



DRIVERS OF SUSTAINABILITY OF AGRICULTURAL COOPERATIVES IN KENYA: A CASE OF MACHAKOS COUNTY

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DRIVERS OF SUSTAINABILITY OF AGRICULTURAL COOPERATIVES IN KENYA: A CASE OF MACHAKOS COUNTY

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ABSTRACT

Kenya has a long history of cooperative development and is recognized by the government to be a major contributor to national development, as they are found in almost all sectors of the economy. The Kenya's population participates directly or indirectly in cooperative-based enterprises. According to the government of Kenya, it is estimated that 80 per cent of Kenya's population derives their income either directly or indirectly through cooperative activities. Although significant progress has been made in the establishment of agricultural cooperatives, sustainability is a major challenge for majority of these cooperatives. The performance and sustainability of these cooperatives in Kenya, have been debatable, since the number of cooperatives becoming dormant (have actually closed down) is increasing over time. This study sought to establish the determinants of sustainability of agricultural cooperatives in Kenya. The specific objectives of the study were to examine how managerial skills, access to finance, stakeholder involvement and competitive environment affect sustainability of agricultural cooperatives in Kenya. The study adopted a descriptive design and the target population was 750 staff (senior and middle level management) of agricultural cooperatives drawn from different sub-counties in Machakos County. The sample size for the study was 80 respondents. A stratified sampling technique was carried out by involving all the targeted respondents and primary data was collected through the use of questionnaires. The secondary data was obtained from published documents such as journals, periodicals, magazines and reports to supplement the primary data. A pilot study was conducted for the data collection instrument. The data was with help of SPSS version 21 and Excel. The study adopted a correlation and regression analysis at 5% level of significance to determine strength and direction of the relationship of the variables under study. The regression analysis showed that managerial skills had the strongest positive (Pearson correlation coefficient =.875) influence on sustainability of agricultural cooperatives. In addition, access to finance, competitive environment and stakeholder involvement were positively correlated to sustainability of agricultural cooperatives with Pearson correlation coefficient of .581, .690 and .806 with p-values of .009<0.05, .008<0.05 and .006<0.05 respectively. The study established that managerial skills were the most significant factor. The study recommends for similar studies to be undertaken in other agricultural organizations in Kenya for generalization of the findings of this study.

Key Words: Sustainability, Agricultural Cooperatives, Managerial skills, Stakeholder Participation, Access to Finance, Competitive Environment

Background of the Study

The formal definition of a co-operative is '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'. The ILO (2010, 2014) and UN (2009), among other organizations, have recognized that co-operatives in developing countries can play an important role in reducing poverty and improving wellbeing. The ILO and the International Co-operative Alliance (ICA), which federates nearly one billion cooperative members worldwide, have also outlined how co-operatives can contribute to the SDGs (ILO and ICA, 2014). With their particular values (self-help; self-responsibility; democracy; equality; equity; solidarity) and principles and mode of governance (voluntary and open membership; democratic member control; member economic participation; autonomy and independence; education, training and information; co-operation among cooperatives; concern for the community), co-operatives have been seen as having considerable potential for promoting economically and socially inclusive development.

In recent decades agricultural co-operatives have been rediscovered as organizations with the potential to foster socio-economic development and to reduce poverty (Bibby& Shaw, 2005; Birchall, 2003, 2004; FAO, 2012; Mu"nkner, 2012; UN, 2011; Vicari& De Muro, 2012). In the current economic and financial climate there is a renaissance of co-operatives, national and international organisations are concerned with understanding the extent to which cooperatives in developing countries have been able to cope with economic and political crises.

There is special interest in Africa where these organisations endured decades of mismanagement,

government interference and failure (Develtere, Pollet, &Wanyama, 2008) and yet, in more recent times, have been able to grow in numbers while serving the poor communities in the region. It has been argued that the advent of liberalisation in the 1990s in the African context has enabled agricultural co-operatives to develop as genuine member-controlled and business-oriented organisations which in turn have improved the wellbeing of vulnerable people (Wanyama, 2013). However, agricultural co-operatives in the African continent have shown a mixed-picture in terms of performance and sustainability (Francesconi& Ruben, 2008; Francesconi&Wouterse, 2011). While there are success stories, not all agricultural co-operative endeavours have been sustainable but those that have can provide key insights for co-operative resilience

Global Perspective of Sustainability of Agricultural Cooperatives

The first agricultural cooperatives were created in Europe in the seventeenth century in the Military Frontier, where the wives and children of the border guards lived together in organized agricultural cooperatives next to a funfair and a public bath. The first civil agricultural cooperatives were created also in Europe in the second half of the nineteenth century. They spread later to North America and the other continents. They have become one of the tools of agricultural development in emerging countries. Farmers also cooperated to form mutual farm insurance societies. Also related are rural credit unions. They were created in the same periods, with the initial purpose of offering farm loans. Some became universal banks such as CréditAgricole or Rabobank. (Birchall, 2004)

Local Perspective of Sustainability of Agricultural Cooperatives

Kenya has a long history of cooperative development that has been characterized by strong growth, thus making a significant contribution to the overall economy. (Ministry of cooperative development & marketing, 2008) 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: 13), it is estimated that 63 per cent of Kenya's population participate directly or indirectly in cooperative-based enterprises (GoK, 2008).

The movement is supposed to play an important role in wealth creation, food security and employment generation and hence participate in poverty alleviation. To date, there are over 11,200 registered cooperative societies country-wide. The membership is over 6.1million and has mobilized domestic savings estimated at over Kshs. 125 billion. The cooperatives have employed over 300,000 people, besides providing opportunities for self-employment. Indeed, a significant number of Kenyans, approximately 63% draw their livelihood either directly or indirectly from cooperative-based enterprises (Republic of Kenya 2007; International Monetary Fund 2007; The Kenya High Commission in the United Kingdom 2007).

Statement of the Problem

Cooperatives in Kenya contribute about 47% of the GDP and 34% of the national savings; empirical evidence indicates further that some 78% of the Kenyan people derive their livelihood either directly or indirectly from Cooperatives. During the year 2011, cooperatives recorded a turnover of about Ksh.50 Billion (WOCCU, 2010). From this data, we conclude that cooperatives have great potential as poverty economic pillars. The sustainability of these agricultural cooperatives in Kenya, have been

debatable, since the number of cooperatives becoming dormant (have actually closed down) is increasing over time (GoK, 2013).

In addition, a survey conducted by the Ministry of Cooperative Development and Marketing reported that from a sample of 220 cooperatives only 3.63% were considered to be sustainable, 35% cooperatives had an average sustainability score and 78% were considered not sustainable. The cooperatives scores were based on 3 sets of criteria; the existence of a business plan (50%), the degree of representation (20%) and management (30%) (GoK, 2012).The poor sustainability of agricultural cooperatives in Kenya has been attributed to poor leadership, lack of managerial skills, stakeholder involvement and competitive environment (RoK, 2012; WOCCU, 2010). Munkner, 2015; Birchall, 2011; Mazzrol et al., 2011).It is on this premise that this study seeks to establish the drivers of sustainability of agricultural cooperatives in Kenya specifically Machakos county. Could managerial skills, stakeholder involvement, access to finance and competitive environment be drivers of sustainability of agricultural cooperatives in Kenya? This study sought to explore more.

General objective

The main purpose of the study was to establish the determinants of sustainability of agricultural cooperatives in Kenya.

Specific objectives.

The specific objectives of the study were to

- i. Find out how managerial skills influence sustainability of agricultural cooperatives in Kenya.
- ii. Determine how stakeholder involvements affect sustainability of agricultural cooperatives in Kenya.

- iii. Examine how access to finance influence sustainability of agricultural cooperatives in Kenya.
- iv. Establish how competitive environment affect sustainability of agricultural cooperatives in Kenya.

LITERATURE REVIEW

This chapter reviews relevant literature on determinants of sustainability of agricultural cooperatives in Kenya.

Theoretical Framework

This section examines relevant theories to the study variables. According to Kombo and Tromp (2009), a theoretical framework is a collection of interrelated ideas based on theories.

Theory of the co-operative movement

It was proposed by Robert Owen in 1817. Robert Owen has been called the 'father of English Socialism'. He was the founder of the Co-operative movement and believed in worker control although he was a high capitalist himself. He was the product of self-help and a very practical man who concentrated on the 'means to the end'. The theory proposed that if the working man ever was to achieve equality, then the man must change first - in attitude. Also, the working man had to know of, believe in and be equipped to fight for the cause. This is very much the self-help ethic. (Chambers and Conway, 2006)

Owen became convinced that the advancement of humankind could be furthered by the improvement of every individual's personal environment. He reasoned that since character was molded by circumstances, then improved circumstances would lead to goodness. The environment at New Lanark, where he tried out his ideas, reflected this

philosophy. (Chaves and Sajardo, 2004) This theory supports the notion of an enabling environment and proper leadership that will foster sustainability in the long run. If people are motivated and given the impetus to apply themselves through creation of fair policies and equitable environment, then even their attitude to work will change and a new era of flourishing social and economic movements will be witnessed. The theory supports the managerial skills on sustainability of agricultural cooperatives.

Cooperative Marketing Theory

This theory was proposed by Aaron Sapiro and E.G Nourse in the 1930s. Strength of the Sapiro and Nourse ideas is in specifying objectives and organizational structures for cooperatives that address the concerns of agricultural producers in a context of achieving a public interest role. In both schools of thought, cooperatives provide some balancing of market power, whether affecting the terms of trade for an industry-wide commodity, the Sapiro School, or in stimulating competition in specific markets, the Nourse School. In their conceptions, cooperatives capture a larger share of industry earnings for the membership, but additionally, contribute to market or industry efficiency. In other words, their philosophies of cooperation were grounded in a public interest perspective, as legislatively recognized in the Capper-Volstead Act of 1922.

Sapiro and Nourse made major contributions to the practical problems of achieving member commitment and cohesive organizations. Yet, subsequent cooperative thought moved further into examining and modeling key facets of internal organization, developing a more coherent theory of agricultural cooperation. Over the years since Sapiro and Nourse, there has been some shift in emphasis from concern with the external effects of

organization to the internal or micro aspects of organizing and sustaining cooperation (Chaves and Sajardo, 2004). This theory espouses sound leadership in the cooperative movement and connects proper leadership and sound governance to a satisfied cooperative membership, proper financial management and a thriving cooperative movement. The theory supports the access to finance and managerial skills on sustainability of agricultural cooperatives.

Cooperatives Dynamic Theory

According to Nzube (2009), cooperative and mutual organizational forms arise for reasons that include contracting problems between parties. Economic literature suggests a variety of allocative inefficiencies implied by these forms that largely have their origins in poor investment decisions. It is demonstrated that a multi-period model and the supplier and cooperative valuations it implies the essentials for understanding the sources of inefficiency and solutions to them. Using the case of supplier co-operative shows that economic inefficiency arises because of the common over-supply of input induced by suppliers responding to average, rather than marginal, revenue, and that investment is actually efficient given the supply of input. The presence of unknown capital is an important source of over-supply. We show that if the cooperative's shares are priced at the present value of expected dividends and supplier entry and exit decisions are taken solely on the basis of profitability of membership then there is no inefficiency and we describe a functioning example. Finally, our valuations show that that there is no "time horizon" investment problem, at least from an industry perspective (Chandler, 1962).

Saccos in Kenya have proved to be dynamic in the way they are formed Saccos exist in all spheres of society from the urban salaried workers Saccos to the rural farmers Saccos. All these are dynamic in

the way they respond to their members needs using the capital at their disposal. The resource-based view is grounded in the perspective that a firm's internal environment, in terms of its resources and capabilities, is more critical to the determination of strategic action than is the external environment. "Instead of focusing on the accumulation of resources necessary to implement the strategy dictated by conditions and constraints in the external environment, the resource-based view suggests that a firm's unique resources and capabilities provide the basis for a strategy. The business strategy chosen should allow firms to best exploit its core competencies relative to opportunities in the external environment" (Barney, 2002). The theory supports the competitive environment on sustainability of agricultural cooperatives.

Co-operative Commonwealth Theory

In some Co-operative economics literature, the aim is the achievement of a Co-operative Commonwealth; a society based on cooperative and socialist principles. Co-operative economists - Federalist, Individualist, and otherwise - have presented the extension of their economic model to its natural limits as a goal. This ideal was widely supported in early-twentieth century U.S. and Canadian leftist circles. This ideal, and the language behind it, were central to the formation of the Co-operative Commonwealth Federation in 1935, which became Canada's largest left-wing political party, and continues to this day as the New Democratic Party. They were also important to the economic principles of the Farmer-Labor Party of the United States, particularly in the FLP's Minnesota affiliate, where advocacy for a Co-operative Commonwealth formed the central theme of the Party's platform from 1934, until the Minnesota FLP merged with the state Democratic Party to form the Democratic-Farmer-Labor Party in 1944 (Eias, 2010)

In Kenya co-operatives have been formed as social organizations that are formed by people with a common goal of uplifting their financial well-being. In Kenya many co-operative societies have had their influence in Kenya's political scene as co-operatives specifically cooperatives control a large chunk of the National savings as well as over 15 million Kenyans who are members. Some giant cooperatives mainly in Kenya have seen some of their officials be elected as members of parliament and have gone ahead to hold senior positions in Government. A case in point is the former minister of Co-operatives Mr Njeru Ndwiga who was a former chairman of Parliament cooperatives have also grown to become a sector of the economy to an extent where the Government has formed the Ministry of Co-operative development to specifically formulate policies to regulate and supervise them.

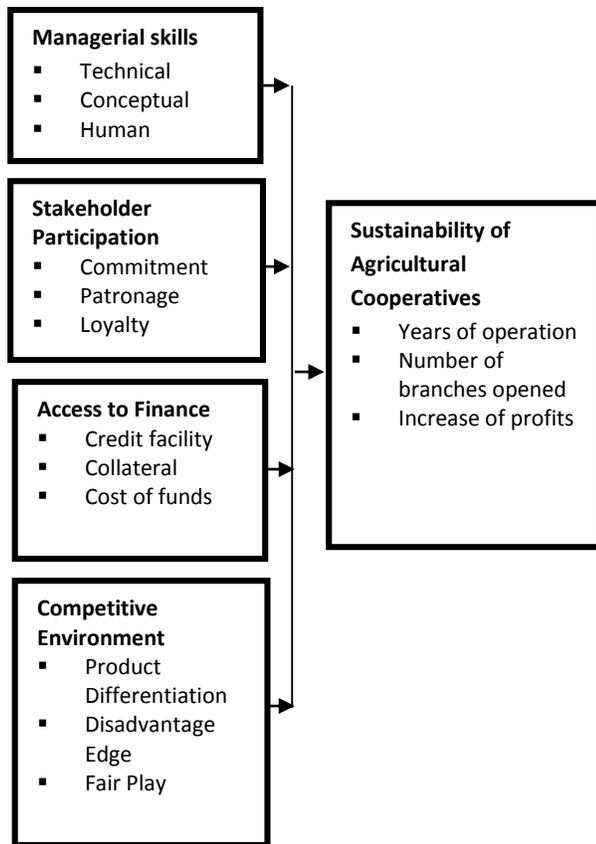
Scientific Theory of Management

Frederick Winslow Taylor developed the scientific theory of management which he published in the journal of the American Society of Mechanical Engineers in 1895. Scientific Management focuses on the efficient accomplishment of work tasks with an attitude of work smarter, not harder. Taylor meant his methods to be both a win for management in increasing productivity and a win for laborers making their jobs easier. But Taylor as a mechanical engineer focused on the physical aspects of the job and the formal organization of the shop. Scientific management was the seed bed of the Efficiency Movement in the United States. His consideration of motivation was primarily limited to the scientific determination of fair financial incentives for worker performance (Wren, 2005). This study focuses on drivers that influence sustainability of agricultural Cooperatives. Such factors include management skills that are geared to improve productivity of cooperatives, marketing

and management of cooperatives as well as influence of other services offered by cooperatives. The theory supports the managerial skills on sustainability of agricultural cooperatives.

Conceptual Framework

Mugenda, (2008) defines conceptual framework as a concise description of the phenomenon under study accompanied by a graphical or visual depiction of the major variables of the study. Kombo and Tromp, (2009) defines it as a set of broad ideas and principles taken from relevant fields of inquiry and used to structure a subsequent presentation. It is a research tool intended to assist a researcher to develop awareness and understanding of the situation under scrutiny and to communicate this. Bell, (2010) describes it as a diagrammatical representation that shows the relationship between dependent and independent variables. A conceptual framework assists a researcher to organize their thinking and complete an investigation successfully. It also explains the relationship among interlinked concepts and explains the possible connection between the variables (Kombo & Tromp, 2009). The conceptual framework comprises of the independent variables also known as the exploratory variables and which are the presumed cause of changes in the dependent variable and the dependent variable also called the criterion or predictor variable which the researcher wishes to explain (Kothari, 2004). The following framework depicts the relationship between the independent and dependent variables based on four independent variables and a dependent variable as represented diagrammatically in figure 2.1. In this study, sustainability of agricultural cooperatives is dependent on managerial skills, member participation, access to finance and government policy.



Independent variable Dependent variable

Figure 1 Conceptual Framework

Managerial Skills

According to Hambrick and Mason (1984) management refers to the process of planning, organizing, leading and controlling the efforts of organization members and of using all other organizational resources to achieve stated organizational goals. On the other hand, Veerakumaran (2006), sees “management as the driving force in cooperative endeavours that assist in achieving compromises among participants, taking into account both the interests and the needs of the members, which are often short-term interests as well as the long-term commercial goals (sustainability and reducing risks) of the cooperative enterprise”. An AC is an organization that needs management like other entities. On its own it is a

private business organization that is jointly owned and controlled by its members (IRG, 2005).

For the smooth operation, it needs good management to control its daily activities through the management committee. In a cooperative, a management committee involves a process of reaching consensus and then following through with the group’s decision. Management is therefore, crucial in the implementation of policies and activities which continuously enhance the operations of the cooperatives. Cooperatives being a democratic organization are likely to experience management problems which can lead to organizational failure when the cooperative fails to adopt the most efficient policies for their members. Fulton (2001) claims that management problems occur when cooperatives fail to elect an efficient management committee. The management committee is the highest elected executive institution in a cooperative enterprise. It approves all the activities that need to be carried out by the cooperatives. Committee members are not paid for their services and the time they devote to meetings is limited. Every member of the cooperative may present matters (personal problems, cooperative problems or public affairs) for discussion, but only a limited number of subjects can be considered in the twice weekly meetings of the management committee.

Cooperatives are democratic organizations and are likely to experience management problems that may lead to organizational failure. Cooperatives fail to adopt the most efficient policies for their members. It has already been stated that, management problems occur when cooperatives fail to elect an efficient management committee with relevant managerial skills (Fulton, 2001). They encounter various managerial problems that include poor financial management, poor credit control (that leads to unpredictable cash flow) and

lack of marketing (resulting in unresponsive attitudes to customer requirements), management and members' weaknesses, failure to delegate and train cooperative members and resistance to outside advice. A problem of corruption in Kenya's ACs management has also been reported. Some of the cooperative management problems reported besides corruption included illiteracy and lack of management skills for the members and their committees (Citation).

Stakeholder Involvement

The activities that encompass member participation in a cooperative include attending meetings, serving on committees, involvement in recruitment and patronage (Osterberg&Nilson, 2009). The participation of members in governance of a cooperative is what differentiates cooperative from other businesses organizations. Participation is an important indicator in developing members in understanding and appreciating of the cooperative (Gray, Karaenzle& USDA, 1998)

The literature suggests that a membership participation inspired by cooperative values is crucial for co-operative sustainability. A number of writers have argued that co-operatives' sustainability depends on members' sense of identity, commitment and cohesion (Birchall, 2011; Mazzarol et al., 2011; Munkner, 2012). As Munkner(2015) notes: 'co-operatives are good as their members make them'. However membership loyalty and commitment depend on cooperatives' ability to meet members' needs and demands.

Satisfied members are less likely to be free riders (Birchall, 2012; Munkner, 2012). Trust and reciprocity between members are also conducive to loyalty, which is needed when co-operatives experience financial instability (i.e. insufficient market demand, low prices). The literature argues that trust reinforces norms of generalized

reciprocity, which is particularly important in monitoring and sanctioning free riding behavior (Pelling& High, 2005). In order to work equitably and conform to co-operative values and principles, some pre-conditions are required, according to Munkner (2012) these include: knowledge, skills and investment in members' education. Informed and skilled members are more likely to understand and be committed with the co-operative business. Smith, Puga, &MacPherson (2005) and Majurin (2012) also argue that members that understand or are familiar with the co-operative values are more likely to promote the inclusion of, often marginal, groups such as women and youth within cooperatives enterprises.

Access to Finance

Agricultural cooperative credit has long been identified as a major input in the development of the agricultural sector. Credit is viewed as more than just another resource such as labor, land, equipment and raw materials (Rahji, 2000). One of the reasons for the decline in the contribution of agriculture to the economy is lack of a formal national credit policy and paucity of credit institutions, which can assist farmers. Credit access helps to expand farmland size and production. (Olagunju, 2000) affirmed that credit facilities as well as the use of agricultural capital and labor resources accelerate the adoption process and expand the scale of production. The availability of credit occupies a central place of development strategies. (Jia, 2006). Credit is important in fostering agricultural cooperative development.

Government and donors spend billions of shillings supporting credit activities for agricultural cooperatives in low income countries. Most of these activities are justified by the impact that loans have on ultimate borrowers: credit demand filled, additional crops produced, changes in modern inputs use and borrowers' increased income. This is because in case of nil or poor return from

agriculture, farmers can use credit to restart. In Kenya, there are both formal and informal credit sectors, but there is a large interest rate difference.

On average, credit to agricultural cooperatives is estimated at less than 10% of the total credit provided through the domestic financial system. (Nyangito, et al., 2004) Credit access is not only affected by interest rate but by all characteristics of credit. This study attempts to find out how all credit factors in totality affect agricultural cooperatives access to credit. Before market liberalization in Kenya, formal agricultural credit was provided at subsidized rates through the Agricultural Finance Corporation (AFC). However, this parastatal experienced difficulties in recovering loan advances and had to stop lending at subsidized rates. Even then AFC lending rates have remained lower than commercial rates and are more stable. Although banks are legally required to lend between 17% and 20% of their loan portfolio to the agriculture sector, the local banking system has been conservative in lending to agriculture. This is probably owing to risks in agricultural production. The situation has been worsened by liberalization of interest rates and lending policies. These have made it difficult for small scale farmers to access credit.

Competitive Environment

Competition is the ability of the firm to increase or maintain its market share of its products or services, which is always under threat by other firms in the same industry. Competition is important because good competition brings about quality goods and services, innovation and efficiency in provision of goods and services. The nature and degree of competition in an industry hinge on the five forces model, the threat of new entrants, the bargaining power of customers, the bargaining power of suppliers and the threat of substitute products or services. (Pearce and Robinson 2009) argues that

for company to deal with these forces and grow despite their effects, it must understand how they work in its industry and how they affect the company in its particular situation.

According to Michael Porter five competitive forces model, firms have to continually scan the internal and external business environment so as to maintain or increase their market share (Pearce and Robinson 2009). This will determine the long run profit attractiveness of the market or market segment. The ability of the firm to sustain competitive advantage in an intense rivalry market segment is very important to that company. The entrance of NGO, Micro-Finance Institutions and the shift in focus among some commercial banks to tap into the micro and small enterprise niche has brought to bear for the SACCOs that there are more niches in rural areas than just the agricultural sector. In a bid to remain competitive, these rural SACCOs are aligning themselves to serve a wider range of clientele, including salaried groups –e.g. teachers, civil servants; micro and small entrepreneurs; institutions, all of who play a role in rural economies. Banks and micro-finance Institution continue to compete with cooperative societies for the same savings from the employees (Mudibo, 2009). This competition is very intense and as such, each has to come up with superior products to attract more deposits. This has led to banks giving unsecured loans unlike in the past when collateral security was necessary. Cooperative societies on the other hand have opened up their lending by refinancing old loans and new innovative loans on household equipment and furniture. This competition has brought new innovations and created opportunities to members to enhance their well-being (Mudibo, 2009).

Sustainability of Agricultural Cooperatives

The word sustainability is derived from the Latin *sustinere*(*sus*, up; *tenere*, to hold) (Atkinson, Dietz

&Neumayer, 2007). It is the long-term continuity of an enterprise or keeping the enterprise going over time (Bookchin, 2007). Sustainability is a call to action, a task in progress or “journey” and therefore a political process. It can also refer to a future intention; “sustainable business” is not necessarily a current situation but a goal for the future, a prediction (Ngugi, 2012). It has also been described as a “dialogue of values” that defies consensual definition (Blackburn, 2007).

Sustainability problems experienced by cooperative management in the whole world are almost the same. These problems result in incompetent and poor service delivery (Chaddad and Cook, 2000). Even cooperatives which are doing well are still facing many problems. “These problems include, among others poor management, lack of capital resources, inadequate training, lack of communication and participation among members, unclear and inadequate government policies on the development of agricultural cooperatives and weak linkages among the activities of the production, credit and marketing cooperatives (Prakash, 2003)”.

Empirical review

According to Nkhoma (2011), several studies have shown that lack of adequate management skills in management has contributed to cooperatives failure. Keeling, Carter and Sexton (2009) conducted a study of the Rice Growers Association in California and found out that the closure of this organization was primarily due to lack of board oversight and education, coupled with ineffective management and passive membership. Nyoro and Ngugi (2007) identified that successful cooperatives had staff and management committee, with relatively higher qualifications than unsuccessful cooperatives. Management with required skills will be able to strategize on business volume, type of product and

product quality; and for competing with other players in the market

Several studies have revealed that the effect of un-democratic processes on member’s participation. Osterberg & Nilson (2009) found that there was significantly higher member disloyalty, when members were dissatisfied with their cooperative’s management. Borgen (2001) reported that a member is seen to be more loyal to decisions in which s/he has participated actively, rather than the decisions in which were forced on him/ her. Osterrberg and Nilson (2009) observed that members considered democratic control to be more crucial and further argued that this indicates that members regard the cooperative as a social institution, as much as an economic one. This shows the importance of having a well-functioning democracy within the cooperative governance. The more the members participate in their cooperative, the more they will be committed to their cooperative.

A number of studies have pointed out that there is a relationship between member commitment and sustainability of a cooperative. According to Fulton *et al* (2001), noted that member commitment is linked to the cooperatives ability to develop a reputation, as an effective agent for the members. Members should be able to see the cooperative as addressing their needs. Fulton and Giannaks (2001) concluded that cooperatives must be increasingly aware of these feedback effects and manage them accordingly. The authors noted that success of cooperative as being all effective agent for members is likely to result to increased member commitment.

Studies such as those of Bataille-Chedotel and Huntzinger (2004), which analyses the typology of co-operative managers according to their origin, training, length of stay in the post and relation with

social value creation, or Cornforth (2006), which establishes different models of manager, centre on the power of managers. Along the same lines, Spear (2004) points out that compared to managers in capitalist companies, co-operative managers enjoy positions of far greater power and much wider margins of discretion, unfettered by the membership, as the attendance rates at the Annual General Assemblies of members tend to decrease with the age and size of the organization. Again, Akella and Greenbaum (1988) highlight the co-operatives' greater permissiveness towards expense preference behavior, in other words, the members have a high tolerance of management power. This behavior is accentuated with a diffuse membership (diffused ownership), which tends to trust in government regulation and is not prepared to bear the cost of effective control. These tensions have an impact on the co-operatives and alter the above-mentioned balances, resulting in shortcomings in co-operative governance

Gabre-Mahdhin (2006) argued that information asymmetry and opportunistic behavior, which act as determinants of transaction costs related to contract enforcement, leads to enforcement related costs. Fafchamps and Gabre-Mahdhin (2001), in an extensive survey of traders in Malawi and Benin, found incidences of contract non-performance, by up to 41% in Malawi. Coutre and Onumah (2002), also identified that lack of supportive framework and disabling policies are amongst the issues that affect development of market institutions such as agricultural cooperatives.

RESEARCH METHODOLOGY

This chapter specifies the nature of the research design and the population studied.

Research Design

Kothari (2004) observed that research design is a blue print which facilitates the smooth sailing of the various research operations, thereby making research as efficient as possible hence yielding maximum information with minimal expenditure of effort, time and money. This study used descriptive research design. This design refers to a set of methods and procedures that describe variables.

Target Population

Kothari (2004) described population as the entire group of individuals or items under consideration in any field of inquiry and have a common attribute. The target population the study was 750 staff (senior and middle level management) of agricultural cooperatives in Machakos County.

Sample and Sampling Technique

A sample size is a set of observations drawn from a population by a defined procedure (Mugenda, 2008). The manual calculation method to be used to arrive at the sample size using the following formula: $\text{Sample Size} = n / [1 + (n/\text{population})]$ In which $n = Z * Z [P (1-P) / (D * D)]$. Where, P = True proportion of factor in the population, or the expected frequency value D = Maximum difference between the sample mean and the population mean Or Expected Frequency Value minus (-) Worst Acceptable Value Z = Area under normal curve corresponding to the desired confidence level For our study therefore our sample will be: $n / [1 + (n) (E)^2]$ where n is the total population (750), E is the level of significance. $750 / [1 + (750) (0.05 \times 0.05)] = 110$. Our sample size therefore was 110.

Research Instruments & Data Collection Procedure

The study relied mainly on primary data. The researcher used questionnaire as the research instrument. The study utilized questionnaire that was developed for generating information on key

variables of interest from the targeted respondents in the study. Secondary data was obtained from literature sources or data collected by other people for some other purposes.

Pilot Study

According to Borden& Abbott (2008), pilot study is as a small-scale version of the study used to establish procedures, materials and parameters to be used in the full study. Pilot study was conducted in determining if there were flaws, limitations, or other weaknesses within the data collection instrument to make the necessary revisions prior to the implementation of the study. This study took 1% of the population that was not part of the sample for pilot test. A pilot study was undertaken on at least 27 respondents and the findings of the pilot study were be included in the actual study

Data Analysis and Presentations

The study collected both qualitative and quantitative data. Qualitative data was applicable since meanings was based on expressions through words and analysis was conducted through the use of content analysis. Quantitative data was applicable since meanings derived from numbers and analysis conducted through the use of diagrams and statistics.

DATA ANALYSIS, PRESENTATION AND DISCUSSION

This chapter presents the results of the study, data analysis and discussion. The current study sought to establish the drivers of sustainability of agricultural cooperatives in Kenya. The specific variables of the study were: managerial skills, stakeholder involvement, access to finance and competitive environment.

Response Rate

From the data collected, out of the 110 questionnaires administered, 80 questionnaires were fully completed and returned making a response percent of 72.27%. This percentage concurs with Mugenda and Mugenda (2003) who argues that for generalization a response rate of 50% is adequate for analysis and reporting, 60% is good and a response rate of 70% and over is excellent, thus 72.27% was adequate for analysis.

Gender Distribution

The research went further to establish the gender of the respondents The findings as indicated a simple majority (53%) were male respondents with (47%) being females respondents.

Age Distribution

The study went further to establish the distribution of the respondents' age. The findings were as indicated in Figure 4.3. From the findings, majority (45%) indicated that they ranged between 41-50 years, followed by those who indicated that they are 51 and above years at 35% with few (15%) and (5%) and indicating that they were 31-40 years and 20-30 years respectively.

Level of Education

The respondents were requested to indicate their highest level of academic qualifications. The study established that majority (45%) indicated that they had university first degree, followed by those who indicated that they had diploma at (35%), certificate with 3%, few (15%) indicating that they had master's degree and (5%) doctorate qualification respectively and this implies that respondents were well educated and that they were in a position to respond to research questions with ease.

Work Experience

The study sought to establish how long the respondents had been in the respective agricultural cooperatives, this was to ascertain to what extent

their responses could be relied upon to make conclusions for the study based on experience. The findings as indicated a simple majority (40%) of the respondents indicated that they had been in the agricultural cooperatives for a period ranging from 1-10 years followed by those who indicated that they had been in the agricultural cooperatives for a period of 10-20 years at 30%, (20%) indicating that they had less than one year and with only few (10%) indicating that they had been in agricultural cooperatives for a period more than 20 years.

Managerial Skills

The research sought to find out whether technical skills did increase influence the years of operation of the cooperatives. Respondents stated that it increased the number of the completed cooperatives projects, 70% stated that it increases the number of number of people served with cooperatives activities, 65% of the respondents stated that it led to sustainability of established cooperatives activities. This implies that technical skills are important to increase number of years of operation of the cooperatives. This corroborates with the study findings of Meredith & Mantel Jr (2011) who posited that leadership tasks and activities is focusing responsibility for goal attainment.

Stakeholder Involvement

The study sought to find out on the key stakeholders involved in management of the cooperatives .The study results showed that majority of the respondents stated that beneficiaries, 25% stated implementing staff, 44% indicated the donors and 34% of the respondents stated the government. This implies that there was no clear key stakeholders involved for effective monitoring sustainability of agricultural cooperatives The study results are in agreement with literature review by Otieno (2008) who observed that to involve stakeholders in discussions

about sustainability of agricultural cooperatives programs often empowers them and promotes meaningful participation by diverse stakeholder groups which avail to the sustainability of agricultural cooperatives sufficient and relevant information useful for the exercise .

Access to Finance

Based on whether cost of capital did affect sustainability of the cooperatives, 78% of the respondents stated that it increased the number of the years of operation, 60% of the respondents stated that increased the number of branches opened and 70% of the respondents stated that it increased the net value of the organization. Similarly Lindell & Hansson (2012) noted that the cost of finance is very high and collateral requirements are hard to fulfill thus affecting sustainability of the agricultural cooperatives.

Competitive Environment

The research requested the respondents to indicate whether product differentiation influenced performance of projects established which could affect sustainability of agricultural cooperatives. From the study results in 66% of the respondents stated that it increased the number of the proposed projects, 64% of the respondents stated that it increased the number of successfully completed/delivered project and 68% posited that it led to sustainability of established projects. This can be deduced that product differentiation influence performance of projects established which affect sustainability of agricultural cooperatives.

Sustainability of Agricultural Cooperatives

The respondents were kindly requested to indicate number of years of operation of the cooperative. The study established that majority of the

respondents(75%) indicated less than 10 years of operation, 10% of the respondents stated between 11 to 15 years, 5% posited 16 to 20 years, 7% of the respondents stated 21 to 25 years and 3% of the respondents also stated over 25 years of operation. This infers that majority of the agricultural cooperatives were not sustainable since their years of operation were very few years since they were established.

Correlation Analysis

Pearson correlation was used to measure the degree of association between variables under consideration i.e. independent variables and the dependent variables. Pearson correlation coefficients range from -1 to +1. Negative values indicates negative correlation and positive values indicates positive correlation where Pearson coefficient <0.3 indicates weak correlation, Pearson coefficient $>0.3<0.5$ indicates moderate correlation and Pearson coefficient >0.5 indicates strong correlation. This statistic is called a correlation coefficient(r) which indicates the relationship between the two variables and the bigger the correlation the stronger the coefficient between the two variables being compared. The direction of the relationship is also important in that if it is positive (+) it means that there is a positive relationship between the two variables and this means that when one variable increases the other variable increases or when one variable decreases the other variable also decreases. A negative relationship (-) means that as one variable decreases the other variable increase and vice versa and hence an inverse relationship. If there is no relationship the coefficient is equal to zero. Pearson's Product - moment correlation coefficient was used to

determine the strength and the direction of the relationship between dependent variable and the independent variables

The analysis of correlation showed that between access to finance and sustainability of agricultural cooperatives there is a positive coefficient 0.602, with p-value of 0.011. It indicates that the result is significant at $\alpha =5\%$ and that if the access to finance increases it will have a positive impact on sustainability of agricultural cooperatives. The correlation results between managerial skills and sustainability of agricultural cooperatives also indicates the same type of result where the correlation coefficient is 0.872 and a p-value of 0.001 which significant at $\alpha = 5\%$. The results also show that there is a positive association between competitive environment and sustainability of agricultural cooperatives where the correlation coefficient is 0.754, with a p-value of 0.009. Further, the result shows that there is a positive association between stakeholder involvement and sustainability of agricultural cooperatives where the correlation coefficient is 0.790, with a p-value of 0.002. This therefore infers that managerial skills contributed most to sustainability of agricultural cooperatives followed by stakeholder involvement in sustainability of agricultural cooperatives, then competitive environment while access to finance had the least influence on sustainability of agricultural cooperatives. The correlation matrix implies that the independent variables are very major determinants of sustainability of agricultural cooperatives as shown by their strong positive relationship with the dependent variable; sustainability of agricultural cooperatives.

Table 1: Correlation Coefficients

		Sustainability of agricultural cooperatives	Access to finance	Managerial skills	Stakeholder Involvement	Competitive Environment
Sustainability of agricultural cooperatives	R	1.000				
	Sig. (2-tailed)	.				
	N					
Access to finance	R	.602	1.000			
	Sig. (2-tailed)	.011				
	N	80				
Managerial skills	R	.872	.908	1.000		
	Sig. (2-tailed)	.001	.065			
	N	80	80			
Stakeholder Involvement	R	.790	.142	.876	1.000	
	Sig. (2-tailed)	.002	.001	.004		
	N	80	80	80		
Competitive Environment	R	.754	.037	.046	.056	1.000
	Sig. (2-tailed)	.009	.000	.001	.005	
	N	80	80	80	80	

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

Multiple Regression Analysis

In addition, the researcher conducted a multiple regression analysis so as to test relationship among variables (independent) on the sustainability of agricultural cooperatives. The study applied the statistical package for social sciences (SPSS V. 21) to code, enter and compute the measurements of the multiple regressions for the study. According to the model summary Table 2, R is the correlation coefficient which shows the relationship between the independent variables and dependent variable. It is notable that there exists strong positive relationship between the independent variables and dependent variable as shown by R value (0.899). The

coefficient of determination (R^2) explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable and the four independent variables that were studied explain 80.80% of the sustainability of agricultural cooperatives as represented by the R^2 . This therefore means that other factors not studied in this research contribute 19.20% to the sustainability of agricultural cooperatives. This implies that these variables are very significant therefore need to be considered in any effort to boost sustainability of agricultural cooperatives in the study area. The study therefore

identifies variables as critical determinants of sustainability of agricultural cooperatives in the

study area.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.899	.808	.605	.008

Further, the study revealed that the significance value is 0.001 which is less than 0.05 thus the model is statistically significant in predicting how managerial skills, access to finance, competitive environment and stakeholder involvement affect

sustainability of agricultural cooperatives. The F critical at 5% level of significance was 20.023. Since F calculated (20.023) is greater than the F critical (value = 3.765), this shows that the overall model was significant.

Table 3: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16.980	4	4.245	20.023	.001 ^a
	Residual	15.987	75	.2120		
	Total	32.967	79			

NB: F-critical Value = 3.765; **Predictors: (Constant):** Managerial skills, Access to Finance, Competitive environment and Stakeholder involvement.

The study ran the procedure of obtaining the regression coefficients, and the results were as shown on the Table 4 Multiple regression analysis was conducted as to determine the relationship between sustainability of agricultural cooperatives and the four variables. As per the SPSS generated table below, the model equation would be ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$) becomes: $Y = 45.098 + 0.587X_1 + 0.875X_2 + 0.690X_3 + 0.806X_4$. This indicates that sustainability of agricultural cooperatives = $45.098 + 0.587(\text{Access to finance}) + 0.875(\text{Managerial skills}) + 0.690(\text{Competitive Environment}) + 0.806(\text{Stakeholder Involvement})$. According to the regression equation established, taking all factors into account (access to finance, managerial skills, competitive environment, stakeholder involvement) constant at zero sustainability of agricultural cooperatives was 45.098. The data findings analyzed also shows that

taking all other independent variables at zero, a unit increase in access to finance will lead to a 0.587 increase in sustainability of agricultural cooperatives.; a unit increase in managerial skills will lead to a 0.875 increase in sustainability of agricultural cooperatives, a unit increase in stakeholder involvement will lead to .806 increase in sustainability of agricultural cooperatives and a unit increase in competitive environment will lead to 0.690 increase in sustainability of agricultural cooperatives. This infers that managerial skills contributed most to sustainability of agricultural cooperatives. At 5% level of significance, access to finance had a 0.009 level of significance; managerial skills showed a 0.001 level of significance, stakeholder involvement showed a 0.006 level of significance and competitive environment showed a 0.008 level of significance hence the most significant factor was managerial skills.

Table 4: Regression Coefficient Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	P-value.
		B	Std. Error	Beta		
1	(Constant)	45.098	.223		2.615	.007
	Access to finance	.587	.293	.402	3.098	.009
	Managerial skills	.875	.150	.554	7.087	.001
	Competitive environment	.690	.247	.416	6.008	.008
	Stakeholder Involvement	.806	.273	.463	6.546	.006

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of the study as guided by specific objectives, research questions and conclusions reached based on the findings and recommendations for establishing drivers of sustainability of agricultural cooperatives in Kenya as well as recommendations for further research

Summary of the Findings

Objective 1: To find out how managerial skills influence sustainability of agricultural cooperatives in Kenya

From study results as the respondents stated that they mostly met annually to discuss the sustainability of agricultural cooperatives and senior level management does not frequently meet affecting decision making in regard to sustainability of agricultural cooperatives. The study established that leadership, planning and organizing increases the number of the completed Sacco projects, increases the number of number of people served

with Sacco activities and led to sustainability of established Sacco activities, increases the number of the clients, net value of the Sacco increases and members take loans with interests. Further, the study revealed that the variable (Pearson correlation coefficient = 0.875) and p-value (0.001 < 0.05) statistically, strongly and significantly correlated to sustainability of agricultural cooperatives at 5% level of significance as it had a positive relationship with the dependent variable. This reveals managerial skills are an important factor that can enhance sustainability of agricultural cooperatives in the study area. This also reveals that the more managerial skills improves the more the sustainability of agricultural cooperatives in the study area. Therefore, from these quantitative results it can be deduced that the study which sought to establish the influence of managerial skills on sustainability of agricultural cooperatives in the study area was achieved because it established that managerial skills influenced sustainability of agricultural cooperatives.

Objective 2: To determine how stakeholder involvement influence sustainability of agricultural cooperatives in Kenya

From the descriptive analysis, the study results revealed that majority of the respondents indicated stakeholder involvement affect sustainability of agricultural cooperatives in Kenya. The key stakeholders involved in monitoring and evaluation of the projects include beneficiaries, implementing staff, donors, government and they normally have stakeholder meetings on monitoring and controlling the activities of the projects yearly. The stakeholders involved carrying out monitoring and evaluation activities of the projects are rarely adequate and different stakeholders have different reporting requirements which are lenient and demonstrating the long term impact of M & E of the projects to stakeholders is rarely straightforward. Further, the study revealed that the variable(Pearson correlation coefficient =.790) and p-value (0.002< 0.05) statistically, strongly and significantly correlated to sustainability of agricultural cooperativesat 5% level of significance as it had a positive relationship with the dependent variable. This reveals that stakeholder involvement is an important factor that can boost effective sustainability of agricultural cooperatives. This also reveals that the more stakeholder involvement becomes the more the sustainability of agricultural cooperatives Therefore, from these quantitative results it can be deduced that the study which sought to establish the influence of stakeholder involvement on effective sustainability of agricultural cooperatives was achieved because it established that it influenced sustainability of agricultural cooperatives.

Objective 3: To examine how access to finance influence sustainability of agricultural cooperatives in Kenya

From the descriptive analysis, the respondents stated that it increased the number of the proposed projects, increased the number of successfully completed/delivered projects and led to sustainability of established projects. This implies that cost of capital and collateral affected sustainability of agricultural cooperatives. The study also established that conditions were too stringent, corruption in giving out funds, it required security and the process was too technical.The collateral availability affect sustainability of the organizations as it increases the number of the years of operation, increases the number of number of branches opened and increases the net value of the organization. The access to financial medium (financial facilitation) equally affect sustainability of the cooperatives. Further, the study revealed that the variable(Pearson correlation coefficient =.0.602) and p-value (0.005 < 0.05) statistically, strongly and significantly correlated to sustainability of agricultural cooperatives in the study area at 5% level of significance as it had a positive relationship with the dependent variable. This reveals access to finance is an important factor that can increase sustainability of agricultural cooperatives in the study area. This also reveals that the access to finance is the more sustainability of agricultural cooperatives. Therefore, from these quantitative results it can be presumed that the study which sought to establish the influence of access to finance on sustainability of agricultural cooperatives was achieved because it established that access to finance influenced sustainability of agricultural cooperatives in the study area.

Objective 4: To establish how competitive environment influence sustainability of agricultural cooperatives in Kenya

From the descriptive analysis, the study results showed that the respondents stated that product differentiation increased the number of the

proposed projects, number of successfully completed/delivered project and sustainability of established projects. This can be deduced that product differentiation and fair play influence sustainability of agricultural cooperatives as it increased the profitability, increased the customer base and leads to sustainability of agricultural cooperatives. To increase the competitive gap, the study established by adding greater value through innovation, routine and controlled visit to competitors and enhancing the overall in-house experience. The competition affected sustainability of agricultural cooperatives by the greater selection of products, lower prices, greater range of services, more advertisement, greater emphasis on customer satisfaction. Further, the study revealed that the variable (Pearson correlation coefficient = 0.754) and p-value ($0.009 < 0.05$) statistically, strongly and significantly correlated to sustainability of agricultural cooperatives at 5% level of significance as it had a positive relationship with the dependent variable. This reveals competitive environment is an important factor that can boost sustainability of agricultural cooperatives. This also reveals that the more competitive environment becomes the more the sustainability of agricultural cooperatives in the organization. Therefore, from these quantitative results it can be deduced that the study which sought to establish the influence of competitive environment on sustainability of agricultural cooperatives was achieved because it established that competitive environment influenced sustainability of agricultural cooperatives.

Conclusions

The study established that majority of the respondents indicated stakeholder involvement affect sustainability of agricultural cooperatives in Kenya. The key stakeholders involved in monitoring and evaluation of the projects did not meet adequately thus hindering sustainability of

agricultural cooperatives. The stakeholders involved carrying out monitoring and evaluation activities of the projects are rarely adequate and different stakeholders have different reporting requirements which are lenient and demonstrating the long term impact of M & E of the projects to stakeholders is rarely straightforward.

Additionally, study results showed that the managerial skills play an important role on sustainability of agricultural cooperatives. The senior level management attends fewer meetings affecting decision making in regard to performance of the projects. The management lacks leadership, planning and organizing skills to implement the projects. This also reveals that there is need for more managerial skills to be enhanced to boost sustainability of agricultural cooperatives. Further, the study found out cost of capital and collateral affected sustainability of agricultural cooperatives. The study also established that conditions were too stringent, corruption in giving out funds, it required security and the process was too technical.

Finally, the study established that competitive environment play a significant role on enhancing sustainability of agricultural cooperatives. The product differentiation increased the number of the proposed projects, number of successfully completed/delivered project and sustainability of established projects. The fair play brought by competition affected sustainability of agricultural cooperatives as it stated to be niche offer brand identification, price differentiation and incorporation of attributes (quality or price). The reasons for not winning government sustainability of agricultural cooperatives that were provided included corruption and favouritism, technical process, the hard to get relevant information, the high standard quality of work and the sustainability of agricultural cooperatives hard to get necessary financial support. The competition affected

performance of the projects by the greater selection of products, lower prices, greater range of services, more advertisement, greater emphasis on customer satisfaction.

Recommendations

The study recommends for involvement of all stakeholders to boost sustainability of agricultural cooperatives. The key stakeholders should meet adequately in carrying out monitoring and evaluation activities of the projects that are rarely adequate whereby different stakeholders have different reporting requirements. In regard to Co-operative movement theory, there is need to ensure that there is to bring all stakeholders on board for the success of an organization as every individual's personal environment, and then improved circumstances would lead to goodness. If people are motivated and given the impetus to apply themselves through creation of fair policies and equitable environment when included in the running an organization activities, then even their attitude to work will change and a new era of flourishing social and economic movements will be witnessed for the sustainability of the organization.

Additionally, study recommends for the management to be trained on the managerial skills as they play an important role sustainability of agricultural cooperatives. The senior level management should increase meetings affecting decision making in regard to sustainability of agricultural cooperatives. The training should focus on leadership, planning and organizing skills. According to the scientific theory of management the efficient accomplishment of work tasks depends on proper management. The primary consideration should be based on training of staff on marketing and management of cooperatives as well as influence of other services offered by cooperatives.

Further, in relation to cooperative marketing theory, the specifying objectives and organizational structures for cooperatives that address the concerns of access to finance for agricultural producers in a context of achieving sustainability role for cooperatives capture a larger share of industry earnings for the membership, but additionally, contribute to market or industry efficiency. In other words, the external effects of organization to the internal or micro aspects of organizing and sustaining cooperation should have sound leadership in the cooperative movement and connects proper leadership and sound governance to a satisfied cooperative membership, proper financial management and a thriving cooperative movement to access finance to run cooperative activities to ensure its sustainability. The study found out cost of capital and collateral affected sustainability of agricultural cooperatives. The study also established that conditions were too stringent, corruption in giving out funds, it required security and the process was too technical. The policies on access to funds should be enhanced to promote sustainability of the cooperatives.

Finally, the study recommends for amendment on policies in regard to competitive environment as it play a significant role on enhancing sustainability of agricultural cooperatives. The product differentiation should be enhanced and fair play brought by competition can lead to the greater selection of products, lower prices, greater range of services, more advertisement, greater emphasis on customer satisfaction aimed at enhancing sustainability of agricultural cooperatives. According to cooperative dynamic theory, cooperative and mutual organizational forms arise for reasons that include contracting problems and stiff completion between parties. The cooperative always work in a dynamic environment that requires the government to specifically formulate policies to regulate,

supervise and protect them from stiff competition for their sustainability purposes.

Recommendations for Further studies

A review of literature indicated that there has been limited amount of research on drivers of sustainability of agricultural cooperatives in the Kenyan context. Thus, the findings of this study serve as a basis for future studies on sustainability of agricultural cooperatives and on this population. Sustainability of agricultural cooperatives, has not been widely studied which presents gaps in African and Kenyan contexts. The study has contributed to knowledge by establishing that managerial skills, stakeholder involvement and access to finance influence sustainability of agricultural cooperatives of this population in the Kenyan context.

Some of the findings have generally vindicated the long held positions regarding the various relationships that were studied. Other findings, however, such as the role of training and remuneration in sustainability of agricultural cooperatives were inconsistent with pertinent literature and results of previous studies thus preparing ground for paradigm shift in such factors in relation to this population.

The research has clearly pointed out the role of managerial skills and stakeholder involvement especially the members in sustainability of agricultural cooperatives. Studies have

concentrated on employee behavior, satisfaction, dissatisfaction and commitment in sustainability of agricultural cooperatives. This study therefore highlights the role of managers and stakeholders in sustainability of agricultural cooperatives, an area that has not been much explored.

This study used qualitative and quantitative techniques. It was also a cross sectional study and hence other studies using longitudinal design could be carried out to establish whether turnover cognitions are actualized. Also, an exploratory study would enrich findings because such a study would have a wide range of factors that sustainability of agricultural cooperatives addressed other than the ones identified in this study. Interaction effects should be investigated. The interaction effects may be re-examined at a later period because of the constant changes that take place in organizations.

This study confined itself to the agricultural cooperatives in Machakos County, Kenya. A comparative study should be carried out to compare whether the findings also apply for agricultural cooperatives in other counties Kenya in order to validate whether the findings can be generalized to others in Kenya. Additionally, the study did not tie the determinants as the only drivers of sustainability of agricultural cooperatives. Thus, there is need to undertake another research to examine the other factors which could be influencing sustainability of agricultural cooperatives in Kenya.

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