FACTORS INFLUENCING SERVICE PROVISION BY COOPERATIVE SOCIETIES IN KIGUMO DISTRICT, MURANG'A COUNTY, KENYA

BY

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DECLARATION

This research project report is my original work and has not been presented for any award in any other university:

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DEDICATION

This work is dedicated to my wife Beatrice for her unconditional love, support and encouragement throughout the study.

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ABBREVIATIONS AND ACRONYMS

AGM – Annual General Meeting

ASDS – Agricultural Sector Development Strategy

CBK - Coffee Board of Kenya

CIC – Cooperative Insurance Company

ICA – International Cooperatives Alliance

ICT – Information Communication Technology

KCC – Kenya Cooperative Creameries

KCCE – Kenya Coffee Cooperative Exporters Limited

KMC – Kenya Meat Commission

KPCU – Kenya Planters Cooperative Union

KUSCCO – Kenya Union of savings and Credit Cooperatives

NCPB - National Cereals and Produce Board

PBK – Pyrethrum Board of Kenya

SACCO – Savings and Credit Cooperative Society

SRA – Strategy for Revitalizing Agriculture



ABSTRACT

Marketing cooperatives are important in the provision of credit both in cash, and delivery of various inputs including fertilizers, crop protection chemicals, and pumps for spraying crops and extension services. However, since the era of liberalization in the 1990s, these roles have diminished leading to low levels of satisfaction with cooperatives' service delivery on the part of coffee farmers. Production quantities are erratic and farm level earnings from coffee are relatively low despite the recent rise in global prices of coffee. The result is disincentive in coffee farming and substitution to other crops. The objectives of the study were to investigate how governance influences service provision by cooperative societies in Kigumo District, to determine the extent to which coffee price fluctuations influence service provision by coffee cooperative societies to their members in Kigumo District and to find out how access to credit facilities influence service provision by cooperative societies to their members in Kigumo District. Literature reveals that, coffee cooperative societies in the region are marred by mismanagement and corrupt practices which impairs service delivery. The target population was all coffee farmers in Kigumo district and the management committee of the selected coffee cooperative societies. The study used descriptive research design and randomized sampling. Primary data was collected by structured questionnaire from 199 coffee farmers and secondary data from management committee were used to provide information on the issues under investigation. The data was coded, entered and analyzed using the Statistical Package for Social Sciences (SPSS), Results indicate the coffee industry in Kigumo district has recorded erratic production fluctuation for the 2005/6 to 2011/12 period. Prices have been on the increase but the variance has differed across the societies. The study found that good governance promotes service delivery and vice versa. Thus indicators of good governance such as level of education of managers, managerial training and experience are fundamental to provision of quality services to coffee cooperatives. It was noted that the coffee industry experiences fluctuations in unit coffee prices. Low coffee prices reduce coffee farmers' satisfaction with service provision by the cooperative and lead to decline in production. Access to credit facilities is not of significant influence to service provision. However, the direction of relationship is such that higher access to credit increases satisfaction with services provided. The researcher recommends that the government comes up with a criterion of selecting management committees, increases agricultural extension workers and seeks alternative markets to stabilize prices and production. To understand the role played by other stakeholders in coffee sector, further studies can be conducted to investigate the role of microfinance institutions and banks in improving production and hence livelihoods of coffee farmers in Kenya, A comparative study may be useful to document lessons learnt from neighboring countries that have success stories in service provision within coffee cooperatives.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The Co-operative Movement brings together over 1 billion people around the world. The United Nations estimate that the livelihood of nearly 3 billion people is made secure by co-operative enterprise. These enterprises continue to play significant economic and social roles in their communities. In Kenya every one person in five is a member of a co-operative society. In addition, 5.9 million and 20 million Kenyans directly and indirectly derive their livelihood from the Co-operative Movement. (ICA, 2002)

According to the Wikipedia, The cooperative movement began in Europe in the 19th century, primarily in Britain and France, although The Shore Porters Society claims to be one of the world's first cooperatives, being established in Aberdeen in 1498. The industrial revolution and the increasing mechanization of the economy transformed society and threatened the livelihoods of many workers thus exciting the cooperative spirit in the workers. (http://en.wikipedia.org/wiki/Historyofthecooperativemovement)

According to Lampe, 2000, the first documented cooperative society was founded in 1769, in a barely furnished cottage in Fenwick, East Ayrshire. In the decades that followed, several cooperative societies were formed and today, co-operative communities are widespread all over the world. Agricultural cooperatives form 46 per cent of all cooperative societies in Kenya. They have 3 million members out of a total membership of 8 million in the entire cooperative movement. (Republic of Kenya, 2010)

Cooperative development in Kenya, like in most African countries, has generally traversed two main eras, namely, the era of state control and that of liberalization. The first era, which

saw the origin and substantial growth of cooperatives under state direction, conditioned these organizations to emerge as dependent agents and/ or clients of the state and other semi-public agencies. By serving as instruments for implementing government socio-economic policies, cooperatives were engulfed into state politics to the extent that the failures of state policies found expression in the cooperative movement. This partly explains why literature on cooperatives in this era is awash with more stories of cooperative failure than stories of cooperative success. Such failures contributed to calls for the liberalization of the cooperative movement in the early 1990s (Hussi et al, 1993; Porvali, 1993; Lindberg, 1993).

With the argument that state control was stifling the performance of cooperatives and that their potential contribution to development could only be realized if they operated according to market principles, cooperative development was pushed into the second era that was characterized by economic liberalization. Consistent with the new economic environment that was sweeping across Africa in the 1990s, Kenya introduced new policy and legislation in 1997 in order to liberalize cooperatives. The resultant framework sought to facilitate the development of commercially autonomous, member-based cooperative organizations, which would be democratically and professionally managed, self-controlled and self-reliant business enterprises (Wanyama, 2009)

Whereas cooperative development in Kenya during the first era is well documented in the existing literature, the second era of cooperative development is yet to be adequately researched and understood. It is over a decade since the introduction of liberalization measures in Kenya, yet since then very little is known about the unfolding status of the cooperative movement. The few studies available tend to focus on disparate economic sectors of the cooperative movement, rather than providing comprehensive accounts that inform of the current status and functioning of cooperatives. Studies have focused on savings and credit

(Evans, 2002); agriculture (ICA, 2002); and dairy production (Staal et al, 1997; Owango et al, 1998).

Cooperatives and in particular agricultural cooperatives play a major role in production, primary processing and marketing of agricultural and livestock commodities. The general objective of the organizations is to promote the economic interests and general welfare of members in accordance with cooperative values and principles. The performance of Agricultural cooperatives is critical in economic growth and poverty alleviation in the country (Hussi 1993)

The justification for cooperatives arises from their potential in maximization of profits, harnessing various skills with members, enhancing advocacy and bargaining power, enhancing financial accessibility, boosting social capital, promoting investment, providing educational opportunities, improving market access and contributing to poverty reduction (Damianopoulos 2005)

The Strategy for Revitalizing Agriculture (SRA 2004 - 2014) recognizes and stipulates the crucial roles of cooperative movement or producer organizations in Kenya. It is clear that Kenya's agriculture is predominantly small scale accounting for 70% of the total agricultural output and 70% of marketed agricultural produce. Processing and marketing is organized through farmers' organizations, cooperatives and statutory bodies. Through the SRA, the government recognizes the need for urgently improving management structures and accountability of cooperatives. The organizations are expected to take over the roles that were previously undertaken by Statutory Boards and Parastatals. (Republic of Kenya, 2004)

Kigumo District is one of the districts in Murang'a County within Central Kenya with the headquarters located at Kigumo Township. It is a high potential agricultural area on the

eastern slopes of the Aberdare ranges with good soils and favorable rainfall. Agriculture dominates the economy of Kigumo district and provides livelihood to over 80% of the population and employs 75% of the population. Coffee is the main agricultural enterprise and the major source of income in the district. (Murang'a South district development plan, 2008 - 2012)

The district has four divisions namely Kangari, Kigumo, Muthithi and Gacharage and five locations namely Kangari, Kigumo, Kinyona, Kahumbu, and Muthithi location. The district covers a geographical area of approximately 285 km2. The district has four coffee farmers' cooperative societies namely Muthithi, Kangiri, Marumi, and Thangaini coffee farmers cooperative societies. In addition there is one transport SACCO namely Kigumo travellers SACCO limited and one dairy SACCO namely Ahadi dairy SACCO.

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1.2 Statement of the problem

Small-scale production dominates the Kenyan coffee sector with over 75 percent of land under production controlled by smallholder farmers. The large fixed costs involved in the processing and marketing of coffee, along with the additional hindrance of inadequate transportation, communication and banking infrastructure poses significant challenges to smallholder profitability. For this reason, the smallholder coffee sector has traditionally been organized into cooperatives in order to facilitate regulation and to improve the effectiveness and efficiency of smallholder coffee production, marketing and the provision of key inputs such as fertilizers, pesticides, credit and extension services (Mude, 2006).

However, the foregoing is not the case due to the fact that the farmer is not receiving the right services at the right time including the nonexistence of some of the services expected of the cooperatives such as extension services, provision of credit and farm inputs.

According to the Agricultural Sector Development Strategy (ASDS) 2010 – 2020, the main task of cooperatives is to collect (and process) members' produce, store, and then transport it to designated buyers and agents. They also receive payments for the produce delivered and pass this to the members. In addition, cooperatives are important in the provision of credit both in cash, and delivery of various inputs including fertilizers, crop protection chemicals, and pumps for spraying crops and extension services. These roles have however diminished in this post liberalization period leading to the growth of private coffee marketing channels which involves middlemen buying coffee from farmers directly and selling the berries to private millers. The downside of this channel is that coffee farmers are heavily exploited leading to crop substitution. In Kigumo district (between the years 1990 and 2000), many farmers indeed uprooted coffee plants and replaced them with tissue culture and indigenous bananas whose marketing coulds allow them exercise better control. If no corrective measures are put in place, then the future of coffee production is bleak.

This study sought to establish the factors that influence service provision by cooperative societies to their members by studying selected coffee cooperatives in Kigumo District of Murang'a County.

1.3 Purpose of the study

The study investigated the factors which influence service provision by cooperative societies in Kenya with a case study of cooperative societies in Kigumo district.

1.4 Objectives of the study

The objectives of this study drawn from the purpose were:

- To investigate how governance influences service provision by cooperative societies in Kigumo District.
- 2. To determine the extent to which coffee price fluctuations influence service provision by coffee cooperative societies to their members in Kigumo District.
- 3. To find out how access to credit facilities influence service provision by cooperative societies to their members in Kigumo District.

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1.5 Research questions

The research questions were:

- 1. How does governance influence service provision by cooperatives to their members in Kigumo District?
- 2. What is the extent to which coffee price fluctuations influence service provision by cooperatives in Kigumo District?
- 3. How do access to credit facilities influence service provision by cooperatives to their members in Kigumo District?

1.6 Significance of the study

The study is considered beneficial to cooperative development policy makers by providing information on the extent to which factors such as credit access, governance, prices, and

availability of extension services affect cooperatives. The government can then intervene from an informed point of view and enhance better service provision by cooperative societies to their members.

By facilitating informed policy decisions the study can benefit the members of the cooperative societies who will enjoy the quality goods and services provided by their cooperatives.

To other scholars, this study is a reference material as far as the factors influencing cooperatives in provision of services to their members in Kigumo district is concerned.

1.7 Basic assumptions of the study

This study was based on the following assumptions:

- 1. The sampled cooperatives and members are representative of the existing situation of the rest of the cooperatives in Kigumo district.
- 2. The respondents would give truthful answers in the survey.

1.8 Limitations of the study

Limitations anticipated included time, money, and accessibility of information. The study was expected to take at least two months given its scope which was the case. The study requires substantial amount of money for data collection, analysis and presentation. Data required from the cooperative management are classified, confidential and was hard to get. Good anticipation however led to a high response rate.

1.9 Delimitations of the study

This study investigated the factors that influence service delivery by cooperative societies to their members. Cooperatives are distributed countrywide and they share a similar organizational structure. The researcher did not intend to carry out the research in the entire republic since it is expensive and duplication of the research process.

Similarly, the researcher acknowledges the fact that there are many other factors that influence service delivery in cooperative societies. It is the opinion of the researcher that by focusing on produce market prices, availability of credit services, availability of extension services, and management skills, the research became more purposeful.

1.10 Definition of significant terms

Cooperative society – Cooperatives are user-owned, user controlled and user-benefited organizations. They could be agricultural, non-agricultural, unions or Savings and Credit Cooperatives (SACCOs). They operate in different sectors of the Economy including agricultural, handicraft, Jua Kali, transport, housing, development, building and construction, consumer services, banking and insurance.

Liberalisation - refers to a relaxation or withdrawal of previous government restrictions or official state intervention, in the cooperative movement

Cooperative extension service – extension education consists of a series of embedded communicative interventions that are meant among others to induce interventions which supposedly help to resolve problematic issues in agriculture. The Cooperative Extension Service is a non-formal educational program designed to help people use research-based knowledge to improve their lives through the improved ways of farming, pest control, improved technologies and crop varieties.

Prices – Prices means and includes both the world market prices at the coffee auction and the producer or farm gate prices.

1.11 Organization of the study

Chapter one covers the background information, statement of the problem, purpose, objectives, research questions, significance, basic assumptions, and limitations of the study. Chapter two covers literature review, the cooperative organizational network, significance of cooperatives, cooperative development policy and legislation and the status of the cooperative movement in the coffee subsector in Kenya.

Chapter three documents the methodology that was used in gathering data. It covers research design, target population, sample design, data collection, data analysis, ethical issues and operationalization of the variables. Chapter four gives a presentation of the findings. Chapter five presents a summary of the key findings, a comparative discussion and conclusions based on research objectives and recommendations, policy action and further research

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter gives a detailed literature on the evolution of the cooperative movement in Kenya, the cooperative organizational network in Kenya, significance of cooperatives in Kenya, cooperative development policy and legislation in Kenya and the status of the cooperative movement in the coffee subsector. It also looks at the services offered by cooperative societies.

2.2 The concept of cooperatives

Cooperatives are user-owned, user-controlled and user-benefit organizations. They could be agricultural, non-agricultural, unions or Savings and Credit Cooperatives (SACCOs). They operate in different sectors of the Economy including agricultural, handicraft, Jua Kali, transport, housing development, building and construction, consumer services, banking and insurance. (Gamba and Komo, 2006)

Cooperatives are member-owned businesses; they aggregate the market power of people who on their own could achieve little or nothing, and in so doing they provide ways out of poverty and powerlessness. The representative body for cooperatives, the International Cooperative Alliance (ICA), defines a cooperative as 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.

This definition and the ICA set out seven cooperative principles: voluntary and open membership; democratic member control; member economic participation; autonomy and independence; education, training and information; cooperation among cooperatives; and concern for community. The first four of these are core principles without which a cooperative would lose its identity; guarantee the conditions under which members own, control and benefit from the business. The education principle is really a commitment to make membership effective and so is a precondition for democratic control, while cooperation among cooperatives is a business strategy without which cooperatives remain economically vulnerable. The last principle, concern for community, is about corporate responsibility, and it leads into other concerns such as prevention of poverty and protection of the environment.

2.3 Evolution of the cooperative movement

Gamba and Komo (2006) and Wanyama (2009) have traced the evolution of the cooperative movement in Kenya in three eras namely pre independence era, post - independence but pre - liberalization era and liberalization era.

2.3.1Pre-independence Era

Informal producer organizations have been in existence in Kenya even before colonial period. However, formal organizations particularly cooperatives started as early as 1908 and membership was limited to white settlers. The first cooperative was established at Lumbwa - Rift Valley, in present day Kipkelion area.(Wanyama, 2009)

In 1944 colonial officers opened the door for Africans to form and join cooperatives. The Mau Mau rebellion of early 1950s had a negative effect on the cooperative members of staff who withdrew to join pro-independence forces. However cooperatives continued to grow. The reason for this growth was application of the Swynnerton plan of 1954

on Developing African Agriculture and Improving Land Tenure. By 1958 there were over 400 registered cooperatives. (Gamba and Komo 2006)

2.3.2 Post- independence but Pre - liberalization Era

The post independence era saw the rapid rise in number of producer organizations and the consolidation of the ones that already existed. At this time, the government saw the cooperative movement as a vehicle to the introduction of African socialism, and for strengthening common ties between the people from different regions of Kenya. (Karanja, 2002)

Producer cooperatives were also directly linked to government parastatals. No individual private traders were allowed to compete with cooperatives. Cooperatives were linked to state run marketing corporations like National Cereals and Produce Board (NCPB), Cotton Board of Kenya (CBK), Pyrethrum Board of Kenya (PBK), Coffee Board of Kenya (CBK), Kenya Meat Commission (KMC), and Kenya Cooperative Creameries (KCC). Most of the cooperative members' produce was sold to these corporations and the latter then linked the cooperatives to the world market. These linkages excluded the participation of private traders in the marketing of the agricultural produce. (Wanyama, 2009)

The direct intervention by the government in management of cooperatives compromised the principles of member owned and run organizations. Government involvement hindered the emergence of member-controlled cooperatives since members relied on government to safeguard their interests. As a result, equality, equity, solidarity, democratic principles, self-responsibility, and self- help that are important pillars of successful producer organizations were thus hindered. This caused the cooperatives to be run as if they were government owned instead of privately owned member organizations. (Gamba and Komo 2006)

2.3.3 Era of liberalization, structural adjustment and privatization

The advent of economic and political liberalization in early 1990's heightened the need for liberating cooperatives from government control. A new policy was consequently formulated by 1997 to provide for a member based, autonomous and member controlled movement. The aim was to enable cooperatives make independent decisions concerning operations of their business and to have a level playing ground like the rest of the private sector. New legislation was also put in place to implement this policy the same year. (Karanja, 2002)

The liberalization period brought a wind of change in the structure and the running of the cooperatives. Having been fully dependent on the government for the control of markets and funding, it was difficult for them to suddenly start operating on their own. These institutions were not prepared to compete with private firms that brought in high levels of competition. (Wanyama, 2009)

The Sessional Paper no. 6 of 1997 outlined the government's role as facilitative in nature i.e. create an enabling environment for cooperatives to operate. The other role was regulatory particularly in the formulation of policies and legislation. This meant no direct involvement in the running of the cooperatives. Liberalization saw the mergers and splits of various cooperative societies. They split into small uneconomic units. High levels of mismanagement mainly fueled this, and other factors beyond management's control, like fluctuating market prices. Political influences could not be avoided and some individuals in management used their positions to gain political leverage. (Gamba and Komo 2006)

The Cooperative Societies Amendment Bill of 2004 sought to re-introduce some degree of government control. As much as the government would not completely leave the cooperative sector alone without any form of regulation, it explicitly defined a clear point of intervention

without prejudicing its own efforts of embracing the principle of a free market economy.

2.4 The significance of cooperatives in Kenya's economy

Kenya has a long history of cooperative development that has been characterized by strong growth, thus making a significant contribution to the overall economy. Cooperatives are recognized by the government to be a major contributor to national development, as cooperatives are found in almost all sectors of the economy. With the total population of Kenya at approximately 37.2 million (Republic of Kenya, 2008a), it is estimated that 63 per cent of Kenya's population participate directly or indirectly in cooperative-based enterprises (Ministry of Cooperative Development & Marketing, 2008).

In the agricultural sector, cooperatives handle over 72 per cent of coffee sales, 95 per cent of cotton sales, 76 per cent of dairy produce sales, and 90 per cent of pyrethrum sales. The greatest contribution of cooperatives to Kenya's social and economic development is in the financial sector where financial cooperatives (savings and credit cooperatives, KUSCCO, Cooperative Bank and CIC) hold substantial savings portfolios. (Wanyama, 2008).

With the cooperative movement playing such a significant role in economic development, the Government has over the years maintained an institutional framework to develop the movement. The Ministry of Cooperative Development and Marketing is the current Government's official agency for coordinating cooperative development in Kenya. The main duties of the Ministry include registration and liquidation of all cooperatives register under the Act, enforcement of the Cooperative Societies Act, formulation of cooperative policy, supporting development of a conducive environment for cooperative growth, registration of cooperative audits, carrying out of inquiries, investigations and inspections. (Republic of Kenya, 1997)

2.5 Cooperative development policy in Kenya

Sessional Paper No. 6 of 1997 on "Cooperatives in a Liberalized Economic Environment" provides the current policy framework for cooperative development in Kenya. The policy was formulated after the liberalization of the economy, which necessitated the withdrawal of state control over the cooperative movement. The aim of the policy was to make cooperatives autonomous, self-reliant, self-controlled and commercially viable institutions. The role of the government was redefined from one that sought to control cooperative development, to one that now seeks to regulate and facilitate their autonomy. (Republic of Kenya, 1997a)

The monopoly of cooperatives in the agricultural sector, which had made them the sole

The monopoly of cooperatives in the agricultural sector, which had made them the sole marketers of cash crops in Kenya, was removed. The consequences of this meant that cooperatives now had to compete with other private enterprises in the marketing of agricultural produce.

In response to the inadequacies of the 1997 policy, the Ministry formulated a revised policy framework titled "Kenya Cooperative Development Policy 2008". The main theme of the new policy is 'expanding the economic space for sustainable cooperative growth in Kenya'. Its main focus is on restructuring, strengthening and transforming cooperatives into vibrant economic entities that can confront the challenges of wealth creation, employment creation and poverty reduction as private business ventures. (Ministry of Cooperative Development & Marketing, 2008).

2.6 The Kenyan cooperative legislation

The Cooperative Societies Amendment Act of 2004 is the current basic legislation that guides the formation and management of cooperatives in Kenya. It has its origins in the Cooperative Societies Act, Cap. 490 of 1966, which was revised in 1997 into the Cooperative Societies Act Chapter 12 of 1997. The reforms contained in the revised Act sought to reduce the strict state supervision of cooperatives, in order to support the liberalization of cooperative

enterprise. (Republic of Kenya, 1997b and 2004)

The 1997 Act empowered the members to be responsible for the running of their own cooperatives, through elected management committees. To the detriment of many primary cooperatives, the newly acquired freedom was dangerously abused by elected leaders. This saw many cooperatives report cases of corruption and mismanagement, such as gross mismanagement by officials; theft of cooperative resources; split of viable cooperatives into smaller ineffectual units; failure of employers to surrender members' deposits to cooperatives (Particularly SACCOs); failure to hold elections; nepotism in hiring and dismissal of staff; refusal of management committee members to vacate after members voted for this dismissal; conflict of interest among cooperative officials; endless litigations; unauthorized cooperative investments; illegal payments to the management committees (Manyara, 2003).

In response to these circumstances, the 1997 Act was amended in 2004. The main content of the Cooperative Societies (Amendment) Act of 2004 re-enforces state regulation of the cooperative movement through the office of the Commissioner for Cooperative Development. The legislation stipulates that the roles to be undertaken by government include creating the policy and legal framework for development of cooperatives; improving the growth and development of cooperatives by providing the requisite services for their organization, registration, operation, advancement and dissolution; developing partnerships with cooperatives through consultative processes that are focused on policy, legislation and regulation. The SACCO Societies Act of 2008 provides for the licensing, regulation, supervision and promotion of savings and credit cooperatives by the SACCO Societies Regulatory Authority. (Republic of Kenya, 2004b and 2008b)

2.7 Cooperative movement in the coffee subsector

The coffee subsector in Kenya is organized into coffee factories, farmers' cooperative societies, District Cooperative Unions and the Kenya Planters Cooperative Union. The coffee Board of Kenya (CBK) is a regulating agency in the coffee subsector (Nyangito 2001)

2.7.2 Coffee factories

Almost all existing coffee factories serving smallholder farmers belong to cooperative societies. A few private factories have started since coffee processing and milling has been liberalized, but they are still rare. Nyangito, 2001 notes that factory management is burdened with nepotism, which has led to mismanagement and run-down facilities—a factor that may contribute to cooperative break-up. In general, factory payout to farmers is largely determined by the charges for the services of coffee processing, storage, bulking and transportation and for overheads. High deductions and lower-quality coffee result in low producer price, which discourages production.

2.7.3 Cooperative societies

Cooperative societies are wholly formed by a group of factories, but in some cases one factory may make up a society. Main society functions are to keep books, provide credit, market, repair and maintain factories, and employ factory staff. Most societies are poorly managed. This has led to a widespread break-up of large societies into smaller ones. The problem is made worse by huge deductions taken from farmers' returns to cover expenses incurred by the many factories a society may own. The payout from society to factory varies from about 46% to 93% depending on the performance of the cooperative and the services it offers to factories and individual factory expenses. Over 95% of the expenses for factories are factory related, but much of these expenses are inflated because of corrupt practices, such as exaggerated deductions for both factory and the society services. (Kegonde, 2005 and

2.7.4 District cooperative unions

The District Cooperative Unions draw membership from coffee cooperative societies and in some cases from other farming enterprises such as dairying. District unions help coffee farmers produce; process and market coffee, but they do not physically handle it. The unions are allowed by the Cooperative Societies Act to take up to 17.05% of the farmers' proceeds to finance their operations. However, recently unions have reduced what they provide farmers by not involving themselves directly in employing society staff. They have instead diversified into other functions such as banking. However, the fact that unions are no longer active in arbitrating society disputes has increased the wrangling. (Mude, 2006)

2.7.5 Coffee milling

Coffee inilling before the coffee subsector was liberalized was a reserve of the Kenya Planters Cooperative Union (KPCU). Although more milling companies are now registered, KPCU dominates as a result of the monopoly it once had. With easy access to coffee factories through the district unions, KPCU is credited for the services it provides to farmers directly, such as extension and financing. Recovery of loans to farmers is, however, poor and has affected KPCU cash flow and financing ability. Milling charges vary from miller to miller but deductions on the farmers' proceeds should not exceed 4% of the export price according to CBK rules. This has restricted the range of services millers can provide. As a result, conflicts have arisen over unfulfilled promises millers have made to farmers. (Karanja, 2002)

2.7.6 Coffee Board of Kenya

In addition to regulating and controlling the industry, CBK functions include production services, monitoring of processing, marketing, production research and publicity. Despite the

policy reforms in coffee processing and milling, CBK remains the regulatory agency in the coffee industry and controls export marketing at the auction market by appointing coffee brokers and regulating the activities of the coffee brokers and buyers. The CBK also receives all the proceeds of exported coffee which it later remits to farmers. The board further provides extension services to farmers, research and promotion of coffee in export markets. It charges about 8% of the export price on marketed coffee to cover its expenses and government levies. Board control over coffee marketing and regulatory functions in the industry has been a bone of contention with other stakeholders. (Lindberg, 1993)

2.7.7 Kenya Coffee Cooperatives Exporters Limited (KCCE)

The finance bill of 2005, enacted direct sales of coffee in an attempt to revive the coffee industry. As a result of a benchmarking exercise on the marketing systems in Colombia and Costa Rica where coffee is marketed directly to international markets through the National (apex) coffee organizations, the Kenya Coffee Cooperative Exporters Limited (KCCE) was formed with the objective of promoting, organizing and undertaking the marketing of coffee in the local and export markets in order to maximize returns to the members, thereby promote their social economic welfare. To achieve the objective, KCCE limited was registered in June 2009 and required to operate under three key pillars namely direct access to international markets, transparency of market information rendered to farmers, enhanced financial management for primary cooperative societies (Ministry of Cooperative Development, 2010)

The entrance of KCCE into coffee marketing has broken hitherto strong cartel and increased the coffee earnings to the farmers. Recently it registered a KCCE milling company called Kenya Cooperative Coffee Millers Company (KCCM) which has in turn entered into lease agreement to utilize KPCU Sagana coffee mills for coffee from Mount Kenya region

2.8 Review of related literature

This section looks at the literature related to the services offered by cooperative societies which form the variables of the study namely agricultural extension, training and information services, marketing, and access to credit facilities and cooperative governance.

2.8.2 Agricultural Extension, Training and Information Services

The extension service plays a key role in disseminating knowledge, technologies and agricultural information, and in linking farmers with other actors in the economy. The extension service is one of the critical change agents required in transforming subsistence farming to a modern and commercial agriculture to promote household food security, improve income and reduce poverty. (Porvali, 1993)

Several public training institutions offer services to the agricultural sector. These include universities, middle-level colleges and institutes, and farmer and pastoral training centres. These institutions provide specialized training to clients (farmers and extension personnel) and act as demonstration centres for improved technologies. The Agricultural Information Resource Centre and other resource centres, agricultural shows, field days, and open forums have been important sources of agricultural knowledge, information and technology.

According to the Agricultural Sector Development Strategy 2010 – 2020, inadequate levels of funding for public training institutions leading to deterioration of infrastructure and facilities for training and technology demonstration; limited capacity to train in emerging areas such as indigenous animals and plants husbandry, and organic farming; advanced biotechnology; the slow pace of commercializing services offered by training institutions; and failure to respond to market demands for specialized courses. (Republic of Kenya, 2010)

2.8.3 Coffee pricing

Facilities and operations of coffee marketing cooperatives are in many ways similar to those of other firms. They must employ resources such as management, labor, and capital. They are subject to market and competitive factors and to all regulations regarding industries in which they operate, including those that affect handling, packing, processing, marketing and transporting products. (Chambo et al. 2008)

Pricing may involve differentials or discounts for various grades and hauling charges unless they are listed separately. These factors plus changes in the value of inventories affect the gross margins per dollar or unit realized over various time periods. Pricing at prevailing market levels reduces the likelihood of extreme pricing practices by competitors. It increases the chances for the cooperative to realize net margins and accumulate operating reserves to cushion the effects of market price declines or unusual expenses. (Karanja, 2002)

The international coffee market is one of the world's most volatile, exhibiting extreme sensitivity to fluctuations in the supply from a handful of coffee-producing countries. For more than a decade, coffee farmers around the world have been struggling to adapt to exacerbated volatility in supply and prices, precipitated not only by climatic events in the largest producer countries (notably Brazil), but also by important changes in production technology, processing techniques and the structure of inter- national markets (Ponte 2002).

Since its introduction as a cash crop in the early 1900s, coffee has traditionally been the backbone of Kenya's rural highlands economy. Coffee was the nation's top foreign exchange earner from independence in 1963 until it was surpassed by tourism in 1989. Since then, national coffee earnings have steadily declined and currently rank fourth after tourism, tea, and horticulture (Karanja, 2002).

Over the years, cooperatives have played a key role in marketing coffee, dairy products, pyrethrum, livestock, fish, handicrafts and honey. Out of 12,000 registered cooperatives, 49 per cent are in agribusiness, with a membership of over 4 million. (Republic of Kenya, 2010) Marketing of agricultural produce and products within the country is carried out by the private sector either as formal marketing companies or as brokers. National and regional markets have great potential to expand with better marketing infrastructure and quality assurance. The export markets mainly deal with raw commodities and have become stringent on issues of traceability, safety, sanitary and phytosanitary standards, and maximum residue limits. (Damianopoulos, 2005)

Nyangito, 2001 notes that factory payout to farmers is largely determined by the charges for the services of coffee processing, storage, bulking and transportation and for overheads. High deductions and lower-quality coffee result in low producer price, which discourages production.

Milling charges vary from miller to miller but deductions on the farmers' proceeds should not exceed 4% of the export price according to CBK rules. This has restricted the range of services millers can provide. As a result, conflicts have arisen over unfulfilled promises millers have made to farmers. (Karanja, 2002)

2.8.4 Access to Credit and Inputs

After independence, the Government set up the Agricultural Finance Corporation to provide long-term credit to individuals and groups to purchase farms and to finance farm improvement, as well as seasonal credit for production. By providing suppliers with credit, cooperative societies also supported farmers. These organizations have been mismanaged and run down and are no longer important sources of finance for agriculture. Indeed, a large

number almost collapsed. Today, farmers get credit mainly from cooperatives, NGOs and community-based lending institutions. (Mude, 2006)

Access to bank credit by farmers is still a major challenge despite the fact that Kenya has a relatively well-developed banking system. According to Chambo et al (2008), Risks associated with agribusiness coupled with complicated land laws and tenure systems that limit the use of land as collateral make financing agriculture unattractive to the formal banking industry. In addition, corruption, political interference in the operations particularly of State-owned banks, and a dysfunctional court system in the past, gave rise to a culture of defaulting that led to high numbers of non-performing loans. This development forced many banks to charge their customers, who included farmers, prohibitively high interest rates to remain afloat. Limited competition in the banking industry despite the large number of banks also ensures interest rates remain high. The cost of bank credit and the limited number of banks in rural areas are some of the factors that make it difficult for farmers to access bank credit. (Karanja, 2002)

Major inputs in agriculture are seed, fertilizer, pesticides, feed, farm machinery, breeding animals and building materials. According to Wanyama (2008), the annual fertilizer demand increased from 329,449 tonnes in 2002/03 to 410,214 tonnes in 2006/07. Production of certified seed for various crops increased from 12,998 tonnes in 2002 to 34,682 tonnes in 2006, while the volume of imported seed increased from 1217 tonnes to 4773 tonnes over the same period. The volume of pesticide imports reached 7000 tonnes in 2006/07. The inputs are distributed through a wide range of stockists and merchants all over the country. Also, some cooperative societies and commodity boards supply inputs to members. (Hussi et al 1993)

The use of fertilizer is low due to its high price, attributed to the high cost of transportation and distribution systems. Fertilizer use in Kenya is about a third of the level used in India and a quarter of the level used in Indonesia. In addition to the high cost, adulteration by

merchants, which affects the quality of fertilizer, seed and pesticides, has limited the use of these inputs. Only about 24.3 per cent of farmers use manure to improve soil fertility. (Wanyama, 2008)

The use of agricultural machinery has generally declined; this has been due to the high costs arising from taxation and maintenance. Most of the farm equipment, machinery and spare parts are imported. Further, the increased reduction in farm size through subdivision makes the use of large machinery and mechanization of farming generally uneconomical. (Lindberg, 1993)

2.8.5 Cooperative governance

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 et al, 1993)

The cooperative Manager is the chairperson of the management committee, and the only paid officer in the enterprise. The cooperative manager initiates and presides over the meetings of the management committee, and prepares the agenda for those meetings. It is this officer who is most directly involved in the personal problems of members of the cooperative and of its employees. The manager represents the cooperative in other forums, institutions and government bodies; and it is this person who is in charge of the operation of the different departments of the organization as well as for the preparation and execution of the socioeconomic policy of the cooperative. It is the manager who proposes plans, executes and evaluates. (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)

2.9 Theoretical framework

The theoretical framework consists of theories, principles, generalizations and research findings which are closely related to the present study. The researchers knowledge of the problem and his understanding of the theoretical and research issues related to the research question will be demonstrated.

2.9.1 Frederick Taylor's Theory of Management

Fredrick Taylor led the development of a theory of management that analysed work flows. Its main objective was improving economic efficiency especially labour productivity. He attempted to apply science to the engineering of processes and management.

Taylor believed in standardization of best practices and wreathed traditions preserved merely for its own sake or to protect the social status of particular workers with particular skills sets. He advocated for transformation of craft production into mass production and knowledge transfer between workers and from workers into tools, processes and documentation. Taylor noticed that natural differences in productivity between workers were driven by various causes including differences in talent, intelligence or motivation. He applied science in understanding why and how these differences existed and how best practices could be analyzed, synthesized and then propagated to other workers through standardization of process steps. He believed that decisions based upon rule of thumb and tradition should be replaced by practical procedures developed after careful study of an individual at work, including via time and motion slides which would synthesis the "one best way to do any given task.

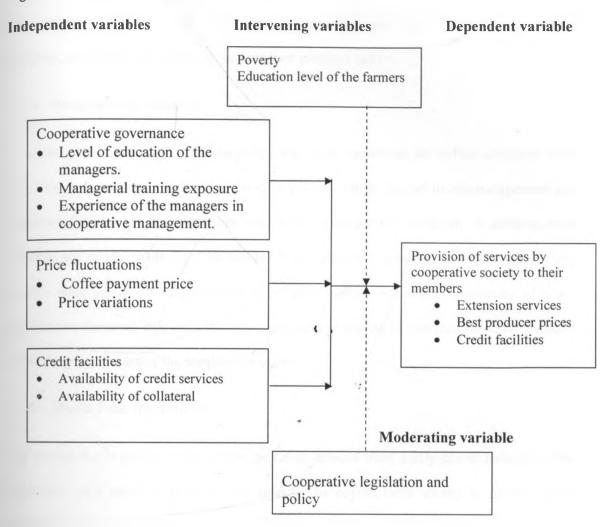
The goal and promise was both an increase in productivity and reduction of effort. Taylor observed that some workers were more talented than others and that even smart ones were

often unmotivated. He observed those workers who were forced to perform repetitive tasks tended to work at the slowest rate that goes unpunished. Taylor observed that, when paid the same amount, workers tend to do the amount of work that the slowest among them does. This reflected the idea that workers had vested interest on their own well-being and don't benefit from working above the defined rate of work when it will not increase their remuneration. He proposed that time and motion studies combined with rational analysis and synthesis could uncover one best method of performing any particular task and that prevailing methods were seldom equal to these best methods.

Taylor acknowledged that if each employee's compensation was linked to their output, their productivity could go up. His compensation plans included piece rates. He rejected the idea that the trades including manufacturing were black art that couldn't be analyzed. In his empirical studies he examined various kind of manual labour and discovered many concepts. He decided that labour should include rest breaks so that workers could get time to recover from mental and physical fatigue. As a result productivity increased.

2.10 Conceptual framework

Figure 1: Conceptual Framework



Explanation of the variables

Factors influencing service provision by cooperative societies to their members form the independent variables. These factors include Management skills, availability of credit facilities, availability of extension services, and producer prices.

1. Cooperative governance

Nyangito (2001) in his study of the policy and legal framework for coffee subsector notes that factory management is burdened with nepotism, which has led to mismanagement and run-down facilities—a factor that has contributed to cooperative break-up. In addition, most societies are poorly managed. This has led to a widespread break-up of large societies into smaller ones which are not economically viable and do not enjoy economies of scale. Governance therefore influences the way a cooperative society is managed based on the skills of the decision makers of the cooperative society.

2. Market Price fluctuations

The current world market coffee prices are on an upward trend partly due to reduced coffee production as a result of previous low prices. The payout from society to factory varies depending on the performance of the cooperative and the services it offers to factories and individual factory expenses. Nyangito (2001) notes that over 95% of the expenses for factories are factory related, but much of these expenses are inflated because of corrupt practices, such as exaggerated deductions for both factory and the society services. Producer prices therefore influence cooperative societies in that the higher the producer prices offered by the cooperatives the better for their members and vice versa. High deductions and lower-quality coffee result in low producer price, which discourages production.

3. Extension services

Extension education to the members on improved ways of farming, pest control and improved technologies and crop varieties is very important as it has a direct effect on the production from the farmers both in terms of quality and quantity. Provision of extension education or lack of it will therefore influence cooperative societies in provision of services to their members

4. Credit facilities

Availability of credit facilities to the cooperative societies is important as it enables the cooperative society invest in most recent technology such as embracing of ICT in management and investment in more efficient and cost effective machinery. The same credit facilities trickle down to the members in terms of farming loans, inputs loans and even loans on farm implements. Availability of credit facilities will therefore have a direct influence on the cooperative societies in provision of services to their members.

2.11 Summary of Literature

The literature has outlined the various aspects of cooperatives with regard to the evolution of the cooperative movement, significance of cooperatives to the Kenyan Economy, and the status of the cooperative movement in the coffee subsector with special focus on agricultural extension, training and information services, coffee marketing, accessibility of credit facilities and cooperative management.

The literature highlights the two side of cooperative governance; the cooperative management committee and the cooperative manager which complement each other and their importance in ensuring effective service provision by the cooperative societies to their members. It stresses the importance of credit facilities both in terms of farm inputs and loans

to the cooperative society and the cooperative members as this would ensure increased productivity for the farmers and increased capacity of the cooperative facilities to enable them handle the increased production.

The current world market coffee prices are on an upward trend partly due to reduced coffee production as a result of previous low prices. For more than a decade, coffee farmers around the world have been struggling to adapt to exacerbated volatility in supply and prices due to changes in production technology, processing techniques and the structure of international markets. The payout from society to factory varies depending on the performance of the cooperative and the services it offers to factories and individual factory expenses.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter documents the methodology that was used in gathering data. It covers research design, target population, sample design, data collection, data analysis, ethical issues and operationalization of the variables. The study investigated factors that influence service provision by cooperative societies to their members.

3.2 Research Design

The study utilized a descriptive research design with a mixed approach of qualitative and quantitative design. This design enables a comparison of opinions of respondents regarding service provision by cooperative societies to their members based on other respondent characteristics. Also it enables extensive use of quantitative methods as was the case in this research work.

3.3 Target population

The study targeted all coffee farmers and managers in coffee cooperative societies in Kigumo District. These are Muthithi, Kangiri, Marumi, and Thangaini coffee farmers' cooperative societies as depicted in table 3.1

Table 3.1 Coffee Farmers' Cooperative Societies in Kigumo District

s/no	Name of	Number of	Size of membership
	cooperative society	Member factories	
1	Muthithi	3	1671
2	Kangiri	5	3230
3	Marumi	3	1445
4	Thangaini	8	5327
Total			11673

Source: District cooperative Office, Murang'a South

3.4 Sample size and sampling procedures

The sample was two strata namely cooperative management and coffee farmers who are members of the fore mentioned cooperative societies.

In the cooperative management stratum, the researcher interviewed the chairman, secretary and treasurer of each of the four coffee cooperative societies management committees totaling to 12 respondents drawn by purposive sampling. According to Mugenda and Mugenda, (2003) non probability purposive sampling method is adopted where a group has the required information with respect to the objectives of the study and offer in depth information about the study.

In the coffee farmers' strata, the researcher used a formula adopted from Cochran 1963 to determine the sample size as 201 at 7% level of significance

$$n = N/[1 + N(e)^2]$$

Where; n - sample size

N – population size

e - level of significance

$$n = 11,673 + 11,673(0.07)^2 = 201$$

The sample of 201 was then allocated proportionately to each cooperative society according to the proportionate membership. The respondents were then selected using simple random sampling technique.

Table 3.2 Representation from which the sample was drawn

s/no	Name of	Number of	Size of	Sample
	cooperative	Member factories	membership	respondents
1	Muthithi	3	1671	29
2	Kangiri	5	3230	56
3	Marumi	3	1445	25
4	Thangaini	8	5327	91
Total			11673	201

3.5 Data collection Methods

The study used primary data, which was collected through questionnaires. The researcher administered the questionnaires to respondents via personal interviews. The questionnaires comprised a variety of questions that were structured into different sections with each of the sections addressing a specific objective. Both open and closed questions were included in the data collection tool.

The questionnaire for the coffee farmers was structured in four parts. The first part was intended to capture the demographic information of the respondent while the second, third and fourth parts were designed to collect data on extension education services, coffee prices and credit facilities respectively.

The questionnaire for the cooperative managers was structured in six parts. The first part was intended to capture the demographic information of the respondent while the second, third; fourth, fifth and sixth parts were designed to collect data on governance, coffee prices, credit facilities, cooperative policy regulations and extension respectively.

Personal interviews were used to ensure instant responses are obtained. This instrument would assist the researcher to learn the moods of the respondent and also dig out the relevant information concerning the study.

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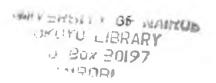
3.6 Validity and reliability of instrument

This section discusses the validity and reliability of the data collection instruments.

3.6.1 Validity of the instrument

According to Mugenda and Mugenda (2003), validity is a measure of relevance and correctness. It is the accuracy and meaningfulness of inferences which are based on the research results. Data collection techniques must yield information that is not only relevant to the research questions but also correct.

For the purpose of this study, the researcher consulted the supervisor and class colleagues and also visited the district cooperative officer and the district agricultural and livestock extension officer before conducting the study to ascertain the validity of the research instruments. The specialists confirmed that the issues in the questionnaires are actually pertinent to the study and they are actually the issues that influence service provision by cooperative societies.



3.6.2 Reliability of the instruments

According to Mugenda and Mugenda (2003), reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. The research instrument was subjected to pretest reliability tests by initially applying it to a small sample of ten (30) respondents from two cooperative societies.

The researcher tested for reliability of the questionnaire using test retest method initially administering it to a small sample of ten (10) respondents from Thangaini cooperative society and then re-administering it to the same sample after two weeks. The scores from the two tests were then correlated giving a Pearson correlation coefficient of 0.87 which indicates strong positive linear relationship between the two scores and implies high instrument reliability because the value falls above 0.7. In addition, before the administration, the researcher had an opportunity to check for any ambiguities and unclear questions. The researcher was able to establish that the questions were well understood by the respondents to clear ambiguities.

3.7 Data collection procedures

Two research instruments were used in the study for data collection: one for management committee and the other for coffee farmers. The researcher formulated the questionnaires and administered them to the respondents whereby relevant questions concerning the study were asked. Face to face interviews were conducted to farmers and managers to capture their feedback. The researcher sought approval for this study from the University of Nairobi and the four coffee cooperatives. As soon as permission was granted, the study proceeded in the following chronology: Recruitment of three research assistants; Conducting briefing for the assistants on the study objectives, data collection process and study instrument administration; Pilot testing; Revision of the data collection instruments after the pilot study;

Reproduction of required copies for data collection upon approval by supervisors; Administration of data collection instruments to respondents; Collection of duly completed research instruments, assessment of filled in questionnaires through serialization and coding for analysis; Data analysis and discussion; preparation of conclusions and recommendations.

3.8 Ethical considerations

The researcher relied on ethical issues as identified by Mugenda and Mugenda (2003), while undertaking this study. Our research followed the three principles of ethics which include Respect, beneficence and justice. The participants were informed of the purpose of the study before information is sought from them thus conforming to the principle of voluntary and informed consent. The researcher sought approval from the University and Cooperative Society management before fieldwork. Honesty, integrity and confidentiality were highly maintained throughout the study.

3.9 Data analysis techniques

Once all the data was collected from the field, the variables (questions) were coded into Statistical Package for Social Sciences (SPSS) ready for data entry. All the responses were entered into the data template followed by preliminary tests and data cleaning. Analysis was conducted by descriptive frequencies, measures of central tendency and correlation techniques.

3.10 Operational definition of variables

The operational definition of the variables have been analyzed as shown in table 3.3

Table 3.3: Operational Definition of Variables

Objective	Type of	Indicators	Level of	Approach	Research	Level of
T	37 3.4	T 1 C 1 1 C 1	<u> </u>	of desir		A
To investigate how governance	Independent	Level of education of the	Nominal	Quantitative	Questionnaire	Descriptive
influences service provision by		managers.		&		
cooperative societies in Kigumo		Managerial training		qualitative		
To determine the extent to which	Independent	Experience of the Payment price	Nominal	Quantitative	Questionnaire	Descriptive
coffee price fluctuations influence		Price variations		&		
service provision by coffee		•				
To find out how access to credit	Independent	Availability of credit	Nominal	Quantitative	Questionnaire	Descriptive
facilities influence service		services ·		&		
provision by cooperative societies		Availability of collateral		analitativa		
To investigate the factors which	Dependent	Satisfaction with	Nominal	Quantitative	Questionnaire	Descriptive
influence service provision by		Extension services,		&	Interview	
cooperative societies in Kenya		producer prices, and			Schedule	
with a case study of cooperative		Credit services provided		qualitative	Senedale	
societies in Kigumo district.						

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1. Introduction

This chapter gives a presentation of the findings collected from four coffee cooperative societies in Kigumo district. The data was collected by direct interviews upon visitations to farmers at household level in Kangiri, Muthithi, Marumi and Thangaini cooperative societies. The chapter starts with descriptive statistics, including demographic characteristics of respondents, while the rest of the section has comparison of means and a ranking of factors which influence service provision by cooperative societies in Kenya based.

4.2. Response Rate

A total of 199 coffee farmers responded to this survey from an initial target of 201 sample respondents which translates to a 99.01% response rate. Twelve members of coffee farmers' cooperatives management committee also responded to the survey on a complementary questionnaire.

Table 4.1: Response rates by cooperative societies

Cooperative society	Frequency	Percentage
Kangiri	60	29
Marumi	21	11
Muthithi	28	14
Thangaini	91	46
Total	199	100.0

The highest response came from Thangaini cooperative at 46% as compared to Marumi with the lowest response at 11% representation in the sample.

4.3. Demographic characteristics of respondents

Males were significantly more represented (78.9%) in the sample indicating some gender imbalance. Part of the reason for male dominance in the study is their higher time availability to participate in the study. Additionally, most females shied off from the interviews referring the researcher to the males who are regarded as the household head and the 'owners' of the coffee trees.

Table 4.2: Gender Distribution

Gender	Frequency		Percentage	
Male	157		78.9	
Female	42	٠,	21.1	
Total	199	1.5	100.0	

It was also noted that, 36% of respondents had over 30 years membership as compared to only 10% of respondents who had less than 10 years membership. Thus the sample had strong capacity to provide valid information to achieve the objectives of the study. This is as evidenced in Table 4.3.

Table 4.3: Duration farmers have been involved in the cooperative movement

Membership duration	Frequency	Percentage
Under 10 years	19	9.5
11 - 20 years	40	20.1
21 - 30 years	69	34.7
Over 30 years	71	35.7
Total	199	100.0

In terms of education profile, 31% of respondents had attained primary level education, 23% secondary and 5% bachelor's degree education level. The indication is that majority of coffee farmers are not very highly educated. However at least they are at a level of understanding the social economic issues in the coffee sector and how they affect them and responding accordingly.

Table 4.4: Education attainment

Highest level of Education reached	Frequency	Percentage
Primary Level	58	30.9
Secondary Level	43	22.9
Bachelors Degree	10	5.3
Others	77	41.0
Total	188	100.0

4.4. Governance and agricultural extension by coffee farmers' cooperative societies

The first objective aimed at establishing how governance influences service provision by cooperative societies in Kigumo District. The researcher investigated the extent to which the level of education of the cooperative managers, length of experience and exposure to managerial training and hiring process were perceived to influence service provision by cooperative societies.

The findings reveal that the level of education of the cooperative managers was the most influential factor (67%) impacting on service provision cooperative societies positively. Experience in cooperative management was second most influential at 45% whereas exposure to managerial training came third (38%). However only one out of the four cooperative managers had post secondary education up to diploma level while the remaining three were educated up to secondary level. Majority (75%) of the cooperative managers interviewed were found to have served in the same cooperative society for over ten years (11 - 15 years bracket) rising through the lower ranks to the level of cooperative manager while the fourth one who is coincidentally the only one with post secondary education (diploma) had served in the cooperative society for less than five years with his Marumi cooperative society being rated the best of the four cooperative societies as indicated in section 4.7. Incidences of coffee thefts were reported in virtually all the four cooperative societies. In response to a query in part VI on the mechanisms put in place to curb the thefts, the cooperative managers suggested liaison with National Security organs and insurance plans for coffee beans delivered to the society. All the three cooperative societies indicated having society by laws and cooperative society's rules 2004 which affected the service provision to a

large extent. Two thirds (61%) of the cooperative managers were found unaware of the

cooperative development policy 2008 as they indicated not having the policy document and

were also not sure of the extent to which it influences service provision by cooperative societies.

The findings reveal that 98.2% of farmers had ever received extension services ranging from utilization of land, proper use of chemicals, pruning and training on farm management practices. On probing the frequency of extension service provision by cooperatives, it was found that over half (54.4%) had received extension service within the last one year. Only 3.5% of the coffee farmers in Kigumo district had to wait for extension services for four years or longer.

Table 4.5: An indication of farmers' experience of agricultural extension services

Attendance to any extension education session Yes No Total An indication of the date Within the last one year 54.4% 1.8% 56.1% of the last agricultural Within the last two years 24.6% 24.6% extension training session Within the last three years 15.8% 15.8% Four years and above 3.5% 3.5% **Total** 98.2% 1.8% 100.0%

The coffee farmers were asked to rate extension services and the related variables were measured on a five-point Likert scale of 1= strongly disagree to 5= strongly agree. The researcher enquired the extent to which respondents agreed that their cooperative society trained them on best land management practices, application of pesticides on crops, conducted soil testing, educated them on good crop husbandry practices and offered the best coffee prices in the market. Other aspects assessed were how promptly farmers were paid for

their deliveries and whether marketing coffee through cooperative society was the most effective of options.

Table 4.6: Farmers' rating of agricultural extension services

		Mean	
Agricultural extension service provision by cooperatives	N	on Likert scale of 1 to 5	proportion (%) of agreement
Cooperative society trains us on best land management practices	17	4.5882	92%
Our cooperative society advices on choice and application of pesticides on our crops	17	4.7647	95%
Extension officers from our cooperative society visit our farms for soil testing.	17	1.5294	31%
Agricultural extension officers from our cooperative society educate us on good crop husbandry practices	17	4.7647	95%
Our cooperative societies offer the best coffee prices in the market.	20	2.7500	55%
Our cooperative society pays farmers very promptly for their deliveries	20	1.5000	30%
Marketing coffee through our cooperative society is more profitable than using other channels	20	3.3500	67%
Mean	18	3.3210	67%

Findings indicate that overall coffee famers in Kigumo district had a 67% affirmation that their respective coffee cooperative society provided them with appropriate services. On the converse, this also implies a 33% level of disagreement with the same. Coffee farmers were most content with education on good crop husbandry practices by agricultural extension officers from their respective cooperative society (95% satisfaction). They expressed high discontent with the statements regarding soil testing and prompt payment services: "Extension officers from our cooperative society visit our farms for soil testing" at 31% satisfaction and "Our cooperative society pays farmers very promptly for their deliveries" at 30% satisfaction.

4.5. Coffee price fluctuations among by coffee farmers' cooperative societies

The second objective aimed to determine the extent to which coffee price fluctuations influence service provision by coffee cooperative societies to their members in Kigumo District. The researcher presents findings about trends of coffee quantities produced, prices and income payments as it relates to service provision.

On average the coffee farmers in Kigumo district received an advance of Ksh 60 received per kilo of coffee delivered in the 2010/11 season. They had delivered an average of 691 kilogrammes (lowest having 20 and highest 10,000 kilogrammes) and earned a bonus per kilo of Ksh 65.20 (bonus in the societies ranged from Ksh 49 to Ksh 98 a kilo). Finally, the farmers earned a total income of Ksh 16,078.80 from coffee farming. The farmer with the lowest income from coffee received Ksh 100 while the one earning the highest received Ksh 81,000. Table 4.7 has more details.

Table 4.7: Descriptive summaries for coffee deliveries and incomes 2010/2011

N	Minimum	Maximum	Mean	Std.
				Deviation
192	20	10000	691.01	951.04
65	49	98	65.20	12.583
34	100	81600	16078.80	17651.90
	192	192 20 65 49	192 20 10000 65 49 98	192 20 10000 691.01 65 49 98 65.20

Data provided by managers reveals that there is a relationship between coffee production and coffee prices. Periods of high coffee prices are also characterized by low production and vice versa. Aggregate coffee production for Kigumo district was highest in 2005/6 and 2009/10 when it hit over 4 million kilograms. Data from the management committees reveals that from 2005 to 2011, the highest production ever recorded was 1936091.5 kilogrammes in Thangaini Farmers Cooperative Society (FCS) while the lowest was 93,936 kilogrammes in Muthithi Farmers Cooperative Society. Thangaini cooperative led production trends but also recorded the second most volatile of fluctuations (over 1 million kilogrammes or 260%) between the peak and trough. Muthithi Farmers Cooperative Society had the most erratic production ever, from a peak of 0.6 million to a trough of 94 thousand kilogrammes. Overall, years 2007/8 were marked by slumps in production and for the 2010/11 season, the production was even lower. According to managers, this period witnessed international price distortions, marketing problems within the Coffee Board of Kenya and widespread incidence of coffee theft.

Table 4.8: Trends of coffee Production for the years 2005 to 2011

	Production	Production	Production	Production	Total
	Marumi	Muthithi	Kangiri	Thangaini	
2005/6	492544	598479	1338893	1936091.5	4366008
2006/7	440245	293904	1112952	1838715.5	3685817
2007/8	457535	809068	900533	1141644.5	3308780
2008/9	331091	295935	1090432	1435699.5	3153158
2009/10	566587	541965	1177831	1766655.5	4053039
2010/11	165419	93936	433314	537302	1229971
max	566,587	598,479	1,338,893	1,936,092	
min	165,419	93,936	433,314	537,302	
range	401,168	494,543	905,579	1,398,790	
variance	243%	526%	209%	260%	

Trends in coffee unit prices paid have been upward looking with a near exponential growth between 2007/8 and 2010/11, as in table 4.9. However if the indications of Kangiri FCS represent the industry, the price may come down in 2012. For the 6 year period, the price climaxed at 2010/11 with an average of Ksh 72.40 which corresponds well to lowest production period. Low production in 2010/11 may have created a shortage of the commodity and thus driven price upwards following the law of demand and supply. The best paying coffee cooperative society was Marumi (unit price of Ksh 88) while the worst was Thangaini and Marumi (unit price of Ksh 9 each). Indeed the biggest disparity was always between Marumi and Thangaini Farmers' Cooperative Society. As a result of that, Marumi coffee farmers witnessed the most severe fluctuation with a unit price variance of 377%. Thangaini coffee farmers experienced the least severe fluctuation of 213% variance in unit price. It is

anticipated that, instances of low coffee prices may have dipped farmers satisfaction with service provision.

Table 4.9: Trends of coffee unit price as paid by management for the years 2005 to 2011

	Average Price	Average Price	Average Price	Average Price	average
	Marumi	Muthithi	Kangiri	Thangaini	
2005/6	20.17	19	20.05	21.04	20.065
2006/7	19.73	14	22.25	19.22	18.8
2007/8	27.73	22	28.45	23.13	25.3275
2008/9	18.37	20.2	25.1	20.9	21.1425
2009/10	44.4	43.2	34.25	29.26	37.7775
2010/11	87.6	56.6	85.15	60.1	72.3625
max	88	57	85	60	72
min	18	14	20	19	19
range	69	43	65	41	54
variance	377%	304%	325%	213%	285%

Not all the money earned as direct payments, or bonus got to the farmers. The coffee cooperative societies in Kigumo district reported that they are characterized by a high incidence of credit facilities in form of farm inputs and to a little extent cash loans. The study revealed (Table 4.10) that 65.6% of coffee farmers were not deducted their moneys to pay off debt as compared to only 34.4% of coffee farmers got deductions to pay off such debts. In a

different segment (section 4.6), the coffee farmers were asked to indicate the form of credit they had taken.

Table 4.10: Proportion of coffee farmers deducted money to pay off debts

Deducted money to		
pay debts?	Frequency	Percentage (%)
Yes	65	34.4
No	124	65.6
Total	189	100.0

Exactly 12% of farmers were deducted up to Ksh 2,000, 20% were deducted between Ksh 2,001 and Ksh 10,000. Only 1% of respondents were deducted in excess of Ksh 10,000 with the highest paying Ksh 16,000 worth of debts in the last season.

Table 4.11: Period when farmers received the payment (months past)

Months past as of		
date of interview	Frequency	Percent
0 - 6	69	34.5
7-12	12	6.0
13 and beyond	4	2.0
Total	200	100.0

When asked when the coffee farmers had received their payment in the months past, 34.5% reported they had received them in the six months past, when the study was taken, as in figure 4.10. Only 6% of the coffee farmers reported they had received their payments seven months and beyond the time the study was taken. This clearly shows that payment is paid promptly to the coffee farmers.

4.6. Access to credit facilities by farmers in Kigumo district coffee cooperatives

The third objective was to find out how access to credit facilities influence service provision by cooperative societies to their members in Kigumo District. Apart from extension services, prices and incomes, the researcher enquired the extent to which coffee farmers in Kigumo district access credit facilities form their respective cooperatives.

The study revealed that 78.9% of the coffee farmers had received credit from their cooperative society as compared to 21.1% who had not (Table 4.12). One quarter of the debtors (25%) had taken credit within the last 1 year, 30% took three years before time of research and only 9% either four years before or earlier.

Table 4.12: Consumption of credit facility from coffee cooperative societies

Frequency	Percentage
41	25.8
18	11.3
11	6.9
89	56.0
159	100.0
	41 18 11 89

For the greatest proportion of coffee farmers (63%) their type of credit facility consumed was in form of fertilizer, followed by cash loans for a fifth of the sample respondents. other forms of credit include pesticides or a combination of cash, pesticides and fertilizer. In general, farm inputs constitute the largest chunk of loans advanced coffee farmers. One respondent indicated having received credit in form of maize and it wasn't very clear whether it was part of government's social transfer program or it was meant for planting in an arrangement that the specific cooperative took part in a special distribution program.

Table 4.13: A description of the form of facility (whether in form fertilizer, seeds or cash)

Form of credit received	Frequency	Percent (%)
Fertilizer	107	63
Cash	36	21
Pesticides	8	5
Cash and fertilizer	9	5
Fertilizer and pesticides	5	3
Cash and pesticides	3	2
Maize	1	1
Total	167	100.0

The worth of the credit facility that was extended to farmers ranged from Ksh 600 to Ksh 30,000. For more than three quarters of coffee farmers, the credit was less than Ksh 10,000; a fifth of them had received Ksh 11,000-20,000 worth of credit while a paltry 3% had received Ksh 21,000-30,000 worth of credit. A high 79% of the coffee farmers acknowledged that the cooperative societies required collateral before extending the loans, with 21% of them citing that collateral was not required on the same. The forms of collateral ranged from kilograms of

coffee delivered and kilograms of coffee harvested at (66.5%) to guarantors and tallied number of coffee bushes at the farm land.

Table 4.14: Forms of collateral/security used in the cooperative societies

Form of collateral	Frequency	Percent (%)
Guarantors	33	16.5
Kilogrammes delivered	96	48
Kilogrammes harvested	37	18.5
Number of coffee trees	1	0.5
Total	200	100.0

So it emerged that coffee farmers' cooperatives in Kigumo district generally use farmers' deliveries as security to credit facilities more often than other forms of collateral common in financial institutions (namely guarantors and title deeds).

4.7. Factors influencing service provision by coffee cooperative societies

It was imperative to investigate the ratings of the service levels by coffee cooperative societies from the perspective of members (farmers). Such an inquiry would also provide indicators of satisfaction. The respondents were therefore requested to rate services offered by coffee cooperative society compared to others. The researcher used Chi-square which is considered best for testing hypotheses, in this case, differences in ratings of service provision using nominal or categorical data¹ as indicated in Table 4.15.

¹ This test was based on a question asking respondents to rate services offered by their cooperative society compared to others on a categorical scale of 1=Very Poor to 5=Excellent

Table 4.15: Rating of services offered by cooperative society compared to competitors

		Name of coffee cooperative society			
		Marumi	Kangiri	Thangaini	Muthithi
Rate the services	Excellent	1.1%	0%	0.5%	0%
offered by your	Good	2.6%	9.5%	7.4%	1.6%
cooperative society	Average	1.6%	10.5%	18.4%	5.3%
compared to	Poor	2.1%	10.5%	14.2%	5.8%
others?(extension	Very Poor				
services, coffee prices		0%	2.6%	4.7%	1.6%
and credit facilities)					
Total		7.4% (, 33.2%	45.3%	14.2%

Chi-Square Tests

			Asymp. Sig.
	Value	df	(2-sided)
Pearson Chi-Square	25.194(a)	12	.014
Likelihood Ratio	18.806	12	.093
Linear-by-Linear Association	7.483	I	.006
N of Valid Cases	190		

a 8 cells (40.0%) have expected count less than 5. The minimum expected count is .22.

A rating of services offered by cooperative societies indicated that, Marumi and Thangaini had respectively the best services while Muthithi and Kangiri had the worst services in that order. This is confirmed by a strong calculated Chi-square statistic of 25.194 (12 degrees of freedom) significant at 5 percent level. When Chi-square statistic is significant as in this case, then it implies that the ratings of service provision differ by cooperative society.

A Pearson correlation coefficient analysis was conducted between service provision scores and factors ratings of governance and extension services, coffee prices/incomes and credit facilities as offered by the four coffee cooperative societies. Service provision scores were measured by a variable that asked respondents to rate their cooperating society along a five point Likert scale (relative to competitors). Table 4.16 has results tabulated by correlation coefficient magnitudes and signs.

Table 4.16: Correlation Coefficients Among Factors Influencing Service Provision

	Services provision scores		
Satisfaction with governance and extension services	Pearson Correlation	0.152	
among coffee cooperative societies	Sig. (2-tailed)	0.043	
	, N	177	
Satisfaction with prices offered by coffee	Pearson Correlation	0.350	
cooperative societies and prompt payment by coffee cooperative societies	Sig. (2-tailed)	0.043	
	N	34	
Satisfaction with access to credit from cooperative	Pearson Correlation	0.023	
societies	Sig. (2-tailed)	0.754	
	N	184	

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

Out of three factors evaluated, satisfaction with prices paid and prompt payment of delivered coffee, satisfaction with governance and extension services associate most strongly with service provision score and are statistically significant at 5 percent level. Interpreting this

positive correlation, service provision scores associate directly 35% with prices offered and prompt payment by coffee cooperative societies. Service provision also associates directly with governance and extension services among coffee cooperative societies (15% correlation). Even though access to credit was not significant, higher access was seen to promote service provision scores but only marginally.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the key findings, a comparative discussion and conclusions based on research objectives. The chapter concludes with recommendations for management of cooperatives, policy action and further research.

5.2 Summary of findings

This project purposed to investigate and understand the factors which influence service provision by cooperative societies in Kenya with a case study of four coffee farmers cooperative societies in Kigumo district. The researcher undertook five week field study of Kangiri, Muthithi, Marumi and Thangaini coffee cooperative societies. The cooperative societies had between three and eight coffee factories under it. The research objectives were to investigate how governance influences service provision by cooperative societies in Kigumo District; to determine the extent to which coffee price fluctuations influence service provision by coffee cooperative societies to their members in Kigumo District and to find out how access to credit facilities influence service provision by cooperative societies to their members in Kigumo District. A descriptive research design was followed in which of 201 farmers were selected for response to a structured questionnaire using direct interview technique. Twelve senior managers from the four coffee farmers' cooperative societies also provided to the management questionnaire to give information on the administrative side of the societies. Data analysis was conducted by use of frequencies, and test of relationships (chi-square statistics and correlation coefficient). Among other findings, results indicate that satisfaction with prices paid and prompt payment of delivered coffee, satisfaction with

governance and extension services influence service provision score more strongly than access to credit facilities. The sections below present a discussion of the findings.

5.3 Discussions

The study revealed that governance, prices and access to credit facilities influence service provision scores but to different extents. Good governance and higher prices are seen to facilitate service provision significantly. This is because these issues are strong support factors by correlation to service provision by coffee cooperatives. However access to credit facilities is not statistically significant (despite the fact that it also displays a positive relationship).

On governance and agricultural extension by the societies, majority of respondents indicated that they had ever received extension services ranging from proper land tenure, proper use of chemicals, pruning and training on farm management practices. Qualitative variables divulge that the coffee farmers have a challenge gaining access to credit facilities. Some of the causes of hampered access to credit can be attributed to corruption, bureaucracy, price brokerage as alluded to by coffee farmers. Concerning extension services to coffee farms, respondents acknowledged inadequacy of extension officers leading to unequal proportion of extension service to number of coffee farmers.

The study divulged that higher product (coffee) prices and prompt payment of farmers for their deliveries may increase farmer satisfaction with service provided. The correlation coefficient on prices was positive. However the prices in many of the cooperative societies were reported as being low which could be attributed to slack in sourcing of competitive markets. Indeed some respondents cited the momentous differences between producer price and consumer (supermarket market) price of coffee. In some cases, cooperative society prices are even lower than broker" price which leads to low overall incomes (advance payouts and

bonuses). This can cause disincentives to investment in coffee farming as evidenced by recent trends in neighbouring Muranga and Maragua districts. In these regions, farmers totally abandon coffee farming and opt for substitute crops (most commonly bananas).

Even though this study followed a cross-sectional rather than time series analysis, it partly relied on data provided by the management of the societies for the years 2005/6 to 2011/12. It was noted that the coffee industry had experienced fluctuations in production and unit prices. It is predicted that, periods marked by low coffee prices may have reduced coffee farmers' satisfaction with service provision by the management and vice versa. However, price is not the only service provision affecting satisfaction scores in Table 4.15.

Although credit facilities has no statistically important bearing to warrant discussion, it was noted that cooperative societies rated better-off are also the ones which provided more available credit facilities and facilitate credit from banks. On the other hand, those rated worse-off had costly credit facilities. Credit is crucial to coffee farmers since (as revealed from the amount of income received from coffee) they receive relatively low incomes during payment seasons hardly financing them through to the next season. Hence the need for bridging loans. Most of the farmers receive credit in form of farm inputs (fertilizers and chemicals). This is a form of credit that can be regarded indispensable to such farmers and they can only suffer production losses in its absence.

5.4 Conclusions

The first objective sought to investigate how governance influences service provision by cooperative societies in Kigumo District Governance. Results indicate that good governance promotes service delivery and vice versa. Thus indicators of good governance such as level of education of managers, managerial training and experience are fundamental to provision of quality services to coffee cooperatives.

It was noted that the coffee industry experiences fluctuations in unit coffee prices. Low coffee prices can reduce coffee farmers' satisfaction with service provision by the management and lead to decline in production. So it is important to find mechanisms to regulate price accordingly.

Access to credit facilities is not of significant influence to service provision. However, the direction of relationship is such that higher access to credit increases satisfaction with services provided. Some of the causes of hampered access to credit were identified as corruption, bureaucracy and brokerage. So it is crucial for coffee cooperative to institute ways of increasing access to credit for their members by overcoming the said bottlenecks.

In light of the above discussion, we make the following recommendations for policy, management and further research.

5.5 Recommendations

1. The Ministry of Cooperative Development should ensure there are basic academic and experience profiles that management committees must meet before allowing them to vie for any leadership position in coffee cooperatives. Also instances of coffee theft need to be stopped. Hence, in tandem with this is to ensure that the recruitment mechanism adheres to guidelines of integrity and results oriented productivity. Despite the shortage of personnel for extension work, extension service provision was key in increasing their coffee yields that translated to better incomes and hence improved livelihoods from their sale of coffee. Government should increase manpower by hiring more agricultural extension workers and agronomists. The coffee cooperative societies should introduce a capacity building program in which farmers

- are taken through seminars on agricultural and credit products. In turn, the graduates become trainers of their colleagues on best practices.
- 2. To guarantee sustained interest in coffee farming, it is important for the government and stakeholders to seek alternative sources for market that offer better coffee prices. This can help to oversee challenges of coffee price fluctuations due to reliance on traditional markets. At the same time the authorities can initiate programs that promote local demand for coffee. Such ideas have been seen to work in Ethiopia and Egypt.
- 3. The government should help coffee cooperatives to look for better markets and pricing for coffee produced. While it may be difficult to eliminate intermediaries, putting a mechanism to provide a stronger link between the farmers and the market could create a win-win situation between farmers and coffee brokers. This can be achieved by setting up of regulation authority/function that can closely work with intermediaries alongside the Coffee Board of Kenya.
- 4. The farmers suggested various ways to improve service provision by coffee cooperative societies. Some proposed that the cooperatives absorb price fluctuations, enhance transparency and accountability by management while marketing coffee and allocating bonuses, avail credit and farm inputs (especially pesticides and fertilizers) to farmers, provide advance payments for coffee delivered. Others recommended that societies advise farmers on farming procedures. Some of the striking suggestions were that cooperatives provide loans with negotiable collateral, conduct marketing research, improve security of coffee factory, and reduce lending rates and intermediaries (middle men) as well as providing frequent education days.

5.6 Suggestions for Further research

- 1. This research project has focused the factors influencing service provision by cooperative societies. However cooperative societies are not the only institutions that coffee farmers interact with in daily operation. We therefore suggest that further studies be conducted to investigate the role of microfinance institutions and banks in improving production and hence livelihoods of coffee farmers in Kenya.
- It is recommended that a comparative study be conducted between coffee cooperative
 societies in Kenya and Ethiopia so as to borrow best practices from Ethiopia. This is
 because Ethiopia is one of the top rated coffee producing countries in terms of quality
 and quantity.

REFERENCES

- Chambo, S. A, Mwangi; M. and Oloo, O (2008). An Analysis of the Socio Economic Impact of Co-operatives in Africa and their Institutional Context. Nairobi, International Cooperative Alliance and the Canadian Cooperative Association.
- Cochran W.G (1963). Sampling Techniques. John Willey and sons Inc., New York
- Damianopoulos, R. A (2005). Market Adaptability, Industrial Divergence and the Politics of Liberalisation in the Kenyan and Ugandan Coffee Industries. MA Thesis University of British Columbia, Retrieved from ProQuest Dissertations & Theses.
- Evans, A. C. (2002). The Unpaved Road Ahead: HIV/AIDS & Microfinance: An Exploration of Kenya Credit Unions (SACCOs). Research Monograph Series No. 21, Wisconsin, World Council of Credit Unions.
- Gamba, P and Komo I (2006). Evolution, Growth, and Decline of the Cooperative Sector.

 Working Paper for Centre for Governance and Development, Nairobi Kenya
- Hussi, P., Murphy J., Lindberg O. & Brenneman L. (1993). The Development of Cooperatives and Other Rural Organizations: The Role of the World Bank.

 Washington, D.C., World Bank.
- Karanja, A.M (2002). Liberalisation and Smallholder Agricultural Development; A Case Study of Coffee Farms In Kenya. phD Thesis, Wageningen University, USA. Retrieved from ProQuest Dissertations & Theses.
- Karanja, A.M (2002). Coffee Prices and Regulation and their Impact on Livelihoods of Rural

 Community in Kenya. Tegemeo Institute of Agricultural Policy and Development,

 Egerton University Kenya
- International Cooperative Alliance (ICA) (2002) Status of Agricultural Marketing Cooperatives in Kenya, Nairobi, ICA-ROECSA.

- Kenya National Bureau of Statistics (2009). *Economic Survey 2009*. Nairobi, Government Printer.
- Kenya National Federation of Cooperatives (KNFC) (2008a). Proceedings Report of the National Cooperative Leaders' Conference (November 2007). Nairobi, Kenya National Federation of Cooperatives.
- Kenya National Federation of Cooperatives (KNFC) (2008b). Revised By-Laws (2008) for the Kenya National Federation of Cooperative. (Reg. No. CS/1068), Nairobi, Kenya National Federation of Cooperatives.
- Kenya National Federation of Cooperatives (KNFC) Board (2007). Outline Strategy Paper for Kenya National Federation of Cooperatives. Nairobi, Kenya National Federation of Cooperatives.
- Kegonde, P (2005). Economic Governance of Coffee Sector; Focus on Central Province.

 Centre for Governance and Development, Nairobi Kenya
- Kothari C.R (2004). Research Methodology: Methods and Techniques 2nd edition. New Age International Publishers
- Lindberg O. (1993). Kenya: Review of the Cooperative Sector with Special Emphasis on Coffee Cooperatives'. in Porvali H. (ed.), The Development Of Cooperatives and Other Rural Organizations, Agriculture and Rural Development Series, No. 8, Washington, D.C., World Bank.
- Manyara, M. K. (2003). *The Development of Cooperative Law and Policy in Kenya*. Nairobi, Oscan Print.
- Ministry of Cooperative Development and Marketing (2008). *Cooperative Development Policy*, 2008, Nairobi. Ministry of Cooperative Development and Marketing.
- Mugenda A and Mugenda O, (2003). Research methods: Quantitative and Qualitative.

 Kenyatta University Press, Nairobi

- Mude, A (2006). Weakness in institutional organization; explaining dismal performance of Kenyan coffee cooperatives. International Association of Agricultural Economics Conference, Gold coast Australia
- Nyangito, H.O (2001). Policy and Legal Framework for the coffee subsector and the impact of liberalization in Kenya. KIPPRA policy paper no.2
- Owango M., Lukuyu B., Staal S. J., Kenyanjui M., Njubi D. & Thorpe W. (1998). Dairy

 Cooperatives and Policy Reform in Kenya: Effects of Livestock Service and Milk

 Market Liberalization. Food Policy, Vol. 23, No. 2, p. 173-185.
- Porvali, H. (ed) (1993). The Development of Cooperatives and Other Rural Organizations, Agriculture and Rural Development Series, No. 8 The World Bank, Washington, D.C.
- Republic of Kenya (1997a). Sessional Paper No. 6 of 1997 0n Cooperatives in a Liberalized Economic Environment. Nairobi, Government Printer.
- Republic of Kenya (1997b). Cooperative Societies Act, 1997. Nairobi, Government Printer.
- Republic of Kenya (2008a). *Economic Survey 2008*. Nairobi, Central Bureau of Statistics, Ministry of Planning and National Development.
- Republic of Kenya (2008b). The SACCO Societies Act, 2008. Nairobi, Government Printer.
- Republic of Kenya (2004a). *The Cooperative Societies (Amendment) Act*, 2004. Nairobi, Government Printer.
- Republic of Kenya (2004b). *The Cooperative Societies Rules*, 2004. Nairobi, Government Printer.
- Staal S., Delgado C. & Nicholson C. (1997). Smallholder Dairying under Transactions Cost in East Africa. World Development, Vol. 25, No. 5, p. 779-794.
- Swynnerton, R.J.M. (1955). The Swynnerton Report: A plan to intensify the development of African agriculture in Kenya. Nairobi: Government Printer.

- Wanyama, F. O. (2006). Interfacing the State and the Voluntary Sector for African Development: Lessons from Kenya. Africa Development, Vol. 31, No. 4, p. 73-103.
- Wanyama, F. O. (2008). The Qualitative and Quantitative Growth of the Cooperative Movement in Kenya. in P. Develtere, I. Pollet & F. Wanyama (eds.), Cooperating Out of Poverty: The Renaissance of the African Cooperative Movement, Geneva, International Labour Office.
- Wanyama F.O (2009). Surviving Liberalisation; the cooperative movement in Kenya. ILO, Geneva Switzerland, Working paper number 10

APPENDICES

Appendix 1: Transmittal Letter	
	Stephen N Nduati
	P. o Box 251 – 10203,
	KIGUMO
	Date
ТО	
••••••	
RE: LETTER OF TRANSMITTAL OF DATA CQLLECT	<u>rion</u>
I am undertaking a research for my Master of Arts	degree in project planning and
management of the University of Nairobi. The study	is on factors influencing service
provision by cooperative societies to their members.	
Please answer the questions in the questionnaire honestly	y and completely. The information
you give shall be treated with confidentiality and will be	used for the purpose of academic
research only.	
Thank you.	
Yours faithfully	

Stephen N Nduati

Cell phone 0721910870



UNIVERSITY OF NAIROBI

COLLEGE OF EDUCATION AND EXTERNAL STUDIES SCHOOL OF CONTINUING AND DISTANCE EDUCATION DEPARTMENT OF EXTRA-MURAL STUDIES

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Telephone: 318262 Ext. 120

REF: UON/CEES/NEMC/12/327

Main Campus

Gandhi Wing, Ground Floor

P.O. Box 30197 NAIROBI

28TH JUNE 2012

TO WHOM IT MAY CONCERN

RE: STEPHEN NJUGUNA NDUATI -REG.NO: L50/64996/2010

This is to confirm that the above named is a student at the University of Nairobi College of Education and External Studies, School of Continuing and Distance Education, Department of Extra- Mural Studies pursuing Masters in Project Planning and Management.

He is proceeding for research entitled "factors influencing service provision by selected cooperative societies in Kigumo"

Any assistance given to him will be appreciated.

CAREN AWILLY

CENTRE ORGANIZER

NAIROBI EXTRA MURAL CENTRE

Appendix 2: Coffee Farmers' Questionnaire

Please answer the questions freely. The information you provide will be treated with utmost confidentiality and will only be used for academic research purposes by the researcher himself. Name of cooperative society ______Name of factory _____ Part I: Demographic information 1. What is your gender? Male Female 2. How long have you been in the cooperative movement? ☐ Under 10 years ☐ 11 - 20 years ☐ 21 - 30 years Over 30 years 3. What is your highest level of Education? ☐ Primary Level ☐ Secondary Level ☐ Bachelors Degree ☐ Others (specify): Part II; Extension Education services 4. Have you ever attended any extension education session organized by your cooperative society?' \(\subseteq \text{Yes} ☐ No 5. If yes when was the last training session? ☐ Within the last one year ☐ Within the last two years ☐ Within the last three years ☐ Four years and above 6. Please indicate the extent to which you AGREE or DISAGREE with each of the statements by selecting the category that corresponds best to your desired response.

	Strongly	Disagree	Not sure	Agree	Strongly	Agree
Our cooperative society trains us on best land management practices						
Our cooperative society advices on choice and application of pesticides on our crops						
Extension officers from our cooperative society visit our farms for soil testing.						
Agricultural extension officers from our cooperative society educate us on good crop husbandry practices						

Part III; Coffee Prices

7. Please indicate the extent to which you AGREE or DISAGREE with each of the statements by selecting the category that corresponds best to your desired response.

	Strongly	Disagree	Not sure	Agree	Strongly
Our cooperative societies offer the best coffee prices in the					
market.					
Our cooperative society pays farmers very promptly for their					
deliveries					
Marketing coffee through our cooperative society is more					
profitable than using other channels					

8. How much advance did you receive per kilo of coffee delivered in the last season?
Kshs
9. How much bonus did you receive per kilo of coffee delivered in the last season? Kshs
10. How many kilogrammes of coffee did you deliver in total during the last season?
11. How much money were you paid in total during the last season? Kshs
12. Were you deducted any money to pay off debts? Yes
13. If Yes to Q.12, how much? Kshs
14. When did you receive the above payment? Monthyear
Part IV; Credit facilities
15. Have you ever received any credit facility from your cooperative society?
☐ Yes ☐ No
16. If yes indicate when you took the last credit facility?
☐ Within the last one year
Within the last two years
☐ Within the last three years
Four years and above
17. If yes, please describe the facility (whether it was in form fertilizer, seeds or cash)
18. What is the worth of the credit facility that was extended to you by your cooperative
society? Kshs
19. Did the cooperative society demand any form of security (collateral) before extending the
Ioan?

20. If Yes to Q19, please describe the form of collateral/security

21. In your opinion, how would you rate the services offered by your cooperative society
compared to others?
☐ Excellent ☐ Good ☐ Average ☐ Poor ☐ Very poor
22. Explain your answer above
23. Please suggest ways that your cooperative society can improve service provision
<u> </u>

Thank you

Appendix 3: Cooperative Managers Questionnaire

Please answer the following questions with utmost honesty. The information you provide will be treated confidentially and will be used only for research purposes. Name of cooperative society _____ Part I: Demographic information What is your gender? ☐ Female ☐ Male 1. How long have you been in the cooperative society? 2. \square Under 5 years \square 6-10 years ☐ 11-15 years Over 15 years 3. What is your highest level of Education? ☐ Primary Level ☐ Secondary Level ☐ Diploma level ☐ Bachelors Degree Other (specify): 4. Approximately how many employees are under your command? ****************** 5. List some of the qualities you consider when engaging your employees

Part II: Governance

6. Please indicate the extent to which you agree with the following statements with regard to governance in your cooperative society

	Strongly	Disagree	Not	Agree	Strongly
	disagree		sure		agree
The level of education of the cooperative					
managers influence service provision by					
our cooperative society					
Length of experience of the cooperative					
manager influence service provision by					
our cooperative society					
Exposure to managerial training	٠,				
influence service provision by our					
cooperative society		;			
Robustness of the employee hiring					
process influence service provision by					
our cooperative society					

7.	Have you encountered cases of theft of coffee in your factories? ☐ Yes ☐ No
8.	If Yes to Q 7, how many bags were stolen in the last season?
Par	t III: Prices
9.	How much advance did you pay per kilo of coffee delivered in the last season?
	Kshs
10.	How much bonus did you pay per kilo of coffee delivered in the last season? Kshs
11.	When did you pay the above payment? Monthyear

12.	What is the	highest price you	have ever	paid to	your mem	bers per	kilo of	coffee
	delivered?	Kshs	Year:					
13.	What is the	lowest price you	have ever	paid to	your mem	bers per	kilo of	coffee
	delivered?	Kshs	Year:					
14.	In your opini	on, how would you	rate your pi	rices rela	tive to other	r coffee b	uyers?	
	we buy far	mers coffee at a rel	atively high	er price				
	we buy far	mers coffee at price	es that are ge	enerally s	imilar to ot	her buyer	S	
	we buy far	mers coffee at a rel	atively lowe	r price		•		
				. p				
Par	t IV: Credit_f	facilities						
1 41	tiv. cicari							
15.	What amoun	nt on average (Kshs) do vou all	located fo	or loans to	your men	nbers pe	er year?
			,		•			•
16.	How much	loan (Kshs) did	yo u loan d	out to fa	rmers in	the last	financia	l year?
				4				•
17.	Do you requi	ire any collateral (so	ecurity) befo	ore advan	cing any lo	an to you	r membo	ers?
	□Yes	□No						
18.	If yes describ	be the form of secur	ity required	?				
			••••••					
Par	t V: Coopera	ative policy and re	gulations					
19.		e policies to guide y		ons in the	cooperativ	e society?)	
17,	☐ Yes	□No			o o por activ	2 doorory .		

20.	If your answer to question 8 is Yes, enumerate the policies you have.	
		• • • • • • • • • • • • • • • • • • • •
• • • • •		
21.	To what extent does Cooperative society's act and rules, 2004 influence ser	vice provision by
	your cooperative society?	
[Not at all ☐ Limited Extent ☐ Not sure ☐ Certain extent ☐	Large extent
22.	To what extent does Cooperative development policy 2008 influence service	provision by your
	cooperative society?	
[Not at all ☐ Limited Extent ☐ Not sure ☐ Certain extent ☐	Large extent
Part	VI: Extension Services	
23.	Do you offer extension education services to your members?	
	Yes No	
24.	If Yes to Q 22, when was the last training session?	
	☐ Within the last one year	
	☐ Within the last two years	
	☐ Within the last three years	
	☐ Four years and above	
25.	Kindly explain the extension service you provide to	your members
26.	What major challenges do you face in the process of providing	services to the
	cooperative members	

./.	How do you address the challenges above? (if any)
	What suggestions would you offer to improve service provision to the cooperative
	members?

Thank you.