For example, Kenya which is the origin of Arabica coffee producing the best Arabica in the world has 90% of its population living in the rural areas. Out of these, 36% live below the poverty line. The crisis facing the coffee industry has been characterized by massive over production, collapsing prices, deteriorating coffee quality, disease and above all the growing inequality in the coffee value-chain (United Nations Conference on Trade and Development (UNCTAD, 1999).

Ten years ago, developing countries captured 30% of the value of the coffee market compared to only 10% of what they capture today. For example, in Kenya, coffee contributed on average 60% of foreign exchange earnings and did so until in the year 2002 when its contribution fell to a mere 25%. This rapid fall, brought about social and economic imbalances in more than 3,000,000 smallholder Kenyan coffee farmers affecting their daily livelihoods (Karanja, 2002). For many of these coffee farmers, coffee meant not only money in their pockets but it also translated into ability to afford education, health care, food security and improved household standards of living.

In West Africa countries like Nigeria the formal system provides services to about 35% of the economically active population, which implies that the remaining 65% are excluded from access

to such financial services (CBN, 2005). The disadvantaged 65% often rely on the informal financial sector, comprising non-government organizations (NGO)-micro finance institutions, moneylenders, friends, and relatives. Cooperatives are formed for various social-economic and cultural reasons and are founded on mutual trust and voluntarily involvement in the activities and affairs of the group. Traditionally cooperatives were formed as a form of social security, pooling together resources and fundamentally to solve marketing challenges. These reasons are premised a set of principles adopted by The International Cooperative Alliance (ICA) Commission of 1966 which are vital for the running of a genuine cooperative society: Open and voluntary membership, democratic administration (one man, one vote), limited interest on share capital, payments of dividends and bonuses to members, promotion of education and cooperation with other cooperatives at local national and international levels.

In 1965, the government of Kenya identified co-operatives as the channel through which the majority of Kenyans could participate in economic development, social integration and cultural practices. This was through the session paper number 10 of 1965 on African Socialism. Marketing co-operatives were formed by small scale cash crop growers like coffee farmers. Such were primary cooperatives owned and controlled directly by members (Mullins, 2000). A Co-operative society is formed by people who come together mainly to provide convenient and efficient services to members. Mwaka (2017) indicated that amongst the formal financial service providers, Sacco's are fairly popular with households for not only credit but also savings. Co-operative is derived from the term co-operation.

1.2 Statement of the Problem

The importance of savings for economic development in Kenya needs no emphasis. It has, however, certain ramifications and implications. For instance, one of the main objectives of planned development in Kenya is to raise the income and consumption standards particularly of the poorer sections of the society. The needs of economic growth in terms of increased savings necessitates in the initial stages a rigorous restraint on the increase in consumption itself. Similarly, there are structural deficiencies and low capital stock particularly in the basic industries and infrastructure facilities. These require large amounts of capital investments especially in the high capital intensity areas (Boffa, 2003)

According to Burns (2000), coffee plays a crucial role in the livelihoods of millions of rural households across the developing world. In addition to the estimated 25 million small coffee farmers who depend directly upon coffee as their primary source of income, coffee contributes significantly to foreign exchange earnings and plays a leading role in determining opportunities for employment and infrastructure development in more than 50 developing countries. The breadth and intimacy of the relationship between coffee producers and a host of intermediary institutions along the coffee supply chain makes the sector of critical importance to sustainable development at the local, regional and global levels. Farmers need to improve their efficiency and innovation so as to increase their productivity. In order to do this, farmers need to build up capital stock on their farms from their own savings. This is because, not all farmers can get agricultural loans or credit from the lending institutions. This is even more so with respect to small- scale farmers. It is against this background this study establishes the factors influencing saving behaviour among coffee farmers in coffee cooperative societies in Kenya; a case of Manyatta Subcounty, Embu County.

1.3 Purpose of the Study

The main purpose of this study was to establish factors influencing saving behaviour among coffee farmers in coffee cooperative societies in Kenya; a case of Manyatta Sub-county, Embu County

1.4 Objective of the Study

The study was guided by the following objectives;

- i. To determine how farmerø income level influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county.
- ii. To establish how governance in coffee societies influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county.
- iii. To examine how farmerø financial education influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county.
- iv. To establish how individual future expectations influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county.

1.5 Research Questions

The study focused on the following questions;

- i. How does farmer's income level influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county?
- ii. How does governance in coffee societies influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county?
- iii. How does farmer's financial education influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county?
- iv. How does individual future expectations influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county?

1.6 Significance of the Study

This study may benefit growth and survival of the coffee cooperatives by enhancing financial accessibility to majority of Kenyans. It is expected that from the findings of the study, coffee cooperatives will be aware of the main issues that affect their growth and how the challenges can be addressed. The study may also benefit coffee farmers because the study provides important information on saving, governance, planning and financial education. The study may also benefit the government to come up with policies that assist to correct the situation or that complement the people's efforts.

1.7 Delimitation of the Study

The study took place in Manyatta Subcounty, Embu County. Manyatta Subcounty had 14 registered coffee cooperatives societies with a total of 39,504 registered members and 142 employees. The study targeted only three coffee cooperatives societies namely; Gakundu Farmers' Cooperative Society Ltd with a total population 6,045 registered members and 28 employees;

Kibugu Farmers' Cooperative Society Ltd with a total population of 5,145 registered members and 12 employees and finally New Kapingazi Farmers' Cooperative Society Ltd with a total population of 1,150 registered members and 4 employees (Department of Agriculture

Cooperatives Section, Embu County, 2018). The study only investigated the following factors; farmers income level, governance, financial education and individual future expectation.

1.8 Limitations of the Study

Some respondents were not willing to freely offer information required for this study. This was delimited by assuring the participants of the confidentiality of their responses. The researcher overcame this by booking appointments with the respondents in advance before distributing the questionnaires as well as agreeing with them on the best time to get back the questionnaire. Also, the respondents targeted in this study were reluctant in giving information fearing that the information being sought might be used to intimidate them or print a negative image about them. The researcher handled this by carrying an introduction letter from the University to assure them that the information they gave were to be treated with confidentiality and would be used purely for academic purposes.

1.9 Assumption of the Study

The study assumed that all the respondents were to answer all the questions as asked and honestly. It also assumed that some respondents were to be biased based on the questions. It also assumed that the relevant concerned authorities would give their full cooperation and that the gaps and challenges to be highlighted were to cause for review on plans and policies as well as the implementation process.

1.10 Definition of Significant Terms

Cooperative Societies: An autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise.

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

Future Expectation: The act or state of expecting or looking forward to an event as about to happen.

Governance: is how society or groups within it, organize to make decisions.

Income Level: The flow of cash or cash-equivalents received from work (wage or salary), capital (interest or profit)

Savings Behaviour: The share of disposable income not spent on consumption of consumer goods but accumulated or invested straight in capital equipment or in paying off a home mortgage, or not directly throughout purchase of securities.

1.10 Organization of the Study

The study consists of five chapters. Chapter One covers the background of the study, statement of the problem and purpose of the study. This is followed by the research objectives, research questions, justification of the study, limitations of the study, delimitations of the study, significance of the study, definition of significant terms and concludes with the organization of the study. Chapter Two covers the literature review from various sources to establish work done by other researchers, their findings, conclusions and identification of knowledge gaps which forms the basis of setting objectives and research questions of the study. The theoretical and conceptual frameworks are also explained.

Chapter Three covers the research design, target population of the study, sample size and sampling procedures. This is followed by data collection procedures, data collection instruments, validity of the instruments, reliability of instruments, data analysis techniques, ethical considerations and concludes with operational definition of variables. Chapter four covers the findings from data analysis, presentation of findings and interpretation of findings. It concludes with the summary of the chapter. Chapter five covers the summary of findings, discussions, conclusions and recommendations of the study. It concludes with suggested areas for further research and contribution to the body of knowledge.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covers relevant literature on the factors influencing saving behaviour among coffee farmers in coffee cooperative societies in Kenya. The chapter also offers theoretical review, empirical review, theoretical framework and conceptual frameworks on which the study is based.

2.2 Global Review of Saving Behaviour Among Coffee Farmers

Coffee is one of the world's most popular beverages and 80% of it is produced by 25 million smallholders. Around 125 million people worldwide depend on coffee for their livelihoods. It is the most valuable and widely traded tropical agricultural product and is mainly produced by smallholder farmers. Many of them however are unable to earn a reliable living from the coffee they produce. Coffee is well known for being a boom and bust commodity. Global coffee production varies from year to year according to weather conditions, disease and other factors, resulting in a coffee market that is inherently unstable and characterised by wide fluctuations in price. This price volatility has significant consequences for those who depend on coffee for their livelihood, making it difficult for growers to predict their income for the coming season and budget for their household and farming needs.

According to FAO (1995) savings are resources which one decides to put aside for investment purposes and not for luxury. What people save, avoiding to consume all their income, is called "personal savings". These savings can remain on the bank accounts for future use or be actively invested in houses, real estate, bonds, shares and other financial instruments. A study by EFINA (2011) found both savers and non-savers agreeing that personal savings plays an important role in people's lives. Savings ensures the continuity of a business as it provides fresh funds to grow the business. It helps in the attainment of set goals, and at the same time encourages financial discipline. Savings also act as a means of insurance, so that emergencies can be dealt with as they arise.

The rural household's decision to consume present or in the future is influenced by the current or permanent income. The significance of incentives as a determinant of savings is that although

there has been a long footing fright about the effects of the level of per family income upon proportion of income that is saved, there has been no comparable concern about the effect of variation in the relative prices of new income streams upon savings and investment. The saving can be most often determined by the demographic features like the sex ratio, the age distribution, and the rate of dependant population.

Agrawal et.al (2007) discussed about the individual country analysis of the savings behaviour in five main South Asian countries, namely India, Pakistan, Bangladesh, Sri Lanka and Nepal, using modern time series procedures. They studied the impact of the real interest rate on savings to be minor and inconclusive in direction. The savings rate in South Asia lies in the low to medium range and is comparatively lower than in some other developing countries, particularly China and in countries of East/ South East Asia where the savings rates are in the range of 30 to 40 %. Savings Rate, Real Income per Capital and Growth Rate, Demographics, Foreign Savings as Share of GDP, Share of Agriculture in GDP, Financial variables and Savings Rate, Bank Branch Density, Financial Sector Development, Real Interest Rates, Inflation Rate, are the following determinants of saving revealed by the study

Chandra and Long (2003) examined the determinants of household saving in the process of economic development, in the beam of the Taiwanese experience for the duration of the period 1952-1999. They found that the household saving rate rises with both the intensity and the rate of augment of household disposable income and that the real deposit rate has a significant affirmative impact on saving. Public saving, they revealed seems to throng out private saving, but less than proportionately and that while both old- and young-dependency in population have a off-putting impact on the saving rate, the level of the impact of the former is far greater than with the intention of the latter. As a final point, they concluded that improved accessibility of social security provisions and improved credit availability in addition appear to cut saving.

Nga (2007) examined a general idea of household saving in South Africa intended for the phase 1983 to 2003. She identifies the main factors responsible for the lack of a commitment to saving which are particularly relevant in the case of poor households. The major factors are: lack of income (due to unemployment), inadequate income, over-consumption (due to obvious

consumption, procedural rationality and the bandwagon effect) and market failures, such as unfinished or even no information, lack of financial literacy, cultural and political factors.

Komicha (2007) examined to understand and explain farm household economic behaviour with reference to saving, credit and production efficiency under imperfect financial market conditions based on data obtained from farm household survey conducted in two districts of south-eastern Ethiopia from September 2004 to January 2005. Data was analyzed using stochastic frontier analysis and limited dependent variable econometric tools where farm household saving behaviour and its determinants were studied. Factors like the interest rate, loan processing time, type of loan, credit information and loan size, significantly affected this borrowing behaviour of the farm households.

The study used farm household survey data collected using structured questionnaire, which covered crop and livestock production, off-farm and non-farm activities, income, consumption, saving and borrowing activities of the farm households. The farm households were randomly selected from six Farmers Associations (FAs), based on agro-ecological zones of the two districts ó four from Merti and two from Adamitullu-Jido-Kombolcha. As evident in this Article, about 62% of the farm households had savings in financial and physical assets but almost all farm households (about 90%) had savings held informally. This was explained more by problems of incentives and opportunities to save than by their ability to save. It suggested that financial institutions with easy access, low transaction costs, higher real returns on savings and convenient withdrawal of savings may provide incentives for those who hold financial savings informally to channel their savings into the formal institutions.

2.3 Coffee Production in Kenya

Coffee is one of the major key players in the agricultural sector in Kenya, employing many people and contributed about 5% of export revenues in 2003. The crop was the first major export in Kenya and has remained an important part of the Kenyan economy throughout its history. Its farming is mainly done by small-scale farmers organized into co-operative societies who account for 60% while 40% is done by large scale farmers at plantation or estates level. (Nyangito, 2005).

Kenya coffee is worldily known for its high quality that makes it ideal among other brands. It is arguably the best coffee in the world and always fetches high premium prices in the world market. Coffee was the leading export crop and foreign exchange earner in Kenya from 1963 up to 1988. Between 1975 and 1986, it contributed over 40% of the total Kenyan exports value. It earned about KShs.107 billion, which was about 10% of agriculture's share of GDP between 1987/88 and 1997/98. (Republic of Kenya 1998).

According to the Kenya Economic Survey (2013) coffee exports account for approximately five percent of all exports from Kenya. In addition, the coffee industry, due to its forward and backward linkages, directly and indirectly benefits about six million people in the country. In terms of production, Kenya grows mainly the *Arabica* variety. The predominant commercial cultivars are the *SL28*, *SL34*, *K7* and *Ruiru II*. Pockets of the *Blue mountain* and *French mission* however still exists in the older establishments. A new variety, *Batian*, that was released by the Coffee Research Foundation of Kenya (CRFK) in 2011 is also being promoted.

Kenya's coffee is characterized by a dual production system comprising of co-operative societies, which service most of the small-scale farmers and the large-scale coffee estates. The cooperative societies process their coffee through their factories, serve as the custodians of the coffee for their members and are supposed to benefit individual members through economies of scale. Each cooperative owns and manages one or more wet-processing factories. According to the CBK, estimates there are currently over 700,000 small holders who produce on individual plots of less than 2 hectares and market their coffee through 450 active Co-operative Societies. Within the large-scale sub sector, there are 3,300 small to medium estates with farm sizes ranging from 5 to 10 hectares and about 100 large estates with sizes of between 10 hectares and over 200 acres. On average, smallholders (co-operatives) produce about 56% of Kenya's coffee while 44% of the production is under the estates sub-sector.

This is a shift from a decade ago when smallholders were producing about 66% of the total production (see table 2.1).

Table 2.1 Table Coffee Production in Kenya

Year	Estates production (Metric tons)	Small holder production (Metric tons)	Total (Metric tons)	Hectares	Productivity (kgs/ ha)
2003/2004	18,473.0	29,958.0	48,431.0	170,000	284.89
2004/2005	20,745.0	24,500.0	45,245.0	170,000	266.15
2005/2006	21,975.0	26,860.0	48,835.0	170,000	287.26
2006/2007	23,850.0	29,150.0	53,000.0	170,000	311.76
2007/2008	18,900.0	23,100.0	42,000.0	170,000	247.06
2008/2009	25,650.0	32,350.0	58,000.0	170,000	341.18
2009/2010	19,720.0	22,280.0	42,000.0	108,784	386.08
2010/2011	16,690.0	19,630.0	36,320.0	108,784	333.87
2011/2012	25,001.0	31,256.0	56,257.0	109,795	512.38
2012/2013	13,773.0	26,092.0	39,865.0	109,795	363.09
2013/2014	16,805.0	32,652.0	49,457.0	110,000	449.61
2014/2015	14,808.0	27,230.0	42,038.0	113,000	372.01
2015/2016	15,267.0	30,758.0	46,025.0	113,000	407.30

Source: CBK Statistics (Various)

In 2007 coffee was the second highest contributor to the agricultural sector and the fourth foreign exchange earner to the economy after tourism, tea and horticulture respectively. Coffee has contributed immensely to the Kenyan economy due to its contribution to foreign exchange earnings, farm incomes, and employment. The crop has also led to foundation of many other economic development activities in coffee growing areas of the country (Republic of Kenya, 1995). More than 65% of Kenyans living in the rural areas derive their livelihoods from farming

and related activities. With a contribution of 24% of GDP directly and another 27% indirectly, agriculture is the main productive sector upon which the success of Vision 2030 is anchored. The sector also remains critical to the attainment of the 10% economic growth the country is targeting from the year 2009 to 2030 (Republic of Kenya, 2008).

2.4 Farmers income level and saving behaviour among coffee farmers

According to Lusardi and Browning (1996) the distribution of saving across income groups shows a very strong positive relationship between income and saving. In particular, a large proportion of total saving is due to families in the top part of the income distribution. This is supported too by Avery and Kennickell (1991), an overwhelming proportion of total saving is due to top income decile of families. The same finding is reproduced in Bosworth, Burtles & Sabelhaus (1991) where they find that saving is usually negative for the first and second income quintile and highest in the top quintile. The aforementioned studies show that income is positively related to individual saving, simply because people have or should have more money to save. So they may be able to save more, or at least have some saving. A rising income will often be accompanied by increased saving, and a falling income by decreased saving, on a greater scale at first than subsequently. Increases in current income increase both consumption and saving. Because the marginal propensity to consume the fraction of additional income consumed is less than 1. Higher expected future income raises current consumption even at the same current income level, so current saving declines (Modigliani & Brumberg, 1954).

Katona (2008) states that the effects of income on savings decisions can be summarized into 3 different hypotheses. Hypothesis I: A decline in income will tend to lead to a reduction in the amounts saved or to a change from saving to dissaving. This will be the case particularly if those whose income declined are optimistic (consider the decline in their income temporary).

Hypothesis 2: An increase in income, and especially a large increase, may result in a reduction of the amounts saved or even in a change from saving to dissaving. In place of a smooth adjustment to the new income level, such behavior may occur especially if people believe that their financial situation improved permanently or if they anticipate further income increases

Hypothesis 3: Expected income declines will tend to increase the amounts saved, irrespective of past income changes. These hypotheses have the advantage of linking the analysis of the

consumption function with business cycle theory. This means, however, that they must be tested at different phases of the cycle, so that the conditions under which they are valid may be determined.

2.5 Governance in Coffee Cooperatives and Saving Behaviour Among Coffee Farmers

Cooperative governance can be viewed in terms of the management committee who are elected members of the cooperative society and the cooperative manager who is an employee of the cooperative society and not necessarily a member of the cooperative society. The Management Committee is the highest elected executive institution in a cooperative enterprise. Members of the cooperative society are eligible for election into the management committee which acts on behalf of the members.

These factory farmers' representatives form the cooperative society management committee which manages the affairs of the society on behalf of the members. Everything done in the cooperative must be approved by the management committee (Koopmans, 2006). The management committee ensures that decisions taken can in fact be executed. The Management committee must guarantee a close correlation between theory and practice, between decision and execution. It is always good management policy to view every decision action in the context of the total activities of the enterprise, present and future. In this case, the management committee must seek to discover the correlation between current actions and their future consequences (Hussi, Murphy, Lindberg & Brenneman, 1993).

The cooperative Manager is a paid officer in the enterprise (Kegonde, 2005). Most farmers have become more business-minded as their own farm operations grow. They give more attention to their cooperative's management. They employ managers with more training and expect them to improve their knowledge and skills. Also, a growing number of cooperative managers seek to become more proficient in managing the affairs of their cooperatives (Porvali, 1993).

Public concern about food safety, pollution control, health and the environment, monopoly, standardization procedures and related issues focuses attention on the competence, integrity, and behavior of cooperative managers. As a result, cooperatives are becoming more aware of the need to indemnify cooperative managers who are subject to increased legal exposure. The growing impact of world markets, even on the individual family operation, is changing the

management perspective from the local cooperative level. The local is being viewed less and less as an independent entity and more and more as part of a system (Lindberg, 1993). Poor governance and inefficiencies in cooperatives result in delays in supplying inputs to farmers, credit processing and payment to farmers for their produce.

High costs of fertilizer and pesticides has, in some cases, forced the farmers to reduce application of these inputs, resulting in delivery of low quality cherries and substantial loss of small cherries during pulping stage in processing. The farmers get their earnings once a year, making it difficult for them to meet periodic expenses they incur both at the farm and at personal levels. In addition, there is still tight regulation in today's Kenyan coffee sector. The regulations not only all require smallholders to process their coffee through a cooperative, but prohibit direct purchase from farmers. Farmers also have limited information on the coffee market and existing member associations are structurally weak to act as feedback mechanism to farmers (Chege, 2012).

2.6 Farmers financial education and saving behaviour among coffee farmers

It is hypothesized that education level has a positive impact on individual saving. Higher education levels imply that people have a better understanding of their personal financial matters, so they will be better able to make financial decisions and have more ability to plan for their future. There is evidence to show that more educated people can manage their money in terms of insuring, investing, saving and budgeting (Hogarth & Hilgert, 2002).

Results of a study by Lusardi and Mitchell (2007) show that people with a low level of education, females, African-Americans and Hispanics, demonstrate low levels of financial literacy, which subsequently affect financial decision-making. Results of the study found that these groups of respondents fail to plan properly for their retirement period, have less participation in the stock market, and have poor borrowing behavior, possibly due to lack of knowledge in basic financial concepts. Another study conducted on financial literacy of Malaysian degree students, explored student's background, financial attitude and knowledge (Ibrahim, Harun, & Isz, 2010). The study found that most of the students required more proper practice on money management skills.

Chen and Volpe (1998) examined financial literacy amongst more than 900 students in 14 American universities. By linking the scores to individuals' socioeconomic and demographic attributes, results showed that young females with non-business majors and little work experience have very low degrees of financial literacy. In a survey of an Australian regional university, most of the participating students scored well for financial literacy and knowledge. Business students scored better in comparison with other majors (Delpachitra & Beal, 2010). From the above literature, it can be clearly seen that there is a strong correlation between one's education level and their financial decision-making capabilities. It seems the higher one goes academically the better their financial decision-making skills.

2.7 Individual future expectations and saving behaviour among coffee farmers

According to Keynes (1937) people save for the following reasons to build up a reserve against unforeseen contingencies, to provide for an anticipated future relationship between the income and the needs of the individual, to enjoy interest and appreciation, to enjoy gradually increasing expenditure, to enjoy a sense of independence, bequeath a fortune, to satisfy pure miserliness and to accumulated deposits to buy houses, cars and other durables which is the most common. Saving money is rooted in the psychological need and desire to be financially stable and having the ability to purchase and fulfil one's needs or desires. The security that accompanies saving is one of the motivational principles of behind saving money for the things one wants and needs. Various reasons for saving money motivate individuals to make certain that money is budgeted accordingly, and savings are kept earmarked for use later.

Home ownership is one of the motivations for saving money stemming from the desire to become a homeowner. The cost associated with purchasing a home is usually high; requiring you to save to help ensure home ownership can become a reality. The down payment required to purchase a home can run to more than 20% of the selling price which in some cases is usually high. (Porpiglia, Martha, & Ziegelmeyer, 2017). Another reason is usually retirement. The desire to retire with enough money saved up is a motivation for many people's savings. You need to save money to ensure that once you stop working, you will have enough money in the bank or in investments to fund your lifestyle for the rest of your life. Many people are motivated to save money for retirement so that they can afford the things they both want and need (Luu, Lowe, Butler & Byrne, 2017). Travel and luxury are motivations for some people. Motivation for

saving comes because they want nice things. Not everyone craves luxury items or travel. However, for those who enjoy such things, saving money may be a necessity. Planning for a big trip or a large purchase, such as a boat or car, can provide the motivation one needs to be disciplined in terms of saving money (Freshman & Clingen, 2017)

Older parents demonstrate a strong desire to help their children and grandchildren through important or difficult transitions to "build or rebuild secure lives and futures". Those with young children are motivated by the prospect of that child eventually going off to college. The rising cost of a college education drives people to save money so that a child can attend college without having to worry about finances. Some parents also are motivated to save for other things for their children such as a car, braces, a wedding or helping grown children buy a home. (Ploeg, Campbell, Denton, Joshi & Davies, 2004) Unexpected events and situations can arise at any time. Situations such as a job loss, sickness, long-term illness and even economic issues can all cause a financial shift. Having a healthy savings account at the ready can help you get through challenging financial situations and health situations (Smith, 1999).

2.8 Theoretical Framework

Saving decisions are at the heart of both short- and long-run macroeconomic analysis (as well as much of microeconomics). In the short run, spending dynamics are of central importance for business cycle analysis and the management of monetary policy. And in the long run, aggregate saving determines the size of the aggregate capital stock, with consequences for wages, interest rates, and the standard of living. Aggregate savings for an economy is a predominant component. The problem of savings behaviour can be taken up both at the micro and macro level. The following two of the approaches are now well established by the Relative Income Hypothesis by Duesenberry (1949), the Permanent Income Hypothesis by Friedman (1957) and the Life Cycle Hypothesis by Ando and Modigliani (1963). These main theories that currently exist on the determinants of savings behaviour can be explained as:

2.8.1 The Life-Cycle Hypothesis (LCH)

This is an economic theory that pertains to the spending and saving habits of people over the course of a lifetime. The concept was developed by Franco Modigliani and his student Richard Brumberg. LCH presumes that individuals base consumption on a constant percentage of their

anticipated life income. An example supporting the hypothesis is that people save for retirement while they are earning a regular income (rather than spending it all when it is earned). This simple theory leads to important and non-obvious predictions about the economy as a whole, that national saving depends on the rate of growth of national income, not its level, and that the level of wealth in the economy bears a simple relation to the length of the retirement span. The life-cycle hypothesis remains an essential part of economists' thinking.

With population growth, there are more young people than old, more people are saving than are dissaving, so that the total dissaving of the old will be less than the total saving of the young, and there will be net positive saving. If incomes are growing, the young will be saving on a larger scale than the old are dissaving so that economic growth, like population growth, causes positive saving, and the faster the growth, the higher the saving rate. In fact, it doesn't much matter whether it is population growth or growth in per capita incomes, what matters for saving is simply the rate of growth of total income. The relationship between saving and the age-structure of the population is also a current topic of debate. Cross-country regressions regularly find that aggregate saving rates are lower when the population share of the elderly is high and when the population share of children is high, predictions that are in accord with the life-cycle theory if saving takes place in middle-age when earnings are high, after the child-rearing ages, but prior to retirement.

2.9 Conceptual Framework

An operational framework is a brief explanation of the relationships between the variables identified for study in the statement of the problem, objectives and research questions. In this research, the operational framework was the concise description of the phenomenon under study accompanied by visual depiction of the variables under study (Mugenda & Mugenda 2008). The figure is the diagrammatic representation of the relationship between the independent and the dependent variables. The arrows indicate the direction of influence and thus showing the independent variables influence the dependent variable.

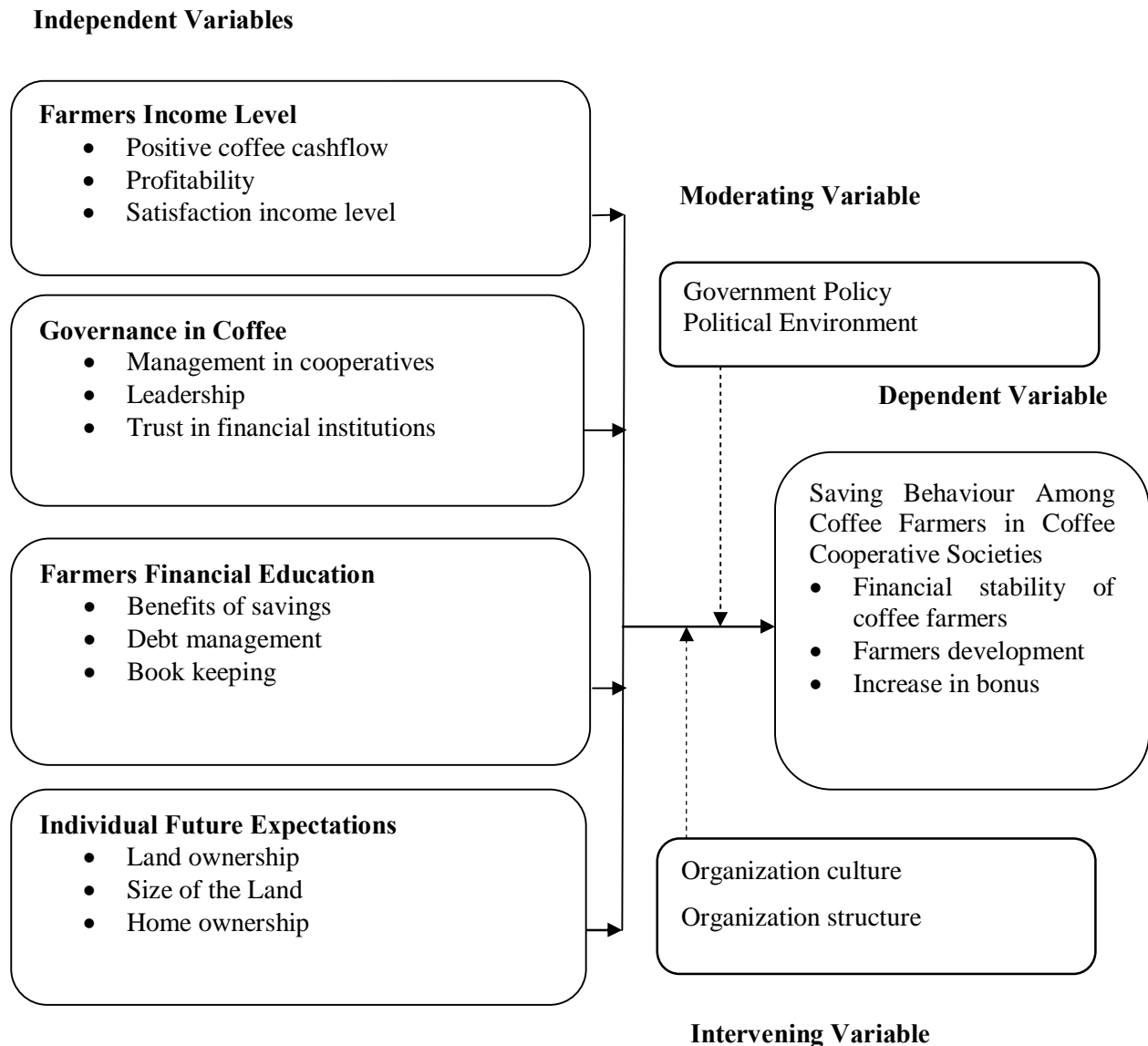


Figure 2. 1: Conceptual Framework

2.10 Summary and Research Gap

Agrawal et.al (2007) discussed about the individual country analysis of the savings behaviour in five main South Asian countries, namely India, Pakistan, Bangladesh, Sri Lanka and Nepal, using modern time series procedures. They studied the impact of the real interest rate on savings to be minor and inconclusive in direction. The savings rate in South Asia lies in the low to medium range and is comparatively lower than in some other developing countries, particularly

China and in countries of East/ South East Asia where the savings rates are in the range of 30 to 40 %. Savings Rate, Real Income per Capital and Growth Rate, Demographics, Foreign Savings as Share of GDP, Share of Agriculture in GDP, Financial variables and Savings Rate, Bank Branch Density, Financial Sector Development, Real Interest Rates, Inflation Rate, are the following determinants of saving revealed by the study.

Nga (2007) examined a general idea of household saving in South Africa intended for the phase 1983 to 2003. She identifies the main factors responsible for the lack of a commitment to saving which are particularly relevant in the case of poor households. The major factors are: lack of income (due to unemployment), inadequate income, over-consumption (due to obvious consumption, procedural rationality and the bandwagon effect) and market failures, such as unfinished or even no information, lack of financial literacy, cultural and political factors.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology adopted. This involves the identification and selection of the most appropriate approach. The process includes a description of the population to be studied, the sample size and a description of how data is collected and analysed. Finally, the researcher gives a summary of the entire process, from the introduction to the final stage of data analysis.

3.2 Research Design

Kombo (2006) defines research design as the scheme, outline or plan that is used to generate answers to research problems. It is an arrangement of conditions of data collection and analysis. The study embraces descriptive survey designed to assess the nature and development factors influencing saving behaviour among coffee farmers in coffee cooperative societies in Kenya; a case of Manyatta subcounty. Descriptive research studies are designed to obtain pertinent and precise information concerning the current status of a phenomenon and wherever possible to draw a valid general conclusion from the facts discovered (Gay, 1992; Kombo & Tromp, 2006).

3.3 Target Population

Thornhill, (2009) defines population as a total set of elements about which some inferences may be drawn after a scientific inquiry. In this case, population elements refer to the subjects. The study targeted a population of 12,340 registered farmers in three coffee cooperatives and 44 employees.

Table 3. 1: Target Population

Coffee Cooperative Societies	Farmers	Employees
Gakundu FCS ltd	6,045	28
New Kapingazi FCS ltd	1,150	4
Kibugu FCS ltd	5,145	12

Total	12,340	44
--------------	--------	----

Source; Department of Agriculture, Cooperatives Section, Embu County,2018

3.4 Sample Size and Sampling Procedures

The section describes the sample size and the sampling procedures the study adopted.

3.4.1 Sample Size

A sample is a smaller group or sub-group obtained from the accessible population (Mugenda and Mugenda, 2008). The study was guided by the Krejcie and Morgan (1970) sample size table. Based on the population size under consideration; 6045 registered members(farmers) in Gakundu FCS Ltd the corresponding sample size was at least 357, New Kapingazi(1150) at 278 and Kibugu FCS ltd(5145) at 357, with a 95% confidence level and 5% percent margin of error. The study captured the entire population of employees which 44. Therefore, the study interviewed a total sample size of 1036 respondents.

Table 3. 2: Sample Size

Coffee Societies	Cooperative	Target Population(Members)	Sample size by Kraejcie and Morgan Table (Members)
Gakundu	FCS ltd	6045	357
New Kapingazi	FCS ltd	1150	278
Kibugu	FCS ltd	5145	357
Total		12,340	992

Source; Department of Agriculture Cooperatives Section Embu County,2018

3.4.2 Sampling Procedures

Sampling procedures involve defining the sampling techniques, the population, and the instrumentation and procedures used to obtain the data (Powell &Connaway 2004). Stratified random sampling was used in this study to identify the participants as it gives everyone in the population an equal chance to be selected as part of the sample that was ultimately used. Stratified random sampling is a technique whereby a population is divided into mutually

exclusive groups called strata and then a simple random or systematic sample is selected from each group or stratum (Johnson & Christensen 2004).

3.5 Data Collection Instruments

Data was collected using structured questionnaires. Structured questionnaires refer to questions which are accompanied by a list of all possible alternatives from which the respondents select the answer that best describe their situation, (Mugenda & Mugenda, 2018). Structured questions are easier to analyse since they are in the immediate usable form (Orodho & Kombo, 2002). Questionnaires were administered to the respondent to complete the questions themselves, the questionnaires were hand delivered. Secondary data was collected through reviews of both empirical and theoretical data from books, journals, magazine and the internet.

3.5.1 Validity of the Instruments

According to Komp and Tromp (2009), validity of a test is a measure of how well a test measures what it is supposed to measure. To ascertain the validity of the research instruments, the researcher made sure that the questionnaire and the interview guides covered the breadth of the content area and that they were completely aligned to the objectives of the study. The researcher also had the questionnaires and the interview guides reviewed by research supervisors who were experts in the area of study. Their suggestions and recommendations were incorporated in the draft instruments to enhance content validity.

3.5.2 Reliability of the Instrument

Copper and Schindler (2012) defines reliability as the accuracy and precision of a measurement procedure. It measures the degree to which a research instrument gives consistent results. The researcher was to use Cronbach to determine reliability, according to Seifer, (2012) a construct composite reliability co-efficient (Cronbach alpha) of 0.6 or above, for all the constructs, was considered adequate for this study.

3.6 Data Collection Procedures

The researcher obtained the introduction letter from the University after that, the research permit was sought from the National Council for Science and Technology to go to the field for data collection. The department of the Agriculture and Cooperatives Embu county was informed on

the same seeking to give a letter of consent before commencing the research. The researcher made prior arrangements with the administrators of the selected participants to establish a working relationship with them so that the instruments be administered in the researcher's presence. The sample participants were visited, and the questionnaires administered to the respondents mentioned in the sampling procedure. The respondents were assured of maintenance strict confidentiality. After completion of the test, the researcher collected the questionnaires to maximize the return rate of the instrument.

3.7 Data Processing and analysis.

Data analysis is the whole process, which starts immediately after data collection and ends at the point of interpretation and processing data, (Cresswell, 2015). Therefore, before processing the responses, the completed questionnaires and interview schedules were edited for completeness and consistency. The study generated both qualitative and quantitative data. Quantitative data was coded and entered into Statistical Packages for Social Scientists (SPSS Version 21.0) and analyzed using descriptive statistics. Qualitative data was analysed based on the content of the responses. Responses with common themes or patterns were grouped together into coherent categories. Descriptive statistics involved the use of absolute and relative (percentages) frequencies and Quantitative data was presented in tables and explanation presented in prose.

3.8 Ethical Consideration

The study was professionally done with the respondents duly informed of their rights including voluntary participation in the study. Consent was sought from authorities before gaining access to data collection sites in company. For the purpose of this study, approval was sought from the University and a letter granted to allow the researcher to carry out the research. The findings of this study were not doctored to fit any pre-conceived ends.

3.9 Operational Definition of Variables

Table 3. 3: Operational Definition of Variables

Objectives	Type of Variable	Indicator	Measuring Indicators	Tools of analysis
To determine how farmers income level influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county.	Independent	farmers income level	Positive coffee cashflow Profitability Satisfaction income level	Percentages Mean score
To establish how governance in coffee societies influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county.	Independent	governance in coffee societies	Management in cooperatives Leadership Trust in financial institutions	Percentages Mean score
To examine how farmers financial education influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county.	Independent	farmers financial education	Benefits of savings Debt management Book keeping	Percentages Mean score
To establish how individual future expectations influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county.	Independent	individual future expectations	Land ownership Size of the Land Home ownership	Percentages Mean score

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter present the analysis, presentation and interpretation of the findings of the study. The purpose of this study was to investigate factors influencing saving behaviour among coffee farmers in coffee cooperative societies in Kenya; a case of Manyatta Subcounty, Embu County. A descriptive analysis of the general information is first presented. The rest of the chapter is thematically presented based on the research objectives and research questions

4.2 Demographic Information

The general information presented in this section includes gender, age, level of education and years in coffee business

4.2.1 Response Rate

The study targeted a total sample size of 1036 respondents (44 employees and 992farmers), from that sample size 764 respondents (41 employees and 723 coffee farmers) submitted the questionnaires making a response rate of 74%. The results are presented in Table 4.1

Table 4. 1: Questionnaire Return Rate

Categories	Sample size	Returned	Not returned	Percentage Return Rate
Employees	44	41	3	93
Coffee Farmers	992	723	269	73
Total	1036	764	281	74

The finding in Table 4.1 indicate 764 (74%) response rate was good and representative and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This implies that majority of the respondents filled the questionnaires and the return rate was appropriate for data analysis.

4.2.2 Gender of the Participants

The study sought to establish the gender of the participants. The findings are as presented in Table 4.2

Table 4. 2: Gender of the Participants

Gender	Frequency	Percentage
Male	403	53%
Female	361	47%
Total	764	100%

Based on the finding in table above 4.2 out of the 764 respondents who participated in the study 403(53%) where male while 361(47%) where female. This implies that majority of that there was gender balance in terms of participation.

4.2.3 Age of the Respondents

The respondents were asked to indicate their ages from among choices of age classes given by the researcher and the results are presented in Table 4.3

Table 4. 3: Age of the Respondents

Age	Frequency	Percentage
20-30 yrs	108	14%
31-40 yrs	167	22%
41-50 yrs	267	35%
51 and above	222	29%
Total	764	100%

The findings show that 108(14%) respondents were aged between 20-30 years of age,167(22%) were between the age of 31-40 years,267(35%) were between the age of 41-50 years and finally 222(29%) were 51 years and above. This shows that majority of respondents in the coffee business were of the age between 41 years and above.

4.2.4 Highest Level of Education

The study also sought to establish the highest level of education of the respondents. The findings are as presented in Table 4.4

Table 4. 4: Highest Level of Education

Level of Education	Frequency	Percentage
Primary	105	14%
Secondary	145	19%
Diploma	279	37%
Degree	212	28%
PhD	23	3%
Total	764	100%

According to the findings in Table 4.4 105(14%) respondents had a primary level of education,145(19%) had a attained a secondary level of education,279 (37%) had attained a diploma level,212(28%) had a degree level of education and finally 23(3%) had attained a PhD level of education. This implies that majority of the respondents involved in coffee business at least had attained a diploma level of education therefore they had different skills that they would apply in their field of work.

4.2.5 Years in Coffee Business

The study further sought to establish how long the respondents had been in the coffee farming business. The results are presented in Table 4.5

Table 4. 5: Years in Coffee Business

Years in Coffee Business	Frequency	Percentage
1-5 years	108	14%
5-10 years	276	36%
11 and above	380	50%
Total	764	100%

From the findings in Table 4.5 above, 108(14%) respondents had been in the coffee business for a period of 1-5 years, 276 (36%) for 5 to 10 years and 380(50%) for a period of 11 years and above. This implies that most of the respondents had been in the coffee business for a long time hence had sufficient knowledge and skills of coffee farming.

4.3 Farmers Income Level and Saving Behaviour Among Coffee Farmers in Coffee Cooperative Societies

The first objective, the study sought to determine how farmers income level influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county. The respondents were given four items and were requested to state on a Likert scale as to whether they 1 ó Strongly Agree; 2 ó Agree; 3 ó Neither Agree nor Disagree; 4 ó Disagree; 5 ó Strongly Disagree.

Table 4. 6: Farmers Income Level and Saving Behaviour Among Coffee Farmers in Coffee Cooperative Societies

	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
Coffee business generates positive cash flow	402	56	256	35	65	9	0	0	0	0
Coffee business has been profitable	328	45	180	25	215	30	0	0	0	0
Income gained after selling coffee is satisfactory	109	15	78	11	345	48	125	17	66	9

As per the findings in Table 4.6, 402(56%) of the participants Strongly Agreed that Coffee business generates positive cash flow,256(35%) agreed,65(9%) were neutral. On the statement whether Coffee business has been profitable to the farmers 328(45%) strongly agreed,180(25%), 215(30%) were neutral. On the statement whether income gained after selling coffee is

satisfactory to farmers 109(15%) strongly agreed,78(11%) agreed, 345(48%) were neutral,125(17%) disagreed and 66(9%) strongly disagreed. This implies that farmers in Manyatta subcounty, Embu county generates a positives income level from coffee business. Avery and Kennickell (1991), states that an overwhelming proportion of total saving is due to top income decile of families. A rising income will often be accompanied by increased saving, and a falling income by decreased saving, on a greater scale at first than subsequently. Increases in current income increase both consumption and saving.

4.3.2 Extent to which farmers income level influence saving behaviour among coffee farmers in coffee cooperative societies.

The respondents were asked to indicate the extent to which farmers income level influence saving behaviour among coffee farmers in coffee cooperative societies. The results are presented on Table 4.7

Table 4. 7: Extent to which Farmers Income Level Influence Saving Behaviour Among Coffee Farmers in Coffee Cooperative Societies

Responses	Frequency	%
Very great extent	679	93
Great extent	44	7
Moderate extent	0	0
Very low extent	0	0
Low extent	0	0
Total	723	100

The findings indicated that out of the 723 farmers, 679(93%) respondents stated that farmers income level influence saving behaviour among coffee farmers in coffee cooperative societies to Very great extent and 44(7%) influenced at great extent. This implies that majority of the respondents (78%) agreed that coffee business is profitable and hence it influence their saving

behaviour. This goes in line with Katona (2008) who stated an increase in income will tend to lead to an increase in the amounts saved.

4.4 Governance in Coffee Cooperative and Saving Behaviour Among Coffee Farmers

The second objective of the study was to establish how governance in coffee societies influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county. The respondents were given four items and were requested to state on a Likert scale as to whether they 1 ó Strongly Agree; 2 ó Agree; 3 ó Neither Agree nor Disagree; 4 ó Disagree; 5 ó Strongly Disagree.

Table 4. 8: Governance in Coffee Cooperative and Saving Behaviour Among Coffee Farmers

	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
poor leadership in the cooperative societies affect saving behaviour	705	98	18	2	0	0	0	0	0	0
services offered by the cooperative societies and the customer care services are the best	67	9	123	17	323	45	210	29	0	0
Fully trust the staff	198	27	78	11	404	56	32	4	11	2

Based on the findings on Table 4.8, 705(98%) of the respondents strongly agreed that poor leadership in the cooperative societies affects saving behaviour and 18(2%) agreed. On whether services offered by the cooperative societies and the customer care services are the best 67(9%) strongly agreed,123(17%) agree,323 (45%) were neutral and 210(29%) disagreed. On the issues whether the farmers fully trust the staff 198(27%) strongly agreed,78(11%) agreed,404(56%)

neutral,32(4%) disagreed and 11(2%) strongly disagreed. This implies that there has been negative perception towards in coffee cooperatives and this influence saving behaviour of coffee farmers negatively. According to Hussi...et.al, (1993) stated that management committee must guarantee a close correlation between theory and practice, between decision and execution. It is always good management policy to view every decision action in the context of the total activities of the enterprise, present and future. In this case, the management committee must seek to discover the correlation between current actions and their future consequences.

4.4.1 Extent to which Governance in Coffee Cooperative Influence Saving Behaviour Among Coffee Farmers

The respondents were asked to indicate the extent to which governance in coffee cooperative influence saving behaviour among coffee farmers. The results are presented on Table 4.9

Table 4. 9: Extent to which Governance in Coffee Cooperative Influence Saving Behaviour Among Coffee Farmers

Responses	Frequency	%
Very great extent	715	99
Great extent	8	1
Moderate extent	0	0
Very low extent	0	0
Low extent	0	0
Total	723	100

The findings indicated that out of the 723 of participants, 715(99%) stated that governance in coffee cooperative influence saving behaviour among coffee farmers at very great extent and 8(1%) stated at great extent. These findings indicate that poor governance in coffee cooperatives influences negatively saving behaviour among coffee farmers. This goes in line with Chege (2012) who stated that poor governance and inefficiencies in cooperatives result in delays in supplying inputs to farmers, credit processing and payment to farmers for their produce.

4.5 Farmers Financial Education and Saving Behaviour Among Coffee Farmers

The third objective of the study was to establish how farmers financial education influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county. The respondents were given three items and were requested to state on a Likert scale as to whether they 1 ó Strongly Agree; 2 ó Agree; 3 ó Neither Agree nor Disagree; 4 ó Disagree; 5 ó Strongly Disagree.

Table 4. 10: Farmers Financial Education and Saving Behaviour Among Coffee Farmers

	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
Cooperatives educate me on some of the benefits of saving	305	42	200	28	98	14	115	16	12	2
educational programs have been beneficial to me	505	70	127	18	34	5	23	3	34	4
this information has motivated me save my income	672	93	28	4	12	2	7	1	4	1

As per the Table 4.10, 305(42%) of the respondents strongly agreed that cooperatives educate them on some of the benefits of saving, 200(28%) agreed,98(14%),115(16%) disagreed and 12(2%) strongly disagreed. On the statement whether educational programs have been beneficial to them 505(70%) strongly agreed,127(18%) agreed,34(5%) neutral,23(3%) disagreed,34(4%) strongly disagreed. On the issues on whether farmers financial education had motivated them save their income,672(93%) strongly agreed, 28(4%) agreed,12(2%) neutral, 7(1%) disagreed, 4(1%) strongly agreed. This implies coffee cooperatives societies has been providing sufficient and beneficial financial education to their members which motivates them to save. Education level has a positive impact on individual saving. Higher education levels imply that people have

a better understanding of their personal financial matters, so they will be better able to make financial decisions and have more ability to plan for their future. There is evidence to show that more educated people can manage their money in terms of insuring, investing, saving and budgeting (Hogarth & Hilgert, 2002).

4.5.1 Extent to Which Farmers Financial Education Influence Saving Behaviour Among Coffee Farmers

The respondents were asked to indicate the extent to which farmers financial education influence saving behaviour among coffee farmers. The results are presented on Table 4.11

Table 4. 11: Extent to Which Farmers Financial Education Influence Saving Behaviour Among Coffee Farmers

Responses	Frequency	%
Very great extent	707	98
Great extent	16	2
Moderate extent	0	0
Very low extent	0	0
Low extent	0	0
Total	723	100

The findings indicated that out of the 723 farmers, 707(98%) respondents stated that farmers financial education influence saving behaviour among coffee farmers in coffee cooperative societies to very great extent and 16(2%) influenced at great extent. This implies that coffee farmers in Manyatta Subcounty have financial and managerial skills which helps them to manage their coffee business hence influence the saving behavior positively. This goes in line with Lusardi & Mitchell (2007) who showed that people with a high level of education, demonstrate high levels of financial literacy, which subsequently affect financial decision-making. Results of the study found that these groups of respondents plan properly for their retirement period, participates more in the stock market, and have good borrowing behavior, possibly due to knowledge in basic financial concepts.

4.6 Individual Future Expectation and Saving Behaviour Among Coffee Farmers

The fourth objective of the study was to establish how individual future expectations influence saving behaviour among coffee farmers in coffee cooperative societies in Manyatta Sub-county. The respondents were given four items and were requested to state on a Likert scale as to whether they 1 ó Strongly Agree; 2 ó Agree; 3 ó Neither Agree nor Disagree; 4 ó Disagree; 5 ó Strongly Disagree.

Table 4. 12: Individual Future Expectation and Saving Behaviour Among Coffee Farmers

	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
Land ownership influence saving behaviour among coffee farmers	701	97	22	3	0	0	0	0	0	0
Size of land influence saving behavior among coffee farmers	715	98	8	2	0	0	0	0	0	0
Home ownership influence saving behavior among coffee farmers	620	85	103	15	0	0	0	0	0	0

Based on Table 4.12 majority of the participant 701(97%) strongly agreed that Land ownership influence saving behaviour among coffee farmers and only 22(2%) agreed. On the second indicator whether Size of land influence saving behavior among coffee farmers 715(98%) strongly agreed while 8(2%) agreed. On the third indicator whether home ownership influence saving behavior among coffee farmers 620(85%) strongly agreed and 103(15%) agreed. This

implies that individual future expectation is one of the motivations for saving money stemming from the desire to become a land owner, home owner and to buy other assets. The cost associated with purchasing a home is usually high; requiring you to save to help ensure home ownership can become a reality. The down payment required to purchase a home can run to more than 20% of the selling price which in some cases is usually high (Porpiglia, Martha, & Ziegelmeier, 2017). Another reason is usually retirement. The desire to retire with enough money saved up is a motivation for many people's savings. You need to save money to ensure that once you stop working, you will have enough money in the bank or in investments to fund your lifestyle for the rest of your life. Many people are motivated to save money for retirement so that they can afford the things they both want and need (Luu, Lowe, Butler & Byrne, 2017).

4.6.1 Extent to Which Individual Future Expectation and Saving Behaviour Among Coffee Farmers

The respondents were asked to indicate the extent to which individual future expectation and saving behaviour among coffee farmers. The results are presented on Table 4.13

Table 4. 13: Extent to Which Individual Future Expectation and Saving Behaviour Among Coffee Farmers

Responses	Frequency	%
Very great extent	723	100
Great extent	0	0
Moderate extent	0	0
Very low extent	0	0
Low extent	0	0
Total	723	100

Based on the findings 4.13 all the respondents 723(100%) indicated that Individual future expectation influence saving behaviour among coffee farmers. This implies that farmers save to build up a reserve against unforeseen contingencies, to provide for an anticipated future relationship between the income and the needs of the individual, to enjoy interest and appreciation, to enjoy gradually increasing expenditure, to enjoy a sense of independence,

bequeath a fortune, to satisfy pure miserliness and to accumulated deposits to buy houses, cars and other durables which is the most common. This goes in line with Freshman and Clingen, (2017) who stated that travel and luxury are motivations for some people. Motivation for saving comes because they want nice things. Not everyone craves luxury items or travel. However, for those who enjoy such things, saving money may be a necessity. Planning for a big trip or a large purchase, such as a boat or car, can provide the motivation one needs to be disciplined in terms of saving money.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS

ANDRECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, discussion, conclusions and recommendations drawn from the study.

5.2 Summary of the Findings

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

5.2.1 Farmers income level and saving behaviour among coffee farmers in coffee cooperative societies

The study found out that 402(56%) of the participants strongly agreed that coffee business generates positive cash flow,256(35%) agreed,65(9%) were neutral. On the statement whether coffee business has been profitable to the famers 328(45%) strongly agreed,180(25%), 215(30%) were neutral. On the statement whether income gained after selling coffee is satisfactory to farmers 109(15%) strongly agreed,78(11%) agreed, 345(48%) were neutral,125(17%) disagreed and 66(9%) strongly disagreed. The respondents were asked to indicate the extent to which farmers income level influence saving behaviour among coffee farmers in coffee cooperative societies the found out that 679(73%) respondents stated that farmers income level influence saving behaviour among coffee farmers in coffee cooperative societiesto very great extent and 44(7%) influenced at great extent.

5.2.2 Governance in coffee cooperative and saving behaviour among coffee farmers

The study found out that 705(98%) of the respondents strongly agreed that poor leadership in the cooperative societies affects saving behaviour and 18(2%) agreed. On whether services offered by the cooperative societies and the customer care services are the best 67(9%) strongly agreed,123(17%) agree,323(45%) were neutral and 210(29%) disagreed. On the issues whether the farmers fully trust the staff 198(27%) strongly agreed,78(11%) agreed,404(56%) neutral,32(4%) disagreed and 11(2%) strongly disagreed. The study also found out that out of

723 of participants, 715(99%) stated that governance in coffee cooperative influence saving behaviour among coffee farmers at very great extent and 8(1%) stated at great extent.

5.2.3 Farmers financial education and saving behaviour among coffee farmers

The study found out that 305(42%) of the respondents strongly agreed that cooperatives educate them on some of the benefits of saving, 200(28%) agreed,98(14%),115(16%) disagreed and 12(2%) strongly disagreed. On the statement whether educational programs have been beneficial to them 505(70%) strongly agreed,127(18%) agreed,34(5%) neutral,23(3%) disagreed,34(4%) strongly disagreed. On the issues on whether farmers financial education had motivated them save their income,672(93%) strongly agreed, 28(4%) agreed,12(2%) neutral, 7(1%) disagreed, 4(1%) strongly agreed.The findings indicated that out of the 723 farmers,707(98%) respondents stated that farmers financial Educationinfluence saving behaviour among coffee farmers in coffee cooperative societies to Very great extent and 16(2%) influenced at great extent.

5.2.4 Individual future expectationand saving behaviour among coffee farmers

The study found out that majority of the participant 701(97%) strongly agreed that land ownership influence saving behaviour among coffee farmers and only 22(2%) agreed. On the second indicator whether Size of land influence saving behavior among coffee farmers 715(98%) strongly agreed while 8(2%) agreed. On the third indicator whether home ownership influence saving behavior among coffee farmers 620(85%) strongly agreed and 103(15%) agreed. The study also found out that all the respondents 723(100%) indicated that individual future expectation influence saving behaviour among coffee farmers.

5.3 Discussions of Findings

This section presents a discussion of the findings and compares these findings with literature review of other studies

5.3.1 Farmers Income Level and Saving Behaviour Among Coffee Farmers in Coffee Cooperative Societies

The study found out that farmers in Manyatta Subcounty, Embu County generates a positives income level from coffee business. Avery and Kennickell (1991), states that an overwhelming proportion of total saving is due to top income decile of families. A rising income will often be accompanied by increased saving, and a falling income by decreased saving, on a greater scale at

first than subsequently. Increases in current income increase both consumption and saving. The study also found out coffee business is profitable and hence it influence their saving behaviour. This goes in line with Katona (2008) who stated an increase in income will tend to lead to an increase in the amounts saved.

5.3.2 Governance in Coffee Cooperative and Saving Behaviour Among Coffee Farmers

The study found out that there was negative perception from farmers towards in coffee cooperatives and this influence saving behaviour of coffee farmers negatively. According to Hussi...et.al, (1993) stated that management committee must guarantee a close correlation between theory and practice, between decision and execution. It is always good management policy to view every decision action in the context of the total activities of the enterprise, present and future. In this case, the management committee must seek to discover the correlation between current actions and their future consequences. It was also found out that poor governance in coffee cooperatives influences negatively saving behaviour among coffee farmers. This goes in line with Chege (2012) who stated that poor governance and inefficiencies in cooperatives result in delays in supplying inputs to farmers, credit processing and payment to farmers for their produce.

5.3.3 Farmers Financial Education and Saving Behaviour Among Coffee Farmers

The study found out that coffee cooperatives societies has been providing sufficient and beneficial financial education to their members which motivates them to save. education level has a positive impact on individual saving. Higher education levels imply that people have a better understanding of their personal financial matters, so they will be better able to make financial decisions and have more ability to plan for their future. There is evidence to show that more educated people can manage their money in terms of insuring, investing, saving and budgeting (Hogarth & Hilgert, 2002). It was also found out that coffee farmers in Manyatta Subcounty have financial and managerial skills which helps them to manage their coffee business hence influence the saving behavior positively. This goes in line with Lusardi & Mitchell (2007) who showed that people with a high level of education, demonstrate high levels of financial literacy, which subsequently affect financial decision-making. Results of the study found that these groups of respondents plan properly for their retirement period, participates

more in the stock market, and have good borrowing behavior, possibly due to knowledge in basic financial concepts.

5.3.4 Individual future expectation and saving behaviour among coffee farmers

The study found out that individual future expectation is one of the motivations for saving money stemming from the desire to become a land owner, home owner and to buy other assets. The cost associated with purchasing a home is usually high; requiring you to save to help ensure home ownership can become a reality. The down payment required to purchase a home can run to more than 20% of the selling price which in some cases is usually high (Porpiglia, Martha, & Ziegelmeyer, 2017). Another reason is usually retirement. The desire to retire with enough money saved up is a motivation for many people's savings. You need to save money to ensure that once you stop working, you will have enough money in the bank or in investments to fund your lifestyle for the rest of your life. Many people are motivated to save money for retirement so that they can afford the things they both want and need (Luu, Lowe, Butler & Byrne, 2017).

The study also found out that farmers save to build up a reserve against unforeseen contingencies, to provide for an anticipated future relationship between the income and the needs of the individual, to enjoy interest and appreciation, to enjoy gradually increasing expenditure, to enjoy a sense of independence, bequeath a fortune, to satisfy pure miserliness and to accumulated deposits to buy houses, cars and other durables which is the most common. This goes in line with Freshman&Clingen, (2017) who stated that Travel and luxury are motivations for some people. Motivation for saving comes because they want nice things. Not everyone craves luxury items or travel. However, for those who enjoy such things, saving money may be a necessity. Planning for a big trip or a large purchase, such as a boat or car, can provide the motivation one needs to be disciplined in terms of saving money.

5.4 Conclusion

The study established that most of the respondents saved one way or the other be it formal or informal. Their trust in financial institutions played a major role too in where they saved. Many of the respondents believed that their individual expectation, income level and financial literacy levels played a critical role towards their savings behavior. With the majority stating that the more educated they would be the more they would save. From the findings many of the

respondents agreed that their savings decisions were challenged by the governance in the coffee cooperatives

5.5 Recommendation

Per the findings there is a still need for coffee cooperatives continue providing financial literacy programs which can encourage the respondents to save. Training of farmers should be encouraged and it should focus on basic accounting and preparation of farm accounts, budgeting and cost control as well as insurance. The government and stakeholders of the coffee industry should give an attention to the marketing factors to ensure they are favourable to the coffee farmers. This includes liberalizing the marketing of tea to both small-scale and large-scale farmers to increase competition.

5.6 Suggestion for Further Studies

For more conclusive results, further studies could be done with an aim of establishing other factors that influence saving behaviour among coffee farmers in coffee cooperative societies in Kenya; a case of Manyatta Subcounty, Embu county. The study only focused on 3 cooperative societies and therefore these results are skewed towards the perceptions and data from the 3 teams. It is suggested therefore that such a study be done in other coffee cooperatives to increase the statistical power of the study and make the results more reliable.

REFERENCES

- Agrawal (2007). Age of reason: *Financial decisions over the Life-cycle*. Harvard University.
- Akiyama, T. & Varangis, P (1990). The Impact of the International Coffee Agreement on Producing Countries, *World Bank Economic Review* 4(2): 157-173.
- Andrew, D. P., Pedersen, P. S. & McEvoy, C. D. (2011). *Research Methods and Design in Sport Management*. Champaign: IL: Human Kinetics.
- Avery, B. R. & Kennickell, B. A. (1991). Household Saving in the US. *Review of Income and Wealth*, 409-432.
- Baharumshahet (2013). Macro & Socia-economic determinants of Savings in Pakistan.
- Bairamli, N., & Kostoglou, V. (2010). The Role of Savings in the Economic Development of the Republic of Azerbaijan. *International Journal of Economic Sciences and Applied Research*, 99-110.
- Ball, D., Geringer, M., Minor, M. & McNett, J. (2012). *International business*. McGraw-Hill Higher Education.
- Bandiera, O., Barankay, I. & Rasul, I. (2010). Social incentives in the workplace. *Bandiera, O., Barankay, I., & Rasul, I. The Review of Economic Studies*, 77(2), 417-458., 417-458.
- Barrientos, S. C. and Tallontire, A (2003). A Gendered Value Chain Approach to Codes of Conduct in African Horticulture. *World Development* 31(9): 1511-1526.
- Barreiro, P. L., & Albandoz, J. P. (2001). *Population and sample. Sampling Techniques*. Seville, Spain: Management Mathematics for European Schools
- Bates, R.H. (1997). *Open-Economy Politics: The Political Economy of the World Coffee Trade*. Princeton. Princeton University Press.
- Battaglini, M., Roland, B. & Jean, T. (2005). Self Control in Peer Groups. *Journal of Economic Theory*, 841-877.

- Blowfield, M. (1999). Ethical Trade: A Review of Developments and Issues. *Third World Quarterly* 20(4):753-770. *International Journal of Academic Research in Business and Social Sciences* September 2013, Vol. 3, No. 9 ISSN: 2222-6990
- Boffa, J.M. (2003). Research and Development Orientations for the Promotion of Shade Coffee in Uganda. Kampala.
- Bernheim, B. D., Garret, D. M., & Maki, D. M. (2001). Education and Saving: The Long Term Effects of High School Curriculum Mandates. *Journal of Public Economics*, 435-465.
- Besley, T. (1995). Savings, credit and insurance. *Handbook of development economics*, 2123-2207.
- Bosworth, B., Burtless, G., Sabelhaus, J., & Porteba, J. (1991). The decline in saving: Evidence from household surveys. *Brookings Papers on Economic Activity*, 183-256. 62
- Browning, M., & Crossley, T. F. (2001). The life-cycle model of consumption and saving. *The Journal of Economic Perspectives*, 3-22.
- Browning, M., & Lusardi, A. (1996). Household saving: Micro theories and micro facts. *Journal of Economic literature*, 1797-1855.
- Burns, R. (2000). *Introduction to Research Methods* (4th edition) French Forest NSW; Longman.
- Butler & Byne 2017: *A nonbehavioral theory of Savings*: *Journal of Post Keynesian Economics*: Vol.39
- Bursztyn, L., Ederer, F., Ferman, B. & Yuchtman, N. (2012). Understanding peer effects in financial decisions: Evidence from a field experiment. *National Bureau of Economic Research*, (No. w18241).
- Chandra and Long: *The determinants of Private Saving in India*. Crawford School of Public Policy.
- Chen, H., & Volpe, P. R. (1998). An analysis of personal financial literacy among college students. *Financial services review*, 107-128.

- Christen, R. P., & Rosenberg, R. (2000). *The rush to regulate: Legal frameworks for microfinance*. Washington: Consultative group to assist the poorest (CGAP).
- Chua, C. F. (2012). The savings-growth nexus for the Malaysian economy: a view through rolling sub-samples. *Applied Economics* Vol. 44.
- Clark, R., & d'Ambrosio, M. (2008). Adjusting retirement goals and saving behavior: The role of financial education. *Overcoming the Saving Slump: How to Increase the Effectiveness of Financial Education and Saving Programs*, 237-256.
- Collins et al (2009). Determinants of Savings among Low-Income Individuals in Rural Uganda.
- Conroy, J. (2000). The Role of Central Banks in Microfinance in Asia and the Pacific. *Asia Development Bank Indonesia*.
- Coupé, T. (2011). Mattresses versus banks-the effect of trust on portfolio composition. *Mattress Kyiv School of economics and Kyiv economics institute Discussion Paper, (40).*, 40.
- Coffee Board of Kenya (CBK) (1998). *Market report, 1997*. Nairobi.
- CBS (1979). *Statistical abstracts: Central Bureau of Statistics*, Nairobi.
- CRF (1999). *Strategies to enhance coffee production in Kenya*. Coffee Research Foundation (CRF), technical committee report, Ruiru, 109p
- Cubeddu, L., & Rios-Rull, V. J. (2003). Families as shocks. (2003). Families as shocks. *Journal of the European Economic Association*, 1(2-3), 671-682., 671-682.
- Davis, E. P., & Hu, Y. W. (2005). Saving, Funding and Economic Growth.
- Della, V., Stefano, List, J., & Ulrike, M. (2012). Testing for Altruism and Social Pressure in Charitable Giving. *Quarterly Journal of Economics*, 1-56.
- Delpachitra, S. & Beal, D. J. (2010). Financial Literacy among Australian University Students. *Economic papers a journal of applied economics and policy*, 65-78. 63
- Denscombe, M. (2003). *The Good Research Guide*. New York, New York: NY : Prentice Hall, Inc .

- Djankov, S., Miranda, P., Seira, E., & Sharma, S. (2008). Who Are the Unbanked? *World Bank Policy Research*, Working Paper No. 4647.
- Domar, E. D. (1946). Capital Expansion, Rate of Growth, and Employment. *Econometrica*, 137-147.
- Duflo, E., & Emmanuel, S. (2003). The role of information and social interaction in retirement: Evidence from a randomized experiment. *Quarterly Journal of Economics*, 815-841.
- Dunavant, E. (2012, February). Poor Financial Decisions Land Many Pro Athletes on The Bench. Los Angeles, USA.
- Dupas, P. & Robinson, J. (2013). Savings constraints and microenterprise development: Evidence from a field experiment in Kenya. *American Economic Journal: Applied Economics*, 163-192.
- Elahi, A. R. (2004). A Comparison Between Iran Football Stadiums Condition and European Standards. *HARAKAT*, 63-80.
- Evensky, H., Horan, S. M., & Robinson, T. (2011). *The New Wealth Management: The Financial Advisor's Guide to Managing and Investing Client Assets* (Vol. 28). John Wiley & Sons.
- Franco Modigliani & *Life Cycle Theory of Saving*: Princetown University.
- Freshman, S. K., & Clingen, H. E. (2017). *The Smartest Way to Save Big: The Large Things in Life for Less*. BookBaby.
- Frey, S. B., & Meier, S. (2004). Social comparisons and pro-social behavior: Testing "conditional cooperation" in a field experiment. *Frey, B. S., & Meier, S. (2004). Social comparisons a The American Economic Review, 94(5), 1717-1722., 1717-1722.*
- Gichangi, E. (2004, April 26). Red Card For Corruption in Sports? *Adili*, p. pp 9.
- Glaeser, L. E., Sacerdote, I. B., & Scheinkman, J. (2003). The social multiplier. *Journal of the European Economic Association, 1(2-3), 345-353., 345-353. 64*
- Gonzalez-Vega 2003: Determinants of Savings Rate in Rural Nigeria. UNL Digital Commons.

- Gravetter, F. J. & Forzano, L.-A.B. (2009). *Research Methods for behavioral sciences*. Belmont: CA: Wadsworth Cengage.
- Guiso, L., Sapienza, P., & Zingales, L. (2004). The role of social capital in financial development. *The American Economic Review*, 526-556.
- Gupta, S., & Singh, S. K. (2016). Economic Security among Rural Women through Self Help Groups: An Analytical Study. *Indian Research Journal of Extension Education*, 117-122.
- Hershfield, H. E., Goldstein, D. G., Sharpe, W. F., Fox, J., Yeykelis, L., Carstensen, L. L., & Bailenson, J. N. (2011). Increasing saving behavior through age-progressed renderings of the future self. *Journal of Marketing Research*, S23-S37.
- Hogarth, J. M., & Hilgert, M. A. (2002). Financial knowledge, experience and learning preferences: Preliminary results from a new survey on financial literacy. *Consumer Interest Annual*, 1-7.
- Hong, H. J., & Rios-Rull, V. J. (2007). Social security, life insurance and annuities for families. *Journal of Monetary Economics*, 54(1), 118-140., 118-140.
- Hong, H., Kublik, J. D., & Stein, J. C. (2004). Social interaction and stock-market participation. *The journal of finance*, 137-163.
- Houser, J. (2011). *Book Alone: Research*. Sadbury: Jones & Bartlett Publishers.
- How Inflation affects your savings - Reduced buying power*. (2012, June 6). Retrieved July 17, 2016, from Inflation data.com: <http://inflationdata.com/articles/2012/06/20/inflation-savings/>
- Hubbard, R., J. S., & Zeldes, S. (1995). Precautionary Savings and Social Insurance. *Journal of Political Economy*, 360-399.
- Hussi et al 1993: *Planning for sustainability: creating livable, equitable savings*
- Ibrahim, I. D., Harun, R., & Isz, M. Z. (2010). A study on financial literacy of Malaysian degree students. *Cross-cultural communication*, 51-59.

- Ichino, A., & Falik, A. (2005). Clean evidence on peer effects. *Journal of Labor Economics*, 24, 65
- Jonubi, A., & Abad, S. (2013). The Impact of Financial Literacy on Individual Saving: an Exploratory study in the Malaysian context. *Transformations in Business & Economics*, 12 (1), 28.
- Karanja, A. M. (1998). Effects of Liberalization measures undertaken in the coffee industry on coffee production, quality and profitability in Kenya. *Kenya coffee* 63(743)
- Karanja, A. M. (2001). Coffee Prices stabilization in Kenya as a policy option. *Kenya coffee* 65(257).
- Karlan, D. S. (2007). Social connections and group banking. *The Economic Journal*, F52-F84.
- Kast, F. & Pomeranz, D. (2012). Under-savers anonymous: Evidence on self-help groups and peer pressure as a savings commitment device. *National Bureau of Economic Research*, (No. w18417).
- Katona, G. (1949). Effect of income changes on the rate of saving. *The review of economics and statistics*, 95-103.
- Keynes, J. (1937). The General Theory of Employment. *The Quarterly Journal of Economics*, 209-223.
- Khumalo, T. (2013, July 15). *Citypress News*. Retrieved February 4, 2016, from Citypress: <http://www.citypress.co.za/you-say/footballs-rotten-core-must-be-excised>
- Kinyanjui J. (2017, March 31). *Soka*. Retrieved from Soka.co.ke: <http://www.soka.co.ke/features/item/life-after-football-the-inspiring-story-of-harold-ndege>
- Kisera, N. J. & Muturi, D. (2015). Factors Affecting Performance of Women Investment Groups: A Survey of Gucha County, Kisii County. *The International Journal of Business Management*, 412.

- Komicha (2007). *Savings behaviour of rural households in Kwara State Nigeria* Sematic Scholar.
- Kremer, M. & Levy, D. (2008). Peer effects and alcohol use among college students. *The Journal of Economic Perspectives*, 22(3), 189-189., 189-189.
- Kumar, R. (2005). *Research methodology: a step-by-step guide for beginners*. London: UK: Sage Publications.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2002). Government ownership of banks. *The Journal of Finance*, 265-301. 66
- Lindberg 1993: Theory ó based measurement of Savings Investment ó Econstor.
- Lusardi, A., & Mitchell, S. O. (2007). Financial literacy and retirement planning: New evidence from the Rand American Life Panel. *Lusardi, A., & Mitchell, O. S. (2007). Financial New Michigan Retirement Research Center Research Paper No. WP 157, 157.*
- Luu, L., Lowe, J., Butler, J., & Byrne, T. (2017). *Essential Personal Finance: A Practical Guide for Students*. Routledge.
- Madriana, B. C., & Dennis, F. S. (2001). The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior. *Quarterly Journal of Economics*, 1149-1525.
- Mahdzan, N. S. & Tabiani, S. (2013). The Impact of Financial Literacy on Individual Saving: An Exploratory Study in The Malaysian Context. *Transformations in Business and Economics*, 41-55.
- Makori, E. (2010, February 10th). *Why it's time for KFF to pack up and go*. Retrieved February 2010, from www.nation.co
- Mwaka 2017: Factors affecting performance of Savings & Credit Co-operative Societies.
- Nga 2007: an exploration of determinants of South Africans personal savings rate.
- Porgilia Martha 2017: *Precautionary Saving: a review of the theory and the evidence* ó Munich

APPENDICES

Appendix I: Letter of Introduction

David M Njamweah

P.O Box 61,

Embu, Kenya

DEAR RESPONDENT,

RE: REQUEST FOR PERMISSION TO CARRY OUT RESEARCH STUDY.

I am a graduate student undertaking a degree in Master of Arts Degree in Project planning and Management in the University of Nairobi and I am currently conducting a research on factors influencing saving behaviour among coffee farmers in coffee cooperative societies in Kenya; a case of Manyatta sub county. I humbly request you to assist in providing the required information because your views are considered important to this study. Please fill this questionnaire to the best of your ability. Any information given will be treated with utmost confidentiality and will only be used for the purpose of this study.

Yours Faithfully;

Signatureí í í í í í í í í í í í .

David M Njamweah

Researcher

Appendix II: Questionnaire for Respondents

The information provided will be treated as confidential and will only be used for the purpose of the study. Please read carefully and give appropriate answers by ticking or filling the blank spaces.

Section A Demographic Information

1) Gender.

Male ()

Female ()

2) Please indicate your age group.

20-30yrs ()

31-40yrs ()

41-50yrs ()

51 and above ()

3) Which is your highest level of education

Primary ()

Secondary ()

Diploma ()

Any other ()

4) For how long have you been in the coffee farming business?

1-5years ()

5-10 years ()

11 and aboveø ()

Section B Farmers Income Level

- 5) Please indicate the extent to which you either agree or disagree with each of the statement by selecting one category that mostly corresponds to your desire. Use the scale: 5- Strongly Agree, 4 - Agree, 3 - Neutral, 2 ó Disagree 1 - Strongly Disagree

Statements	Strongly Agree	Agree	Not Sure	Disagree	Strongly disagree
Coffee business generates positive cash flow					
Coffee business has been profitable					
Income gained after selling coffee is satisfactory					

- 6) To what extent does farmers income level influence saving behaviour among famers in coffee comparatives? Very great extent () Great extent () Moderate extent () very low extent () Low extent ()

Section C: Governance in Coffee Cooperatives

- 7) Please indicate the extent to which you either agree or disagree with each of the statement by selecting one category that mostly corresponds to your desire. Use the scale: 5- Strongly Agree, 4 - Agree, 3 - Neutral, 2 ó Disagree 1 - Strongly Disagree

Statements	Strongly Agree	Agree	Not Sure	Disagree	Strongly disagree
poor leadership in the cooperative societies affect saving behaviour					
services offered by the cooperative societies and the customer care services are the best					
Fully trust the staff					

- 8) To what extent does governance in coffee cooperatives influence saving behaviour among farmers in coffee cooperatives? Very great extent () Great extent () Moderate extent () very low extent () Low extent ()

Section D: Farmers Financial Education

- 9) Please indicate the extent to which you either agree or disagree with each of the statement by selecting one category that mostly corresponds to your desire. Use the scale: 5- Strongly Agree, 4 - Agree, 3 - Neutral, 2 ó Disagree 1 - Strongly Disagree

Statements	Strongly Agree	Agree	Not Sure	Disagree	Strongly disagree

Cooperatives educate me on some of the benefits of saving					
educational programs have been beneficial to me					
this information has motivated me save my income					

10) To what extent does farmers financial education influence saving behaviour among farmers in coffee comparatives? Very great extent () Great extent () Moderate extent () very low extent () Low extent ()

Section E: Individual Future Expectations

11) Please indicate the extent to which you either agree or disagree with each of the statement by selecting one category that mostly corresponds to your desire. Use the scale: 5- Strongly Agree, 4 - Agree, 3 - Neutral, 2 ó Disagree 1 - Strongly Disagree

Statements	Strongly Agree	Agree	Not Sure	Disagree	Strongly disagree
Land ownership influence saving behaviour among coffee farmers					
Size of land influence saving behaviour among coffee farmers					
Home ownership influence					

saving behavior among coffee farmers					
--------------------------------------	--	--	--	--	--

12) To what extent does individual expectation influence saving behaviour among farmers in coffee comparatives? Very great extent () Great extent () Moderate extent () very low extent () Low extent ()

Appendix III: Interview Schedule For Employees

- i) Please indicate your gender.
- ii) How long have you been in the cooperative society?
- iii) What department do you work in?
- iv) In one word describe the management in the Coffee Cooperative Society
- v) On a scale of 1-10 rate the saving ability of the coffee farmers in your cooperative
- vi) Briefly explain in your opinion the main challenges facing the farmers that hinder their cash flow, sales and saving.
- vii) Would you describe the leadership in the cooperative society as trustworthy?
- viii) Do you have programs that offer financial education to farmers and would you say that these programs have proved to be effective?

Appendix IV: Work Plan

ACTIVITIES	Research topic	Chapter One	Literature review	Research Methodology	Proposal submission	Data collection	Project Report
TIME							
February 2018							
March 2018							
April,2018							
May-June 2018							
July 2018							

Appendix V: Krejcie & Morgan (1970) Population Sampling Table

Population Size	Confidence = 95%				Confidence = 99%			
	Margin of Error				Margin of Error			
	5.0%	3.5%	2.5%	1.0%	5.0%	3.5%	2.5%	1.0%
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	4211	610	1147	1960	5165
10,000	370	727	1332	4899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1506	8514	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1537	9603	663	1354	2654	16584
300,000,000	384	784	1537	9603	663	1354	2654	16586

Source: Krejcie & Morgan (1970)