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Organizational Factors and Performance of Dairy Cooperative Societies in Kenya

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Abstract:

In this exploratory study an assessment of the relationship between organisational factors performance of the dairy industry in Kenya for cussing on two dairy cooperative societies in Kiambu County which borders the City of Nairobi, was conducted. The relationship between management, milk marketing and training of staff members; and the performance of dairy cooperative societies was examined. Through a descriptive census survey on a targetpopulation of 80 comprising management and staff was conducted using structured questionnaires to collect primary data. The findings form the 58 respondents were that performance of dairy cooperative societies was significantly related with management ($p < 0.05$) and training ($p < 0.05$). However, the relationship between milk marketing and performance was insignificant at $p < 0.05$ but only significant at $p < 0.1$. It was also found that while management style had a strong negative influence on performance ($t = - 4.1874$, $p < 0.001$) both marketing, and training had positive influence on performance (Marketing: $t = 1.732$, $p = 0.089$; Training: $t = 8.512$, $p < 0.001$). The implication of these findings are that managers and staff of dairy cooperatives need to adopt management style and marketing which would positively contribute to performance. The cooperatives should continue emphasizing training since it had the greatest influence on performance.

Keywords: Organisational factors, performance, dairy cooperatives, Kenya

1. Introduction

Since milk has important nutritional value to populations around the works, it is desirable that the dairy industry is developed to meet the nutritional demand of citizens in countries of the world. Like any other sector, satisfactory performance of the dairy industry should be the concern of all managers and as well as governments. It is therefore of strategic importance to address all barriers to the satisfactory performance of this key food security industry. From a strategic management perspective, all organizations exist in an environment which is in a state of continuous change. In addition, these organizations have an imperative to satisfy their various stakeholders by posting satisfactory performance; this is the essence of strategy. In the case of the dairy industry, it is necessary that it satisfies consumer needs through timely provision of quality milk and associated products and provides returns to investors – some of whom are cooperative members as is the case in Kenya and indeed in a number of other countries. To be able to respond to stakeholder requirements the dairy industry has the necessity to formulate and implement strategies that ensure effective positioning in the market, effective management and a highly skilled staff who can effectively deal with the dynamic market environment.

On global scale, dairy industry significantly contributes towards economic development of individual country (Chege and Bula, 2015). According to (Nyariki & Thirtle, 2000) the dynamics that affect milk production tend to differ from country to country. In developing countries practice of small-scale farming is common where the owners have one to three dairy animals, while in developed countries, commercial dairying enterprises are largely associated with large scale farming and farmers who own typically more than 100 dairy animals. Kenya is amongst the leading producers of dairy products where exotic cattle are over 3.5 million, camels 2.9 million, goats 27.7 million and indigenous cattle 14.1million.

Up to 80% of the world's milk consumed is produced by cows (FAO, 2009). Meanwhile, 8% of the world's milking animals are buffaloes who produce roughly 13% of the world's milk output while 5% are camels. Sheep and goats produce a small volume of milk (Kinyenje, 2013). In the world dairy trade, Australia and New Zealand are two very significant milk

producing countries. Europe as a country produces 210 million tons of milk, the European Union produces 151 million tons while Russian Federation produces 32 million tons. A quarter of the world's milk is produced from North, South and Central America, United States being the largest producer. China accounts for a third of the world's milk making it the leading producer of cow milk in the Asian continent. India produces 103 million tons of milk where more than half (57 million tons) is from buffaloes and it accounts for two-thirds of the world's entire production of buffalo milk.

According to Mwangi (2013) Asia, the Middle East, South/Central America and Africa are tropical regions estimated to produce a third of cow milk annually. Globally, tropical dairy industries are found in Kenya, Zimbabwe, India and the Caribbean where dairy farming in this region has been slow due to excessive harsh climates condition, low quality feeds, diseases and parasites and therefore milk yields become low and seasonal. In tropical countries, dairy production is characterized by smallholders who subsistence family component with family food and selling any seasonal surpluses. Normally, these small-scale farmers own two to four milking animals and milk is delivered to the relevant point once milking is done. Most small-scale farmers retain some of the milk for household consumption which can be converted to ghee, cheese, fermented and concentrated milk products.

In Kenya, 63% of its citizenry benefits from SACCOs, which aids in its social-economic development since they allow different financial transactions. Wambugu, Kirimi and Opiyo (2011) suggest that the Kenyan dairy industry improves the living standards through economic and nutrition. South Africa has the most efficient production system and produces 2,500 liters/ cow/year compared to 800 liters/cow/year in Uganda, 1,000 liters/cow/year and in Tanzania 1,800 liters/cow/year in Kenya (FAO, 2009).

Milk produced in Kenya is mostly done by smallholder agriculturalists who own between 1 to 3 cows in small pieces of land; usually less than two hectares. The smallholder farmers form part of the agricultural micro and small enterprises in Kenya aimed at increasing productivity and efficiency along the finance value chain, initiating entrepreneurship, while emphasizing the concepts of market integration, competition, growth and efficiency (Karanja, 2003).

Kenya's dairy sector has significantly contributed to national economy but still faces technical, economic and institutional challenges which affect its ability to compete in both domestic and regional markets. Smallholder dairy farming offers regular income and asset accumulation to families through economic growth and wealth creation (Wambugu, Kirimi & Opiyo, 2011). However, the dairy sector and the enterprises that operate in it, including cooperative societies have faced challenges in their performance. Yet empirical literature on factors that affect this performance is scarce. According to Karanja (2003), factors that could influence poor performance of cooperative societies particularly in the liberation era include lack of training and unpreparedness by cooperative societies to modernize and embrace change, poor marketing strategies and competition from other stakeholders, lack of essential services and poor management and leadership since majority of leaders are either illiterate or with low education levels, exposure and trainings. In addition, mismanagement and corruption could also influence performance of dairy cooperative societies.

The resurgence of cooperatives in developed countries has been associated with a number of changes including; the abandonment of planned economies in favor of economies liberalization, globalization of production of production and democratization (US Overseas Co-operative Development Council, 2007), but despite identifying the drivers of growth of cooperatives the paper failed to explain the factors affecting performance of cooperative societies. A study by Mahazril, Hafizah & Zurani (2012) focused on strategic planning and members participation in Malaysia as indicators influencing performance. In India Deshmukh (2014) discussed the following five factors as influences of growth and performance of dairy sector: government regulations, farmer level capacity building, infrastructure, management and literacy movement. Unlike Pathak & Kumar, Nirmala (2008) who sought to determine factors contributing to successful performance of cooperatives in Fiji for building a harmonious society; this study will focus on performance of cooperative societies on the dairy industry.

A few studies on cooperative membership in Africa exist. A study by Chagwiza, Muradian and Ruben (2016) in Selale, Ethiopia identified impact of cooperative membership among dairy producers. These included proportion of dairy income to total household income, total dairy income, proportion of crossbreed cows to the total number of cows in the herd (indicator of technological innovation), and amount of feed bought (another indicator of technological innovation). The others were milk production, milk productivity, commercialization, price per liter of milk, price per kg of butter and the share of milk production that was processed at the household level. Further, Wanjala, Omondi, Njehia, and Ngichabe (2014) assessed the relationship between structure and performance of the milk market in Western Kenya and found that inadequate cooling plants, low quality milk, unmet demand and growing population and marketing strategy as the problems facing the dairy sector. Despite studies done on performance of cooperative societies, no specific research on the analysis of determinants affecting performance of the dairy industry in Kenya a case study of selected cooperative societies in Kiambu County. We thus set out to answer the research question: *what is the relationship between organisational factors (management style, marketing and training) and performance in dairy cooperative societies in Kenya?*

1.1. Theory and Hypothesis

1.1.1. Management of Cooperative Societies and Performance

Management is a skill of identifying what is to be done and how it is going to be done in the fastest and cost-effective way possible. This is aimed at achieve the organizations roles by effective and efficient performance. Due to the ever-changing environment, the role of managers today has become more difficult. To ensure the organizational performance managers have to deal with the complexity and speed of change that is occurring in the organization. In a

research by Tibbs and Reuben (2015) on the effects of economic determinants on performance of dairy cooperative societies in Kericho County, Kenya, they observed that for cooperative societies to enhance performance influencing business enterprises, implementation of strategic plans must be observed through structured and focused approach. They further observed that capital formation, entrepreneurship growth, utilization capacity, technological adoption and competition influence strategic plans. Nyambura (2014) sought to establish factors influencing performance of Coffee Cooperatives in Kangema Constituency, Murangit County, Kenya and found that problem solving skills for managers are important at any work place and they have to learn how to confront and handle difficulties by implementing strategic plans. Stainsby (2007) notes that strategies have been developed to help managers able to cope with difficult situations to see the way forward.

Different stakeholders in cooperatives societies are part of decision-making but the membership is the top most organ. Membership is governed by the cooperative's principles, which guide the decision-making processes. Fisher and Desrochers (2002) observes that management structures of daily cooperative societies get complicated due to democratic principles of decision making which leads to conflict between the owners and managers. A balance between the two should be created for good progress, which can happen through monitoring of the cooperatives financial function that assist managers in performance of their roles and decision-making processes. Nyambura (2014) sought to establish factors influencing performance of coffee cooperatives in Kangema constituency, Murang'a County, Kenya and found out that good management skills enhance the performance of cooperatives societies. Aizenman et al (2005) acknowledges management skills help cooperatives staff to handle all risks that sustain to performance.

Governance is meant to ensure that the organizations structures, functions, processes, and traditions run in such a way that they achieve their objectives in an effective and transparent manner. Through efficient management, strategic planning and equitable resource allocation good governance is achieved and adds value to performance in the organization.

A study by Munene and Muturi (2013) sought to determine the challenges facing deposit-taking SACCOs regulatory compliance in the country. Descriptive survey design was used and, on its findings, governance challenges constituted; managerial capacity at board and staff level that influence performance. Barasa (2014) studied the factors influencing performance of savings and credit cooperative societies in Kenya in Bungoma county and the objectives of the study were to determine how corporate governance, members' commitment, motivation, cooperative principles and technology influenced performance of savings and cooperative societies in the County. The findings indicated that governance influences performance though political interference negatively influenced the performance of managers. Effective management of Sacco's is mostly determined by the managers who are tasked by shareholders in day-to-day administration of the SACCOs. Mwangi (2013) examined factors influencing dairy cooperative societies performance in Mathira and Kieni constituencies, Nyeri county, and found that management is better left to professional managers who are employees of dairy cooperatives societies and hence accountable to their member milk producers. In his study on factors influencing the performance of selected "matatu" sacco societies operating in Kitui County, Mwendwa (2016) found that performance of Matatu SACCO was influenced by management skills, manager's levels of education and practices. Consistent with these studies, we hypothesized that:

- H1: management style is significantly related with performance of dairy cooperative societies such that the more the practice of the management decisions and plans, the better will be the performance

1.1.2. Milk Marketing of Cooperative Societies and Performance

Marketing is obtaining needs and wants through creating and exchanging value with others via social and managerial processes (Kotler & Armstrong, 2010). According to Fafchamps (2004), regional food security can be achieved through a well-integrated market system where effective allocation of product resources is gained. This has resulted in globalization of the dairy industry, domestic and trade policy reforms, and high prices for dairy preferences.

According to Food and Agriculture Organization (2010), high prices in the dairy industry have resulted to replacement of inexpensive food in the manufacturing industry. Global dairy sector is characterised by higher price outlook in the dairy industry. In Kenya, liberalization of milk marketing was in 1992 ending the 60 years' dominance of KCC and decontrol of milk prices (Ngigi, 2005). This led to both small-scale milk traders and formal private processors taking over milk marketing and processing roles. There was a fall of milk marketing in the cooperative societies in the 1990s through the sale of raw milk by farmers to the small-scale milk traders (Leksmono et al, 2006). Brookside, Delamere and Ilara processors were amongst the first formal private milk processors in the country.

Kenya has two milk marketing channels system, formal and informal. Marketing system can be defined as a series of movement of commodities being transacted between the producer and the final consumer. These include milk collection from farmers to the producers, processing, packaging, transporting and collection of the dairy producers to the end customers point. Usually the milk chain has various key players involved. They include; consumers, producers and market intermediaries or "middlemen". According to Milk GOK/FAO/TCP/KEN/6611 project findings, Kenya's milk marketing system has at least eight different marketing channels as shown in Table 1.

Milk Marketing Channels	Number of Intermediaries
Producer-consumer	0
Producer-milk hawker-consumer	1
Producer-processor-consumer	1
Producer-processor-retailer-consumer	2
Producer-dairy co-operative-processor-retailer-consumer	3
Producer-milk transporter-processor-retailer-consumer	3
Producer-milk trader-processor-retailer-consumer	3
Producer-dairy coop-milk transporter-processor retailer- consumer	4

Table 1: Milk Marketing Channels

Both small scale milk traders and formal private processors taking over milk marketing and processing roles ensure good quality milk production which can be sold to the processors. The following are some of the measures used by consumers in determining good quality milk and milk products in the market; good predictable taste and flavor, maintaining original nutritional qualities, good appearance, safe from harmful micro-organisms and substances, and has a long shelf-life. Milk processors ensure good quality milk production by properly sterilizing equipment used and disease free animals.

Transportation of milk and milk products is expensive for both small-scale farmers and individual farmers which makes it difficult for milk marketing. This encourages both small scale and individual farmers to join cooperatives societies which lower the cost of transportation and helps to reduce spoilage of milk as collection and spoilage is done in a faster way. Joining of cooperatives also opens up milk markets for both small scale and individual farmers.

Contributing factors toward the rise of performance in cooperatives include technological innovation, production process and quality services; it involves either product or process. Technological innovations in the cooperatives help in collectively giving farmers access to the market using the resources they have resulting to product development activities and market development activities. Cooperatives act as a source of information to farmers enabling them to generate higher income through value addition to their products. Following the discernment of the relationship between marketing and performance from previous studies, we further hypothesized as follows:

- H2: Milk marketing is significantly related with performance of dairy cooperative societies such that the more the implementation of the marketing programs the better will be the performance

1.1.3. Training of Cooperative Societies Staff and Influence on Performance

According to Goldstein and Ford (2002) training involves meeting conditions suitable for the firm's day to day activities. Firms select employee with high ability and rare talent. He further notes that the firm will equip its employees through training to acquire unique skills needed.

Cooperative societies adopt different HRM practices for example selection procedures aimed at screening the best employees. After selection, the existing employees undergo training and development activities which help in progression of the organization. Investing in constant training of employees produces beneficial outcome to the organization.

Poor performance by skilled employees is largely influenced by lack of motivation in their jobs. Motivation in the work place refers to explained underlying activities Guay et al., (2010). Motivation of employees is majorly centered on the interest of employees as it can be a means to decrease and influence the gap between employees actual and desired dedication to the organization and motivate them to work both individually and in groups. Training of organization staff member's impacts the firm's performance through incentive compensation and performance management systems.

Official complaint management in an organization protects the employee's rights and freedoms which motivates them to work effectively and efficiently and be fairly rewarded. He further notes that the organizational culture at the workplace influences the degree of performance by involving employees on work scheduling and accomplishment. Barasa (2014) sorts to find out factors influencing performance of savings and credit cooperative societies in Kenya: a case of cooperative societies in Bungoma County and found out that reward for innovation and creativity motivated staff, lack of harassment at work and a quiet environment also do motivate staff. Findings from the staff also indicated that members received frequent training. We thus hypothesized that:

- H2: Training is significantly related with performance of dairy cooperative societies such that the more the training the better will be the performance

2. Methodology

2.1. Design

A descriptive survey was conducted on 74 respondents from the two cooperatives (Dairy cooperative A: n = 39; Dairy cooperative B: n= 35). This design gives room for collection of sufficient data by the researcher from respective respondents. It allows the use of questionnaires in collection of data since it takes a short period of time (Longnecker, Lyman & Ott, 2008). It also it gives accurate estimation of population parameters (Churchill & Brown, 2008)

2.2. Population and Sample

In this study, we examined the relationship between three organizational factors and performance of the dairy industry with a focus on two dairy cooperative societies in Kiambu County, which borders Nairobi city. This context was important because Nairobi is cosmopolitan city with about five million people who should be supplied with food. As such,

the understanding of factors that would affect the production of milk that is necessary to supply Nairobi was appropriate.

According to the Ministry of Agriculture in Kiambu Constituency, co-operative society A (see table 2) consisted of seven management committee, 12 top management and 20 staff members while co-operative society B consist of eight management committee, 12 top management and 15 staff members respectively as shown in Table 2. They formed the target population of the study. Both dairy cooperative societies were selected since had the highest number of members in Kiambu country.

Target Population (Category)	Number
Management committee	15
Head / Assistant Head of Procurement	4
Head / Assistant Head of Marketing	4
Head / Assistant Head of Operations	4
Head / Assistant Head of Finance	4
Head / Assistant Head of Human Resource	4
Quality / Assistant Head Manager	4
Staff Members	35
Total	74

Table 2: Population Of Management Committee, Top Management Members And Staff Members Of A And B Dairy Ccooperative Societies

2.3. Data Collection Instruments

Method of data collection applied herein by the researcher was primary method. In the former case, the researcher used questionnaires with open and close ended questions. This made it easy for the researcher to analyze data. Questions used were standardized and understandable to enable language respondent's answer without much difficulty. The questionnaire had similar questions administrated to every respondent (Saunders et al., 2012).

Questionnaires were used for collecting data because they allowed reaching as many respondents as possible within limited period. It is also confidential and hence ensures collection of accurate data. The questionnaires were self-administered to management committee and staff members in the A and Bdairy co-operative societies using "drop-and-pick later" method.

Validity is the precision and significance of the results based on research. Cooper and Schindler, (2005) observe that validity is reached upon when questions present the correct gauge of what they were designed to measure. The researcher used content validity to test the validity of questionnaires used. To guarantee validity, we pretested the instruments relevant experts and also ensured accurate data entry to minimize errors.

According to Mugenda and Mugenda, (1999), reliability is the representation under the study of the occurrence attained from data analysis. The researcher conducted a pilot study to reinforce the consistency of results from the research instrument. This helped ascertain and detect any ambiguities. The pilot study collected data from the target population but the same was not included final sample.

In order to ascertain the suitability of the data collection instruments for use in the study, the questionnaires that were used to collected data were tested for reliability. The reliability was assessed using Cronbach's alpha, which evaluates internal consistency by establishing whether certain items within a scale measure the same construct validity. The reliability the results are found in Table 3

Reliability of Data Collection Instruments		
	Reliability Statistics	
Variable/ construct	Cronbach's Alpha	N of Items
Management style	0.703	3
Marketing	0.732	3
Training	0.712	3
Performance of dairy cooperative society	0.732	4

Table 3: Reliability of Data Collection Instruments

Gliem and Gliem (2012) recommend that alpha value threshold should be 0.7; The results in on Table 3 show that all the four scales were reliable because their reliability values exceeded a threshold of 0.7.

2.4. Data Analysis

Quantitative techniques were used data analysis. The process began with editing data contained in the questionnaire after the fieldwork. Coding of closed ended questions followed depending on related responses. The data was then entered in SPSS in order to commence analysis. Subsequently, a multivariate regression model was used to determine the relative importance of each of the three variables (management, marketing and training) on performance. Multiple regression is a flexible method of data analysis that may be appropriate whenever variable is to be examined in

relation to other factors. Cohen, West and Aiken (2003), assert that relationships may be non-linear, independent variables may be quantitative or qualitative and one examines the effects of a single variable or multiple variable or without the effects of other variables taken into account. We analysed the data descriptively to generate means and standard deviations, then proceeded to assess the strength of the relationship between the organisational factors and performance. We finally conducted a multiple linear regression analysis to determine the relative influence of each of the organisational factors on performance of the dairy cooperatives

3. Results and Discussion

Out of the 74 questionnaires that were distributed, 58 were questionnaires returned and used for analysis; this represented a response rate of 78.3%. Out of 39 questionnaires that were administered to management committee, 37 were filled and returned, translating to 82.2%. Similarly, 35 questionnaires, were administered to staff members and 21 were filled and returned translating to 60% return rate. This satisfactory response rate was occasioned by regular visits to the two (A & B) dairy co-operative societies. Further, information on gender, age, education level, and the dairy from which the data were collected. The diaries are identified as A and B co-operative societies for confidentiality purposes. The results on the characteristics of the respondents covering gender, dairy cooperative, age and highest level of education are presented in Table 4.

Variable	Measure	Frequency	Percent	Cumulative Percent
Gender	Female	32	55.2	55.2
	Male	26	44.8	100.0
	Total	58	100.0	
Dairy cooperative	A	32	55.2	55.2
	B	26	44.8	100.0
	Total	58	100.0	
Age bracket	18-26	11	19.0	19.0
	27-38	10	17.2	36.2
	39-47	26	44.8	81.0
	Above 48	11	19.0	100.0
	Total	58	100.0	
Level of education	Secondary level	2	3.4	3.4
	Technical vocational	27	46.6	50.0
	University	29	50.0	100.0
	Total	58	100.0	

Table 4: Demographics of Respondents

As shown in Table 4, there were more female respondents than men, most respondents were in the age bracket 39 – 47 years (n = 26, 44.8%). While 50% (n = 29) had university education, 26 (n= 27, 46.6%) had technical vocational education while two (n = 2, 3.4%) had a secondary school education. These results suggest that the respondents were adequately educated and that the distribution across gender was fair though more women were involved in the cooperative activities. Further, the respondents comprised both management committee and staff (Management committee: n = 37; Staff members: n = 21)

3.1. Descriptive Results

In order to describe the situation at the A and B dairy cooperatives regarding performance, management, marketing, and training, the respondents were requested to indicate their level of agreement on a scale of 1 to 5 on a Likert scale where: 5= Strongly Agree; 4= Agree; 3= Neutral; 2= Disagree; 1=Strongly Disagree. The descriptive analysis of the responses is presented in the Table 4.3 that follows which includes results on each of the four variables – performance, management style in cooperatives, milk marketing, and training of members of the cooperatives. The level of agreement with the statements on a scale of 1 to 5 for performance, marketing, management, and training of members is shown in Table 5.

Descriptive Statistics									
Item/ statement	N	Min	Max	Mean	SD	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	SE	Statistic	SE
Organization structure promotes quick decision making	58	2	5	3.97	1.01	-.461	.314	-1.013	.618
Policies and plans are appropriate	58	3	5	4.07	.697	-.094	.314	-.883	.618
Dairies are well organized	58	2.00	5.00	4.00	.898	-.301	.314	-1.070	.618
Management style	58	2.67	5.00	4.01	.695	-.132	.314	-.860	.618
There adequate promotion of the cooperative society's products (<i>Promotion</i>)	50	3.00	5.00	4.12	.435	.664	.337	1.922	.662
Milk is accessible to customers (<i>Distribution/ place</i>)	58	1	5	4.03	.794	-1.805	.314	5.989	.618
Our milk is of higher quality compared to that of our competitors (<i>Product</i>)	52	2	5	3.62	.820	-.497	.330	-.177	.650
Marketing of products	58	2.33	4.67	3.92	.560	-1.056	.314	1.265	.618
Turnover has been growing over the last two years	58	3	5	4.03	.648	-.032	.314	-.522	.618
There prompt payout to members in this cooperative	58	1	5	3.52	1.143	-.117	.314	-.857	.618
The number of members has increased in the cooperative	58	2	4	3.17	.625	-.135	.314	-.455	.618
The members share capital has increased over the last two years	58	2	5	3.36	.912	-.078	.314	-.870	.618
Performance of Dairy Cooperative Societies	58	2.25	4.75	3.52	.639	.051	.314	-.431	.618
Relevant trainings are provided to management by cooperative society	58	2	5	3.95	.847	-.439	.314	-.382	.618
Relevant trainings are provided to members by the cooperative society	58	3	5	4.47	.706	-.957	.314	-.355	.618
Trainings are conducted regularly	58	2	5	3.98	1.051	-.622	.314	-.863	.618
Training by dairy cooperative societies	58	2.67	5.00	4.13	.701	-.534	.314	-.744	.618
Valid N (listwise)	50								

Table 5: Description of Performance, Marketing, Management and Member Training in A and B dairy cooperatives societies

From the rating on the measures of marketing, there was adequate promotion of the cooperative society's products (*Promotion: M= 4.12, SD = .435*) and that milk was accessible to customers (*Distribution/ place: M= 4.03, SD = .794*). It was also found that the quality of milk (product) was comparable to those of the studied cooperatives competitors (*M = 3.62, SD = .560*). Further, it was reported that the training provided to members of the cooperatives was relevant (*M = 4.47, SD = 0.701*), and that the trainings were conducted regularly. Overall, management style and training were rated as being satisfactory ($4.00 < M < 5.00$) while marketing and permanence were found to be moderate ($3.50 < M < 4.00$). A summary of management, marketing, training and performance status is presented on Table 6.

Descriptive Statistics			
Variable	Mean	Std. Deviation	N
Management style	4.01	.695	58
Marketing of products	3.92	.560	58
Training by dairy cooperative societies	4.13	.701	58
Performance of Dairy Cooperative Societies	3.52	.639	58

Table 6: Summary Descriptive Results

The aggregate means and standard deviations of the responses on study variables are Management style (M = 4.01, SD = 0.695), Marketing of products (M = 3.92, SD = 0.560), Training by dairy cooperative societies (M = 4.13, SD = 0.701), and performance (3.52, SD = .639). These results imply that the training, management style, and to a less extent the marketing of products are satisfactory. However, the performance was reported to be unsatisfactory because the composite average response from all respondents was less than 4 (Agree: M = 4.00). The result on performance shows that there was no agreement on how satisfactory the performance was; the respondents were lying between being neutral (undecided) and agreeing to the statements on performance. Apart from turnover having increased satisfactorily over the previous two years (M = 4.03, SD = .648), all the other indicators of performance had a mean less than 4.00 on a scale of 1 to 5 (1=strongly disagree, 2=disagree, 3=neutral (50/50), 4=Agree and 5=strongly agree). Similarly, promotion and distribution (accessibility) of milk were found to be satisfactory (Promotion: M = 4.12, SD = 0.701; Distribution: M = 4.03, SD = 0.695)

3.2. Relationship between Organizational Factors and Performance

The collected data was also analyzed to obtain the strength of relationship between organizational factors and performance of the dairy cooperatives. The results of the correlation analysis are presented in Table 7

Correlations				
	Management style	Marketing of products	Training by dairy cooperative societies	Performance of Dairy Cooperative Societies
Management style	1			
	58			
Marketing of products	.392**	1		
	.002			
	58	58		
Training by dairy cooperative societies	.422**	.282*	1	
	.001	.032		
	58	58	58	
Performance of Dairy Cooperative Societies	-.010	.230	.685**	1
	.941	.083	.000	
	58	58	58	58

Table 7: Relationship between Organizational Factors and Performance

** Correlation Is Significant at the 0.01 Level (2-Tailed).

* Correlation Is Significant at the 0.05 Level (2-Tailed). As Shown in Table 7, Both Marketing (R = 0.230, P = 0.083 >

0.05) and training (r = 0.230, p = 0.083 > 0.05) had apposite relationship with performance. However, it was found that management style did not have a significant relationship with performance (r = - 0.010, p = 0.941 > 0.05). The relationship between marketing and performance was significant at 10% level of significance (p < 0.1) while that of training was strong and significant at 5% level of significance (p < 0.05). Training had the strongest significant relationship with performance followed by marketing and lastly, management style, which was not significantly related with performance of dairy cooperative societies in location A and B. All the three variables, marketing, management approach and straining had positive relationship with performance.

3.3. Influence of Organizational Factors on Performance

In order to ascertain the relative influence for organizational factors (marketing, management, and training) on performance of dairy cooperative in the two dairy cooperative societies, multiple liner regression was conducted with performance as the dependent variable while the organizational factors were the predictor variable. The results are as shown in Table 8.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.775a	0.600	0.578	0.41506

Table 8: Influence of Marketing, Management and Training on Performance
a. Predictors: (Constant), Training by Dairy Cooperative Societies, Marketing of Products, Management Competence

The combination of marketing, management, and training of members explained 60% ($R^2 = 0.600$) of the variation in performance of both dairy cooperatives. Further, the model fit result is presented in Table 9.

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.983	3	4.661	27.056	.000 ^b
	Residual	9.303	54	.172		
	Total	23.286	57			

Table 9: Model Fit

a. Dependent Variable: Performance of Dairy Cooperative Societies

b. Predictors: (Constant), Training by dairy cooperative societies, Marketing of products, Management competence

The linear regression model had a good fit ($F_{3, 57} = 27.056$, $p < 0.001 < 0.05$) at 5% significance level ($p < 0.05$) indicating that the regression model that was chosen fit the data that was analyzed. Further, the results of the relative influence of marketing, management approach and training of dairy cooperative members on performance are found in Table 10.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.262	.462		2.732	.008
	Management style	-.385	.092	-.418	-4.187	.000
	Marketing of products	.187	.108	.164	1.732	.089
	Training by dairy cooperative societies	.743	.087	.816	8.512	.000

Table 10: Factors Affecting Performance

a. Dependent Variable: Performance of Dairy Cooperative Societies

As seen from the results (Table 10) marketing ($t = 1.732$, $p = 0.089 > 0.05$) and training by cooperative societies ($t = 8.512$, $p < 0.001 < 0.05$) positively influenced performance of dairy cooperative societies. However, management style ($t = -4.187$, $p < 0.001 < 0.05$) had a negative but significant influence on performance cooperative dairies in the two (A & B) at 5% level of significance.

Based on both the correlation and regression these results, H_1 (there is significant negative relationship between management style and performance) and H_3 (there is a significant positive relationship between training and performance) were accepted while H_2 (there is a significant relationship between marketing and performance) was rejected at $p < 0.05$ (but accepted at $p < 0.1$). A discussion of these findings is presented next.

3.3.1. Marketing and Performance

The findings are consistent with the fact that marketing is obtaining needs and wants through creating and exchanging value with others via social and managerial processes (Kotler & Armstrong, 2010). According to Fafchamps (2004), regional food security is achieved through a well-integrated market system where effective allocation of product resources is achieved. This situation has the potential for effective globalization of the dairy industry through the support of domestic and trade policy reforms that would lead to high prices for dairy preferences.

According to the Food and Agriculture Organization (2010) stated that higher prices and a correspondingly higher value of milk production have also set the dairy sector among the highest gross value sectors in agriculture. However, high prices can also have negative consequences for the dairy industry. Under very high prices, demand may retreat and dairy ingredients can be replaced by cheaper substitutes in food manufacturing. The study revealed that the farmers earned an average monthly income of between Kshs 5,000-10,000 the Food and Agriculture Organization (2010) noted that dairy farming offered a regular and reliable source of income for farmers. The study also revealed that dairy farming was profitable. Leksmono (2006) argues that dairy farming is profitable compared to crop farming. This is because crop production depends on rain; it is prone to both drought and floods, rendering agricultural income uncertain for most farmers. The study also found out the ministry of cooperative development, processors and financial Institutions were

important players in the dairy industry. According to Wanyama et al. (2008) Co-operatives have significantly contributed to the mobilization and distribution of financial capital by creating employment and income generating opportunities for both their members and non-members alike. The findings of the present study suggest that the marketing at the two dairy cooperatives in Kiambu County was effective and that it significantly influenced performance of these two cooperatives.

3.3.2. Management Style and Performance

This finding on management agree with Mwangi (2013) who examined factors influencing dairy cooperative societies performance in Mathira and Kieni constituencies, Nyeri county, Kenya and found that management is better left to professional managers who are employees of dairy cooperatives societies and hence accountable to their member milk producers. In his study on factors influencing the performance of selected "matatu" sacco societies operating in Kitui county Kenya with one of his objectives being to assess how management skills and practices influence the performance, Mwendwa (2016) found that performance of Matatu SACCO in Kitui County was influenced by management skills, manager's levels of education and practices. However, the finding in this study is that management has a negative influence on performance hence the need to investigate why this is the case since management has variously been found to positively impact performance.

Further, Owango and Staal, (1998) affirms that the immediate impact of marketing liberalization in Kenya's dairy industry has been intensified market competition among the existing dairy firms, especially the KCC and the other cooperative dairy plants and businesses. This is due to new market entrants. According to Kenya Dairy Board (2009), the informal market controls 70% of the total milk marketed in Kenya. Karanja (2003) further asserts that the main challenge now facing the Kenyan dairy industry is the informal sector that deals in raw milk trade accounting for over 75% of the total marketed milk. Increased trader participation was expected after liberalization, which resulted in competition in the market, which in turn could improve marketing efficiency.

3.3.3. Training and Performance

The study findings are in tandem with Barasa (2014) that sought find out factors that influenced performance of savings and credit cooperative societies in Kenya: a case of cooperative societies in Bungoma County and found that reward for innovation and creativity motivated staff, lack of harassment at work and a quiet environment also do motivate staff. Findings from the staff also indicated that members received frequent training. Strategic Human Resource Management (HRM) activities help a firm to ensure that its human resources are sufficient to execute its business plans. However, due to the social complexity and causal ambiguity inherent in strategic HRM practices such as team-based designs, empowerment, and the development of talent for the long term, competitors can neither easily copy these practices nor readily replicate the unique pool of human capital that such practices help to create. Cooperative societies can adopt various HRM practices to enhance employee skills and thereby improving performance. Employees can be hired via sophisticated selection procedures designed to screen out all but the very best potential employees. Indeed, research indicates that selectivity in staffing is positively related to firm performance (Becker & Huselid, 1992; Schmidt, Hunter, McKenzie, and Muldrow, 1979). Most members of cooperative societies vote for their director who manages cooperative society from among the farmers themselves. This could result in election of incompetent leaders who may lead to poor performance of cooperative in the County. Second, organizations can improve the quality of current employees by providing comprehensive training and development activities after selection.

Considerable evidence suggests that investments in training produce beneficial organizational outcomes (Bartel, 1994; Knoke and Kalleberg, 1994; Russell, Terborg, & Powers, 1985). The effectiveness of skilled employees will be limited, however, if they are not motivated to perform their jobs. According to Gerhart and Milkovich (1992), training showed evidence on the impact of incentive compensation and performance management systems on firm performance. The finding in this study suggests that

Further, considerable evidence suggests that investments in training produce beneficial organizational outcomes (Bartel, 2012). Competitive advantage is possible if a firm ensures that its people add value to its production processes and that its pool of human capital is a unique resource. This is demonstrated by dairy cooperative society A where liberalization afforded the management committee freedom and power to hire professional staff to steer the day to day management activities (Wanyama, 2008).

4. Conclusion and Applied Implications

4.1. Conclusion

Based on the findings of this study, we present a number of conclusions and implications based on the three organizational predictors of performance, namely management approaches, marketing and training are as follows:

4.1.1. Management Style and Performance

Management style at the two (A and B) dairy cooperatives was found to be effective since the respondents agreed to statements on the effectiveness of the management of the cooperatives however the management approaches negatively and significantly influenced performance of the dairy cooperatives. The management style was satisfactory ($M = 4.01$, $SD = 0.695$), and performance (3.52 , $SD = .639$). However, it was found to have a positive but insignificant ($p > 0.05$) relationship with performance ($r = -0.010$, $p = 0.941 > 0.05$) at 5% level of significance. Further, management style had a strong negative influence on performance ($t = -4.1874$, $p < 0.001$). This finding suggests that the management style should be improved so that it does not negatively impact performance.

4.1.2. Milk Marketing and Performance

The findings of the present study suggest that the marketing at the two dairy cooperatives in Kiambu County was effective and that it significantly influenced performance of these two cooperatives. The marketing approaches were found to be effective and that they positively influence performance of dairy cooperatives in Kiambu County. The practice of marketing of products ($M = 3.92$, $SD = 0.56$) was moderately satisfactory. Further, the relationship between marketing and performance was weak ($r = 0.230$, $p = 0.083 > 0.05$) and not significant at 5% significance level but only at 10% significance level ($p < 0.1$). Further, the influence of milk marketing was insignificant ($t = 1.732$, $p = 0.089$) at $p < 0.05$ but only significant at $p < 0.1$. The findings imply that the cooperatives in Kiambu should enhance their practices of marketing as identified in this study; these include promoting the milk products and ensuring that it is available accessible through distribution channels.

4.1.3. Training of Staff Members and Performance

This study explored the extent to which dairy cooperatives train their members and its influence on performance cooperative societies. It was further found that the training was effective on a scale of 1 to 5 with 1= strongly disagree and 5=strongly agree, the responses mean was 4 (Agree: $M=4.00$). Specifically, the training by dairy cooperative societies ($M = 4.13$, $SD = 0.701$) was satisfactory and positively and significantly related with performance. All the respondents agreed that training was organized for farmers by the cooperative societies and training was found to be relevant and effective. Since the relationship between training and performance was strong and positive ($r = 0.685$, $p < 0.001$), this finding implies that the more the members are trained, the better will be the performance of the dairy cooperatives in Kiambu County. In addition, training had positive influence on performance of the dairy cooperatives in Kiambu County (Training: $t = 8.512$, $p < 0.001$). This finding suggests that training should be intensified in the cooperatives to equip the staff and members with requisite skills to positively drive performance.

4.2. Applied Implications

From the study findings and conclusions, this study has some applied implications: dairy industry should invest in milk market infrastructure, which will subsequently improve breeding programs. Further, dairy cooperatives should focus on improving promotion, distribution and quality of milk as a key strategy to realize the needed performance. The management style needs because it was found to negatively affect performance. Specifically, cooperatives should promote professional management by ensuring that the cooperatives become more business oriented.

4.3. Suggestion for Further Studies

From this study, the following areas need further research: an examination of the relationship between other organizational factors such culture, technology, and performance of the dairy cooperatives in other counties to allow for generalization of findings. Further, study on similar factors should be conducted in other counties and on the most effective marketing strategies because management, marketing and training explained about 60% of variation in performance of dairy cooperatives.

5. References

- i. Aizenman, J., Jaewoo, L. (2005). International Reserves: Precautionary versus Mercantilist Views, Theory and Evidence. *Open Economies Review*.
- ii. Barasa, C. (2014). Factors influencing performance of savings and credit cooperative societies in Kenya: A case of co-operative societies in Bungoma County. *MBA Thesis*. University of Nairobi, Kenya.
- iii. Chagwiza, A., Muradian, R., & Ruben, R. (2016). Co-operative membership and dairy performance among smallholders in Ethiopia. *Department of Agriculture and Animal Health*, University of South Africa, South Africa.
- iv. Ling, C. K., (2006). Measuring Performance of Dairy Co-operatives. RBS Research Report 212, *United States Department of Agriculture*.
- v. Chege, P. M., & Bula, H. O. (2015). Effect of Generic Strategies on the Performance of Dairy Industries in Kenya. A Case of Kenya Cooperative Creameries. *International Journal of Education and Research*, 3 (12),34-45. www.ijern.com.
- vi. Churchill, R and Brown J., (2008). *Complex Variable and applications*. The University of Michigan – Dearborn.
- vii. Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.)*. Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers
- viii. Cooper, C. R., & Schindler, P. S. (2008). *Business research methods* (10 ed.). Boston: McGraw-Hill.
- ix. Fafchamps, M. (2004). *Market Institutions in Sub-Saharan Africa: Theory and Evidence*. Massachusetts Institute of Technology Press, Cambridge, England.
- x. Food and Agriculture Organization. (2009). Milk/Dairy Products. Investment Centre Division, Rome.
- xi. Food and Agriculture Organization. (2010)., "The state of Food and Agriculture" United Nations, Rome Italy.
- xii. Goldstein, I., & Ford J.K., (2002). *Training in organization: needs assessment, development and evaluation*. CA: Wadsworth.
- xiii. Guay, F., Chanal, J., Ratelle, C. F., Marsh, H. W., Larose, S., & Boivin, M. (2010). *Intrinsic, identified, and controlled types of motivation for school subjects in young elementary school children*. *British Journal of Educational Psychology*, 80(4), 711–735.
- xiv. Karanja, A. (2003). *The Dairy Industry in Kenya: The Post-Liberalization Agenda*. Working Paper 1, Tegemeo Institute, Nairobi.

- xv. Kinyenje, Joseph Maina. (2013). *Factors influencing performance of the dairy industry in Meru Central District, Kenya: A case of Katheri dairy co-operative society*. MBA Thesis, University of Nairobi, Kenya.
- xvi. Kotler, P. & Armstrong. (2010). *Principles of Marketing*. Prentice Hall, 2010
- xvii. Kothari, C K. (2004). *Research Methodology, Methods and Technique*. University of Raasthan, India.
- xviii. Leksmono, C., Young, J., Hooton, N., Muriuki, H., & Romney, D. (2006). *Informal Traders Lock Horns with the Formal Milk Industry: The role of research in pro-poor policy shift in Kenya*, ODI/ILRI Working Paper 266.
- xix. Ling, Charles K., (2006), *Measuring Performance of Dairy Cooperatives*, RBS Research Report 212, Rural Business-Cooperative Service, United States Department of Agriculture(USDA).
- xx. Longnecker, T., & Lyman, R., & Ott, M. (2008). *An Introduction to Statistical Methods and Data Analysis*. Cengage Learning.
- xxi. Armstrong, M. (2005). *Employee Reward Management and Practice*. Kogan Page Limited
- xxii. Mwangi, R. (2013). *Factors influencing dairy cooperative societies performance in Mathira and Kieni constituencies, Nyeri County, Kenya*. (MBA Thesis) University of Nairobi, Kenya.
- xxiii. Mwendwa, J. K. (2016). *Factor Influencing the Performance of Selected Matatu Sacco Societies Operating in Kitui County, Kenya*. (MBA Thesis), University of Nairobi, Kenya.
- xxiv. Munene, C. & Muturi, W. (2013). *The Challenges Facing Deposit-Taking Savings and Credit Cooperative Societies' Regulatory Compliance in Kenya*. *Interdisciplinary Journal of Contemporary Research in Business*.
- xxv. Mugenda, A., & Mugenda, O. (1999). *Research methods: Quantitative and Qualitative*. Kenyatta University Press: Nairobi.
- xxvi. Nyambura, K. C. (2014). *Factors influencing performance of Coffee Cooperatives in Kangema Constituency, Murang'a County, Kenya*. (MBA Thesis) University of Nairobi, Kenya.
- xxvii. Nyariki, D. M., & Thirtle C. (2000). Technical innovation and farm productivity growth in dry land Africa: The effects of structural adjustment on smallholders in Kenya. *Agrekon* 39(4), 597–606
- xxviii. Ngigi, M. (2005). *The Case of Smallholder Dairying in Eastern Africa*. EPT Discussion Paper 131, IFPRI, Washington D.C.
- xxix. Pathak, R. D., & Kumar, N. D. (2008). The key factors contributing to successful performance of cooperatives in Fiji for building a harmonious society. *International Journal of Public Administration*, 31(6), 690-706.
- xxx. Philip Kotler, Gary Armstrong, Stewart Adam and Sara Deniz (1999). *Principle of Marketing*. Pearson Australia Group Pty Limited.
- xxxi. Saunders, M. N. K., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (6th ended.) Harlow, England: Pearson Education.
- xxxii. Stainsby, K. (2007). *Develop your interpersonal and self-management skills: A practical resource for healthcare administrative and clerical staff*. Oxford: Radcliffe.
- xxxiii. Tibbs and Reuben (2015). *The Effect of Economic Determinants on Performance of Dairy Cooperative Societies; In Kericho County, Kenya* Department of Accounting and Finance, University of Kabianga, Kericho, Kenya.
- xxxiv. Wambugu, Kirimi & Opiyo, (2011). *Productivity trends and performance of dairy farming in Kenya*. Tegemeo Institute of Agricultural Policy and Development. WPS 43/2011, Egerton University.
- xxxv. Wanjala, S., Omondi, P., Njehia, B. N., & Ngichabe, C. (2014). Assessment of The Structure and Performance of the Milk Market in Western Kenya. *Department of Agribusiness Management and Trade, Kenyatta University Kenya*.