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STRATEGIC PROCUREMENT SOURCING AND PERFORMANCE OF COFFEE COOPERATIVE SOCIETIES IN CENTRAL REGION, KENYA

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ABSTRACT

In Kenya, coffee cooperative societies play a critical role in supporting smallholder farmers by organizing the collection, processing, and marketing of coffee, thereby increasing efficiency and ensuring better prices through collective bargaining. However, coffee cooperative societies in Central Region, Kenya, face several challenges that impact their ability to thrive and support the local farming communities. The general objective of the study was to examine the influence of strategic procurement sourcing on performance of coffee cooperative societies in Central Region, Kenya. Specifically, the study sought to assess the influence of procurement planning on performance of coffee cooperative societies in Central Region, Kenya and to evaluate the influence of material acquisition on performance of coffee cooperative societies in Central Region, Kenya. This study was guided by Resource-Based View (RBV) and Supply Chain Management (SCM) theory. For this study, descriptive research design was utilized. According to CAK (2024) report, central region which comprises of Kiambu, Kirinyaga, Nyeri, and Murang'a counties has a total of 550 licensed and registered coffee cooperative societies. The total population in this study was therefore 550 procurement managers from the 550 coffee cooperative societies. The study's sample size of 226 was reached at using Krejcie and Morgan sample size determination formula (Russell, 2019). The 226 respondents were chosen with the help of stratified random sampling technique. This study used semi-structured questionnaires and Secondary Data Collection Sheet to collect the primary data for the study. Data from questionnaires was coded and analyzed using the latest Statistical Package for Social Sciences (SPSS) computer software. Quantitative data collected was analyzed using descriptive statistics techniques. Pearson R correlation was used to measure strength and the direction of linear relationship between variables. The study concluded that procurement planning has a positive and significant effect on performance of coffee cooperative societies in Central Region, Kenya. In addition, the study concluded that material acquisition has a positive and significant effect on performance of coffee cooperative societies in Central Region, Kenya. Based on the findings, the study recommends that the management of coffee cooperative societies in Central Region should prioritize and enhance their procurement planning processes. This can be achieved by adopting a more structured and forward-thinking approach to identifying material needs, forecasting demand, and aligning procurement strategies with the cooperative's long-term goals.

Key Words: Strategic Procurement Sourcing, Procurement Planning, Material Acquisition, Performance of Coffee Cooperative Societies

Background of the Study

Coffee cooperative societies are organizations formed by smallholder coffee farmers who come together to collectively manage the production, processing, and marketing of coffee. These cooperatives aim to improve the bargaining power of farmers, provide them with access to better prices, quality inputs, and essential services such as training, credit, and extension services (Jehad *et al*, 2023). By pooling resources, cooperative societies help farmers reduce costs, improve coffee quality, and access larger markets that would otherwise be out of reach for individual farmers (Hatane, Hotlan & Rany, 2024). Additionally, coffee cooperatives often reinvest profits into community development initiatives, such as education, health services, and infrastructure, benefiting the wider community. Through this collective model, coffee cooperative societies play a crucial role in enhancing the livelihoods of smallholder farmers and ensuring the sustainability of the coffee sector (Thrulogachantar & Suhaiza, 2024).

Coffee cooperative societies are essential in promoting economic empowerment among smallholder farmers, particularly in rural areas where coffee is a major source of livelihood. By pooling resources, farmers gain access to economies of scale, allowing them to reduce production costs, access better quality inputs, and negotiate better prices for their produce (Kanyarat & Ungul, 2023). This collective approach enables farmers to receive a fairer share of the profits from their labor, as cooperatives serve as intermediaries that aggregate and market their coffee. With the increased bargaining power, farmers are less vulnerable to exploitation by middlemen, who traditionally offer low prices for raw coffee. The steady income derived from cooperatives helps stabilize the financial well-being of farmers, reducing their vulnerability to market fluctuations and fostering long-term economic security (Muhammad & Danish, 2024).

Coffee cooperatives play a vital role in providing services that individual farmers would otherwise find difficult to access. These include credit facilities, extension services, and training on best agricultural practices, which contribute to improved coffee production and quality (Adda, 2021). By participating in a cooperative, farmers gain access to affordable credit, which they can use to invest in inputs such as fertilizers, pesticides, and machinery. Additionally, cooperatives often organize training programs to enhance farmers' skills, including modern farming techniques and sustainable practices, improving productivity and coffee quality (Liban & Ibrahim (2022). Some cooperatives also facilitate certification programs for international standards, such as Fairtrade or organic certification, which opens up access to premium markets and enhances the global competitiveness of Kenyan coffee. This knowledge-sharing and access to resources elevate the capacity of smallholder farmers, enabling them to produce high-quality coffee that meets both local and international market demands (Muwolya, 2023).

Beyond economic benefits, coffee cooperative societies significantly contribute to the social development of rural communities. Cooperatives often reinvest a portion of their profits into community projects that improve the quality of life for members and their families (Igwe, 2022). These projects may include the construction of schools, healthcare facilities, and water infrastructure, which directly benefit farmers and their communities. By fostering collective action, cooperatives also promote social cohesion and a sense of solidarity among members (Mary & Dushimimana, 2022). The democratic nature of cooperatives, where farmers participate in decision-making processes, empowers them and enhances governance, transparency, and accountability. This social capital and the shared responsibility of cooperative members not only improve the overall well-being of individuals but also strengthen community bonds, making them more resilient to economic and environmental challenges (Giathi, Abayo & Muhoho, 2021).

In addition to their economic and social contributions, coffee cooperatives are instrumental in promoting sustainable farming practices. Many cooperatives encourage the adoption of environmentally friendly farming methods, such as organic farming, agroforestry, and water conservation techniques, which help preserve the local ecosystem and protect the land for future generations (Kamau & Thogori, 2023). By focusing on sustainability, cooperatives help farmers mitigate the impacts of climate change, improve soil health, and reduce dependence on harmful chemicals. Additionally, cooperatives often advocate for fair trade practices, which not only ensure that farmers receive better compensation but also encourage environmentally responsible production. This focus on sustainability enhances the long-term viability of coffee farming and supports the broader environmental goals of preserving biodiversity and reducing the carbon footprint of coffee production (Munene, 2023).

Strategic procurement sourcing is a proactive, long-term approach to acquiring goods and services that focuses on aligning procurement decisions with an organization's overall business goals (Isaac, 2022). Unlike traditional purchasing, which emphasizes short-term cost savings, strategic sourcing involves a comprehensive analysis of an organization's needs, supplier capabilities, market trends, and potential risks (Bula & Ngahu, 2021). It aims to optimize supplier relationships, improve quality, and ensure value for money through strategic partnerships and negotiations. By consolidating suppliers, leveraging bulk purchasing, and adopting innovative procurement practices, strategic sourcing helps organizations achieve cost efficiencies, enhance supply chain resilience, and drive continuous improvement in the procurement process (Jehad *et al*, 2023).

Procurement planning is the foundational stage of the procurement process, involving the identification of organizational needs and the development of a strategy to meet them effectively and efficiently. It includes forecasting demand, determining budget requirements, setting timelines, and identifying potential risks (Hatane, Hotlan & Rany, 2024). Material acquisition involves sourcing the identified goods or services, ensuring they meet required specifications and are delivered on schedule. This study sought to examine the influence of strategic procurement sourcing on performance of coffee cooperative societies in Central Region, Kenya.

Coffee Cooperative Societies in the Central Region of Kenya play a significant role in the country's coffee production, processing, and marketing. This region, which includes counties such as Nyeri, Murang'a, Kirinyaga, Kiambu, and Embu, is one of the leading coffee-growing areas due to its favorable highland climate, rich volcanic soils, and adequate rainfall (Giathi, Abayo & Muhoho, 2021). The cooperatives serve as vital institutions that bring together small-scale coffee farmers to collectively manage production processes, access inputs, and market their produce. By pooling resources and working as a collective, farmers are better positioned to negotiate prices, reduce costs, and enhance the quality of their coffee (Kamau & Thogori, 2023).

These societies often operate coffee factories (wet mills) where members bring their harvested coffee cherries for processing. After pulping and fermenting, the beans are dried and later sent for milling before export (Munene, 2023). The cooperative then handles marketing, often through the Nairobi Coffee Exchange or through direct sales to international buyers. Historically, Kenya's coffee has been renowned for its high quality, with the Central Region producing some of the most sought-after Arabica beans, often graded AA, AB, or PB. Cooperatives therefore play a crucial role in maintaining quality standards through technical training, access to agronomic support, and quality control measures (Isaac, 2022).

However, despite their importance, many coffee cooperative societies in the Central Region face significant challenges. These include poor governance, mismanagement of funds, lack of transparency, delayed payments to farmers, and aging infrastructure (Bula & Ngahu, 2021). Additionally, global market volatility and fluctuating coffee prices impact the sustainability of coffee farming. As a result, many younger people are moving away from coffee farming, and some farmers have uprooted coffee trees in favor of more profitable crops like avocados or real estate development. The government and private sector have tried to support revitalization efforts, including debt waivers, provision of subsidized inputs, and reforms to the cooperative sector to encourage accountability and farmer participation (Giathi, Abayo & Muhoho, 2021).

Statement of the Problem

In Kenya, coffee cooperative societies play a critical role in supporting smallholder farmers by organizing the collection, processing, and marketing of coffee, thereby increasing efficiency and ensuring better prices through collective bargaining. These cooperatives reduce farmers' reliance on exploitative middlemen, while also offering access to subsidized farm inputs, credit facilities, and technical training to improve productivity and product quality (Kamau & Thogori, 2023). By facilitating certification for international markets, they enable farmers to earn premium prices, enhancing their incomes and economic resilience (Munene, 2023). Additionally, many cooperatives reinvest in community development projects such as schools and healthcare, and promote good governance by involving farmers in democratic decision-making processes (Isaac, 2022).

Coffee cooperative societies in Central Region, Kenya, face several challenges that impact their ability to thrive and support the local farming communities. Coffee cooperative societies in Kenya have experienced a significant decline in market share due to poor governance, mismanagement, and operational inefficiencies. Many cooperatives struggle to maintain competitiveness in a liberalized market where private millers and exporters are increasingly attracting farmers with faster payments and better services (Bula & Ngahu, 2021). For example, a 2019 audit in Nyeri County revealed that 22 out of 25 coffee societies were relying heavily on loans to finance operations, indicating financial distress and eroding confidence among members (Standard Media) (Giathi, Abayo & Muhoho, 2021). Additionally, the once-dominant cooperative sector now handles less than 30% of Kenya's total coffee output, compared to over 70% in the 1980s. This drop is attributed to delayed payments, lack of transparency, and limited market access, prompting many farmers to abandon cooperatives for more efficient private sector actors (Kamau & Thogori, 2023).

Profitability remains a persistent challenge for coffee cooperative societies, primarily due to high operational costs, inefficient processing systems, and poor economies of scale. According to a study in Central Province, the average marketing margin for cooperatives was Kshs 1.85 per kilogram of coffee cherry, whereas the actual marketing cost was only Kshs 1.21. This mismatch suggests a high level of inefficiency and potential financial leakage within the system (University of Nairobi Repository Munene, 2023) (Munene, 2023). Furthermore, outdated cooperative laws and weak internal controls hinder decision-making and responsiveness to market changes. Many cooperatives also face challenges in upgrading infrastructure and adopting modern technologies, limiting their ability to process high-quality coffee that meets international standards, thus affecting overall profitability and long-term sustainability (Isaac, 2022).

Customer (farmer) satisfaction is severely impacted by a lack of transparency, delayed payments, and inadequate communication from cooperative leadership. A report by the Kenya Coffee Producers Association noted that only 19% of cooperatives operate dollar accounts, which prevents farmers from accessing better prices linked to global coffee markets (Standard Media) (Bula & Ngahu, 2021). Additionally, an alarming 87.4% of growers reported not understanding their milling and marketing contracts, reflecting a critical communication gap and a lack of financial literacy support (Giathi, Abayo & Muhoho, 2021). This has led to widespread mistrust and disengagement among farmers, who feel excluded from key decisions regarding their produce. Without improvements in service delivery, transparency, and farmer engagement, cooperative societies risk further alienating their core members and accelerating the shift toward private sector alternatives (Kamau & Thogori, 2023).

Various studies have been conducted in different parts of the world on strategic procurement sourcing and organization performance. For instance, Giathi, Abayo and Muhoho (2021) assessed on strategic procurement sourcing on performance of public institutions, Kamau and Thogori (2023) conducted a study on an assessment on the influence of strategic procurement sourcing on procurement performance of tier one Commercial Banks and Munene (2023) researched on the role of strategic procurement sourcing on organization's performance. However, none of these studies focused on procurement planning and material acquisition on performance of coffee cooperative societies in Central Region, Kenya. To fill the highlighted gaps, the current study sought to examine the influence of strategic procurement sourcing (procurement planning and material acquisition) on performance of coffee cooperative societies in Central Region, Kenya.

Objectives of the Study

General Objective

The general objective of the study was to examine the influence of strategic procurement sourcing on performance of coffee cooperative societies in Central Region, Kenya.

Specific Objectives

i. To assess the influence of procurement planning on performance of coffee cooperative societies in Central Region, Kenya
ii. To evaluate the influence of material acquisition on performance of coffee cooperative societies in Central Region, Kenya

Theoretical Framework

Resource-Based View (RBV)

The Resource-Based View (RBV) theory focuses on the idea that an organization's resources and capabilities are the primary drivers of its competitive advantage and performance (Zafar *et al*, 2023). According to RBV, resources are categorized as either tangible or intangible assets, including physical assets (e.g., equipment), human capital (skills, expertise), and organizational knowledge (e.g., brand reputation, processes). For coffee cooperative societies, RBV suggests that the unique combination of these resources can significantly influence their ability to perform in competitive markets. The theory asserts that firms with valuable, rare, inimitable, and non-substitutable resources can maintain a sustainable competitive advantage, which can lead to superior performance, efficiency, and growth. In the context of coffee cooperatives, these

resources might include strong supplier relationships, access to high-quality coffee processing equipment, or specialized knowledge in coffee cultivation and marketing (Higiro, 2021).

RBV emphasizes that organizations should not only acquire resources but also develop capabilities to use these resources effectively. For coffee cooperatives in Central Kenya, procurement strategies, such as securing high-quality materials (e.g., fertilizers and coffee processing machines), can enhance performance by leveraging these tangible and intangible resources. RBV proposes that competitive advantage is not solely based on external market conditions but on an organization's ability to build and manage its resources effectively over time. Through careful procurement planning, material acquisition, and supplier selection, coffee cooperatives can turn their resources into capabilities that improve productivity, coffee quality, and overall organizational performance (Salim & Kitheka, 2023).

In practice, the RBV theory encourages coffee cooperatives to invest in resources that are difficult for competitors to replicate (Ogwanga & Waweru, 2020). This could include developing proprietary techniques in coffee production, establishing long-term supplier relationships, or enhancing members' skills through training programs. Over time, these resources can contribute to superior product quality, cost efficiency, and brand recognition, resulting in better market positioning. The RBV framework thus provides a lens through which cooperatives can assess their internal capabilities and identify areas for strategic investment to enhance their performance and sustain growth in a competitive coffee market (Kariuki & Wabala, 2021). The theory was used to assess the influence of procurement planning on performance of coffee cooperative societies in Central Region, Kenya.

Supply Chain Management (SCM) Theory

Supply Chain Management (SCM) theory focuses on the integration and management of the flow of goods, services, and information across an organization's supply chain, with the aim of improving efficiency, reducing costs, and maximizing value (Younus, Zaidan & Mahmood, 2022). SCM emphasizes the importance of collaboration and coordination among suppliers, manufacturers, and customers to ensure smooth and efficient operations. For coffee cooperatives, SCM theory highlights the need for effective coordination between farmers, cooperatives, suppliers of agricultural inputs, processing plants, and market outlets. By ensuring timely delivery of high-quality materials and services, cooperatives can avoid disruptions that could negatively affect the quality of their coffee or their ability to meet market demand (Garba, 2020).

The core idea of SCM is that a well-managed supply chain leads to improved operational performance, as it reduces inefficiencies such as delays, stockouts, or overproduction. In the context of coffee cooperatives, effective SCM ensures that the procurement of inputs such as fertilizers, pesticides, and equipment is conducted in a manner that aligns with demand, minimizes waste, and improves the quality of the final coffee product. The theory stresses the importance of information sharing and visibility across the entire supply chain to ensure that all stakeholders are aligned with the cooperatives' objectives, leading to cost reductions and the enhancement of service delivery (Keitany, Wanyoike & Richu, 2023).

SCM also emphasizes the importance of long-term relationships and strategic partnerships within the supply chain (Korir & Kagiri, 2022). For coffee cooperatives, this might involve forming partnerships with key suppliers or buyers, which can lead to more favorable pricing, preferential

treatment, or priority access to resources. This collaborative approach within the supply chain helps cooperatives increase efficiency, improve product quality, and strengthen their competitiveness in both local and international markets. Through the application of SCM principles, cooperatives can reduce risks, streamline their operations, and enhance their overall performance by aligning their procurement strategies with their broader business goals (Sigat & Chege, 2020). The theory was used to evaluate the influence of material acquisition on performance of coffee cooperative societies in Central Region, Kenya.

Conceptual Framework

A conceptual model is used to demonstrate the relationships of the variables in order to reinforce the research study. Thus, the primary goal of a conceptual model is to classify and explain the closely related concepts in study, demonstrating the relationship between them. The researcher may use a conceptual framework to describe the underlying research subject, show the scope of the investigation, categorize variables based on their relationships, and identify shortcomings in current literature.

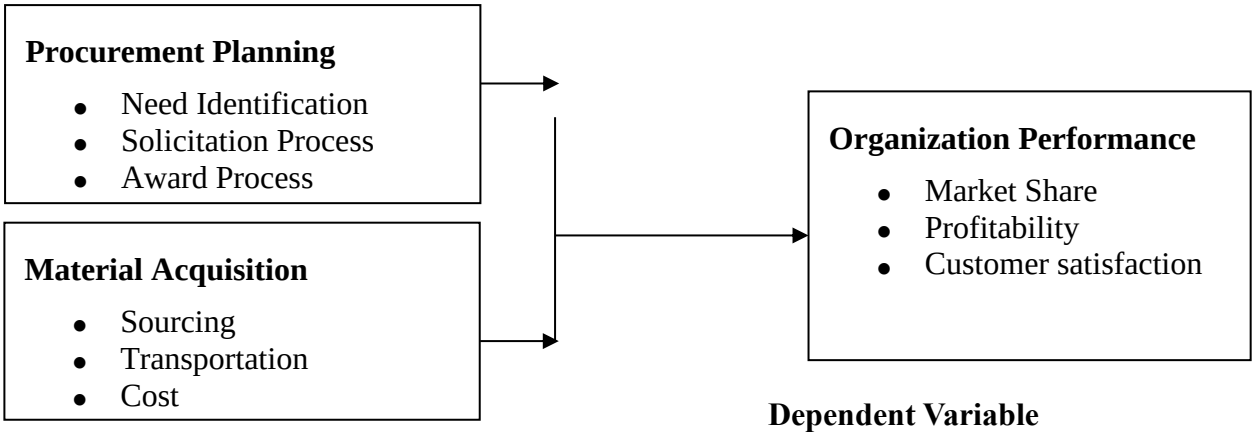

Figure 2. 1: Conceptual Framework

Procurement Planning

Procurement planning is a critical process in project and operations management that involves identifying what goods and services need to be acquired from external suppliers, determining the timing of these acquisitions, and specifying how they will be procured (Zafar *et al*, 2023).. This planning stage ensures that all necessary resources are available at the right time and in the right quantity to support project objectives or operational requirements. It includes assessing whether to buy or lease products, defining specifications, estimating costs, and identifying potential vendors. Need Identification is the first and most crucial step in the procurement process. It involves recognizing and clearly defining the requirement for goods, services, or works necessary to support a project or the operations of an organization (Salim & Kitheka, 2023). This step includes understanding the purpose, quantity, quality, and timing of the needed items. Stakeholders and end users often collaborate during this stage to ensure that the requirements are aligned with the organization's goals and budget constraints. Proper need identification lays the foundation for a successful procurement cycle by ensuring that only necessary and well-defined resources are pursued (Ogwanga & Waweru, 2020).

Award Process is the stage where the organization evaluates the received bids or proposals based on predefined criteria such as price, quality, experience, delivery time, and compliance with specifications (Salim & Kitheka, 2023). This evaluation can be technical, financial, or both, depending on the procurement's complexity. Once the most suitable supplier is selected, a formal contract is awarded, and both parties agree on the terms and conditions of the engagement. This phase is crucial to ensuring value for money and minimizing risks, as the chosen supplier must be capable of delivering according to the contract requirements (Ogwanga & Waweru, 2020).

Material Acquisition

Material acquisition is the process of obtaining the physical goods, raw materials, or components necessary for production, construction, or service delivery within an organization (Younus, Zaidan & Mahmood, 2022). It involves identifying the required materials, sourcing suitable suppliers, negotiating purchase terms, and arranging for delivery to ensure materials are available when needed. This process is critical to maintaining an efficient supply chain and avoiding delays in operations. Effective material acquisition considers factors such as cost, quality, lead time, and supplier reliability. Sourcing refers to the strategic process of identifying, evaluating, and selecting suppliers who can provide the goods or services needed by an organization (Keitany, Wanyoike & Richu, 2023). This step is crucial for building a reliable supply base and ensuring that the materials or services meet the required quality and compliance standards. Effective sourcing involves market research, supplier audits, and negotiations to secure the best value in terms of price, quality, and reliability.

Transportation is the logistical process of moving goods from the supplier to the organization's facility or project site (Sigat & Chege, 2020). It plays a vital role in the supply chain, as delays or disruptions in transportation can lead to significant setbacks in production or service delivery. Transportation management includes selecting the appropriate mode of transport—such as road, rail, air, or sea—based on factors like cost, speed, distance, and the nature of the goods. Ensuring the safe and timely delivery of materials also involves route planning, carrier selection, tracking systems, and compliance with shipping regulations. Cost is a fundamental consideration throughout the procurement and logistics process, influencing decision-making at every stage from sourcing to delivery (Garba, 2020). It includes not only the purchase price of goods or materials but also additional expenses such as shipping, handling, customs duties, insurance, and storage.

Empirical Review

Procurement Planning and Organization Performance

Zafar *et al* (2023) assessed on the moderating role of ethical leadership between the factors influencing procurement performance: a case of home textile industry of Pakistan. The sampling technique used in this research study is convenience sampling which is a sub-type of non-probability sampling and data collected from a sample size of 384 is given in the table. The study found that procurement planning and ethical leadership have positive impact on procurement performance. The study concluded that a positive relationship was observed between procurement planning and procurement performance.

Higiro (2021) investigated on the effect of procurement planning on performance of public institutions in Rwanda: Case of Kicukiro District. The study adopted explanatory research design while the study population constituted 258 employees. The study found that identification of needs is a key indicator in enhancing performance of public institutions. The study concluded that there

is a strong positive relationship between identification of needs and tendering methods on the performance of public institutions.

Ogwanga and Waweru (2020) examined on the influence of procurement planning on performance of Kisumu Water and Sewerage Company Limited, Kenya. Survey research design was adopted. The study population comprised of the 128 procurement officers, middle level managers, supervisors and departmental heads working with KIWASCO. A sample of 57 respondents was derived from the aforesaid population using stratified random sampling technique. The study found that transparency in procurement and procurement requirements were positively correlated to organizational performance. However, transparency in procurement was the only one that had a significant influence on the performance of KIWASCO. The study concluded that procurement requirements were of significant importance to the performance of KIWASCO.

Kariuki and Wabala (2021) conducted a study on the influence of procurement planning on the procurement performance of selected county governments in Kenya. The researcher used the descriptive research design as the sample size used was assumed to have similar characteristics. The target population was composed of 405 employees from selected 24 Counties. A sample of 213 employees was selected for the study. The study found that, budgeting, needs assessment and risk management positively and significantly influences performance of procurement functions in county governments. The study concluded that procurement portfolio has a positive influence on performance of county governments.

Material Acquisition and Organization Performance

Younus, Zaidan and Mahmood (2022) assessed on the effects of material acquisition on organizational performance in Malaysian small and medium sized enterprises (SMEs). The study used a quantitative research design because it supplied quantitative data. Analysis of the primary data collected using statistical techniques. The survey elicited responses from 260 respondents representing all SMEs firms. There were 235 respondents that completed the questionnaire successfully. The study found that material acquisition was significantly strong and positive. The study concluded that material acquisition had a positive effect on organizational performance in SMEs.

Garba (2020) examined on the effect of material acquisition on the performance of Benue Brewery Industry, Nigeria. Survey research design was used with a population of 242 respondents and a sample of 151. The study found that material acquisition has a positive and significant effect on organizational performance. The study concluded that material acquisition have significant effect on the performance of the manufacturing sector in Nigeria.

Korir and Kagiri (2022) conducted a study on the effect of material acquisition on organizational performance: a case of James Finlay (Kenya) Limited. The study used descriptive research design through a cross-section survey within James Finlay (Kenya). The study targets three departments in the organization and the combined three departments have a population of 450 employees. Furthermore, the research used stratified sampling to narrow down from the 450 target population to 45 sample population. The study found a positive relationship between material acquisition and organization performance. The study concluded that material acquisition has a positive effect on organization performance.

Sigat and Chege (2020) assessed on the effect of material acquisition on financial performance of the Kenya Meat Commission in Kenya. Descriptive Research Design was used. The study

population comprised of Kenya Meat Commission headquarters in Athi River, Ladhies branch in Nairobi, Mombasa deport and the user department in Athi River. The study found that material acquisition positively and significantly affects financial performance. The study concluded that the relationship between material acquisition and financial performance of meat commission was positive and significant.

RESEARCH METHODOLOGY

Research Design

For this study, descriptive research design was utilized to investigate and additionally clarify existing status of affairs pertaining the objectives of a research. The major purpose of descriptive research design was to describe the state of affairs as it is at the time, and as Cooper & Schindler (2018) observe, a descriptive research design is a process of collecting data in order to answer questions concerning the current status of the subjects in the study in their natural set up, as they occur.

Target Population

Cooperative Alliance of Kenya (CAK), is the National Apex Organization for Kenya's Co-operative Movement. Its membership is drawn from over 25,000 registered Co-operatives that include the National Co-operative Organizations (NACOs), Co-operative Unions and Primary Co-operative Societies. According to CAK (2024) report, central region which comprises of Kiambu, Kirinyaga, Nyeri, and Murang'a counties has a total of 550 licensed and registered coffee cooperative societies. The total population in this study was therefore 550 procurement managers from the 550 coffee cooperative societies.

Sampling Frame

According to Cooper and Schindler (2019), a sampling frame describes the list of all population units from which a sample is selected. It is a physical representation of the target population and comprises of all units that are potential members of a sample (Mwanje, 2019).

Sample Size and Sampling Technique

The study's sample size was reached at using Krejcie and Morgan sample size determination formula (Russell, 2019). Using this formula a representative sample was obtained. The study's total population was 550.

The formula used for arriving at the sample size is;

$$n = \frac{x^2 NP(1-P)}{\left(ME^2(N-1)\right) + (x^2 P(1-P))}$$

Where:

n=sample size
x^2=Chi-square for the specified confidence level at 1 degree of freedom
N=Population size (550)

P = is the proportion in the target population estimated to have characteristics being studied. As the proportion was unknown, 0.5 was used.

Chuan and Penyelidikan (2019) indicate that the use of 0.5 provides the maximum sample size and hence it is the most preferable. 528.22/2.3354

ME=desired margin of Error (Expressed as a proportion)

$$\frac{1.96^2 550 * 0.5 * 0.5}{(0.05^2 * 550) + (1.96^2 * 0.5 * 0.5)}$$

$$n = 226.18$$

The 226 respondents were chosen with the help of stratified random sampling technique.

Data Collection Instrument

Research Instruments are measurement tools designed to obtain data on a topic of interest from research subjects (Kothari & Gaurav, 2020). This study used semi-structured questionnaires and Secondary Data Collection Sheet to collect the primary data for the study. According to (Mugenda & Mugenda, 2019) questionnaire is a pre-formulated written set of questions to which the respondents record the appropriate responses as indicated and in accordance with the question's options provided if any.

Semi-structured questionnaires were structured into sections 1-5. Section one collected general information of the respondents, while sections 2-4 collected information relevant to various study independent variables while section five targets information on service delivery. The primary data was collected using a self-administered semi-structured questionnaire. The questionnaire contains both open and close ended questions based on the study objectives. According to Mugenda and Mugenda (2019), a questionnaire is appropriate for data collection from a large number of respondents as it helps to save on time spent in data collection. The researcher used semi-structured questionnaire as the primary data collection instrument for this study due to its practicability and applicability to the research problem and the size of the population. It is also cost effective (Denscombe, 2019).

Pilot Test

According to Mugenda and Mugenda (2019), a pilot test is a small-scale preliminary study conducted to evaluate feasibility, duration, cost, adverse events, and improve upon the study design prior to performance of a full-scale research project. Pilot study facilitated pre-testing and validation of the questionnaire. Cronbach's alpha methodology, which measures internal consistency, was used. Cronbach's alpha provides the average of the measures of the items that are measurable and their correlations. This is in line with the research design to be used in this study. The main aim of the pilot test is testing how reliable the data collection tool is. A total of 23 respondents participated in the pilot test which represents 10% of target population. Findings of pilot test were not included in the actual study.

Data Analysis and Presentation

The process where data is analyzed systematically and the process where the hypothesis is tested with the aim of acquiring some information is the process of analyzing data. Because of difficulty in analysing raw data collected from the field, cleaning, coding, entering, and analysing of the data was done first (Mugenda & Mugenda, 2019). Data from questionnaires was coded and analyzed using the latest Statistical Package for Social Sciences (SPSS) computer software. SPSS software

was used because of its ability to appropriately create graphical presentations of questions, data for reporting and presentation. The analyzed data was presented in the form of frequency distribution tables, pie charts and bar graphs where appropriate. The study employed mixed methods data analysis by applying the use of descriptive and inferential statistics.

The objectives of the study guided data analysis. SPSS was used to analyze the data collected from the field. To allow data to be entered into the software, the questionnaires were referenced, and the data coded. Both quantitative and qualitative data was collected. Quantitative data collected was analyzed using descriptive statistics techniques. Through descriptive analyses, correlational as well as experimental studies emerge; and they provide clues on the issues that require more attention which leads to further research (Mugenda & Mugenda, 2019). Qualitative data was analyzed using content analysis which was performed in SPSS. Before the data is analyzed, it was first coded, cleaned, and grouped as per their variables.

Pearson R correlation was used to measure strength and the direction of linear relationship between variables. A large correlation implies a strong relation exists between the variables. The extent of the level of association between 2 variables is determined using correlation analysis (Levin & Rubin, 2019). Through correlation analysis, the researcher was able to detect if there exist any chances of multicollinearity. If the Correlation coefficient is zero, then it suggests the variables are not related, if the value is ±1 the variables are strongly associated (Hair et al., 2019). Small association is indicated by values ranging from 0.1- 0.29, medium association is indicated by value ranging from 0.3-0.49, and strong association is indicated by value of 0.5 and above.

Multiple regression models were fitted to the data to determine how the predictor/independent variables affect the response/dependent variable. Multiple regression analysis was used in this study because it uses the predictor variables in predicting the response variable. It is a statistical tool attempting to establish whether some variables can be used together in predicting a particular variable (Mugenda & Mugenda, 2019).

To determine any causal relationship, multiple linear regression analysis was conducted.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Descriptive Statistics Analysis

Procurement Planning and Organization Performance

The first specific objective of the study was to assess the influence of procurement planning on performance of coffee cooperative societies in Central Region, Kenya. The respondents were requested to indicate their level of agreement on statements relating to procurement planning and performance of coffee cooperative societies in Central Region, Kenya. The results were as presented in Table 1.

From the results, the respondents agreed that the cooperative identifies procurement needs in advance for timely material availability (M=3.973, SD= 0.981). In addition, the respondents agreed that procurement needs are based on analysis that aligns with the cooperative's goals (M=3.966, SD= 0.850). Further, the respondents agreed that the cooperative uses a transparent process for inviting supplier bids (M=3.931, SD= 0.914). The respondents also agreed that the solicitation process promotes competition for better prices and quality (M=3.896, SD= 0.947). In addition, the respondents agreed that suppliers are evaluated based on clear criteria to ensure the best value (M=3.889, SD= 0.856). Further, respondents agreed that the cooperative clearly communicates contract awards to suppliers (M=3.786, SD= 0.876).

Table 1: Procurement Planning and Organization Performance

	Mean	Std. Deviation
The cooperative identifies procurement needs in advance for timely material availability	3.973	0.981
Procurement needs are based on analysis that aligns with the cooperative's goals	3.966	0.850
The cooperative uses a transparent process for inviting supplier bids	3.931	0.914
The solicitation process promotes competition for better prices and quality	3.896	0.947
Suppliers are evaluated based on clear criteria to ensure the best value	3.889	0.856
The cooperative clearly communicates contract awards to suppliers	3.786	0.876
Aggregate	**3.907**	**0.904**

Material Acquisition and Organization Performance

The second specific objective of the study was to evaluate the influence of material acquisition on performance of coffee cooperative societies in Central Region, Kenya. The respondents were requested to indicate their level of agreement on various statements relating to material acquisition and performance of coffee cooperative societies in Central Region, Kenya. The results were as presented in Table 2.

From the results, the respondents agreed that the cooperative sources materials from reliable and cost-effective suppliers (M=3.840, SD=0.861). In addition, the respondents agreed that the cooperative ensures timely delivery of materials through efficient transportation (M=3.834, SD=0.783). Further, the respondents agreed that material transportation is managed to minimize delays and reduce costs (M=3.788, SD=0.866). From the results, the respondents agreed that the cooperative consistently controls material costs to stay within budget (M=3.772, SD=0.753). Further, the respondents agreed that the cooperative evaluates different sourcing options to get the best value for materials (M=3.749, SD=0.896). The respondents also agreed that the cooperative manages transportation costs effectively to reduce overall procurement expenses (M=3.723, SD=0.645).

Table 2: Material Acquisition and Organization Performance

	Mean	Std. Deviation
The cooperative sources materials from reliable and cost-effective suppliers	3.840	0.861
The cooperative ensures timely delivery of materials through efficient transportation	3.834	0.783
Material transportation is managed to minimize delays and reduce costs	3.788	0.866
The cooperative consistently controls material costs to stay within budget	3.772	0.753
The cooperative evaluates different sourcing options to get the best value for materials	3.749	0.896
The cooperative manages transportation costs effectively to reduce overall procurement expenses	3.723	0.645
Aggregate	**3.784**	**0.801**

Inferential Statistics

Inferential statistics in the current study focused on correlation and regression analysis. Correlation analysis was used to determine the strength of the relationship while regression analysis was used to determine the relationship between dependent variable (performance of coffee cooperative societies in Central Region, Kenya) and independent variables (procurement planning and material acquisition).

Correlation Analysis

The present study used Pearson correlation analysis to determine the strength of association between independent variables (procurement planning and material acquisition) and the dependent variable (performance of coffee cooperative societies in Central Region, Kenya). Pearson correlation coefficient range between zero and one, where by the strength of association increase with increase in the value of the correlation coefficients.

Table 3: Correlation Coefficients

		Organization Performance	Procurement Planning	Material Acquisition
Organization Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	198		
Procurement Planning	Pearson Correlation	.825**	1	
	Sig. (2-tailed)	.003		
	N	198	198	
Material Acquisition	Pearson Correlation	.834**	.289	1
	Sig. (2-tailed)	.002	.050	
	N	198	198	198

From the results, there was a very strong relationship between procurement planning and performance of coffee cooperative societies in Central Region, Kenya (r = 0.825, p value =0.003). The relationship was significant since the p value 0.003 was less than 0.05 (significant level). The findings are in line with the findings of Higiro (2021) who indicated that there is a very strong relationship between procurement planning and organization performance.

Moreover, the results revealed that there is a very strong relationship between material acquisition and performance of coffee cooperative societies in Central Region, Kenya (r = 0.834, p value =0.002). The relationship was significant since the p value 0.002 was less than 0.05 (significant level). The findings conform to the findings of Garba (2020) that there is a very strong relationship between material acquisition and organization performance.

Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables (procurement planning and material acquisition) and the dependent variable (performance of coffee cooperative societies in Central Region, Kenya)

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.852	.726	.727	.10120

a. Predictors: (Constant), procurement planning and material acquisition

The model summary was used to explain the variation in the dependent variable that could be explained by the independent variables. The r-squared for the relationship between the independent variables and the dependent variable was 0.726. This implied that 72.6% of the variation in the dependent variable (performance of coffee cooperative societies in Central Region, Kenya) could be explained by independent variables (procurement planning and material acquisition).

Table 5: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	110.187	2	55.094	1311.76	.000[b]
	Residual	8.099	195	.042		
	Total	118.286	197			

a. Dependent Variable: performance of coffee cooperative societies in Central Region, Kenya
b. Predictors: (Constant), procurement planning and material acquisition

The ANOVA was used to determine whether the model was a good fit for the data. F calculated was 1311.76 while the F critical was 3.042. The p value was 0.000. Since the F-calculated was greater than the F-critical and the p value 0.000 was less than 0.05, the model was considered as a good fit for the data. Therefore, the model can be used to predict the influence of procurement planning and material acquisition on performance of coffee cooperative societies in Central Region, Kenya.

Table 6: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.354	0.096		3.688	0.000
Procurement Planning	0.378	0.099	0.379	3.818	0.001
Material Acquisition	0.385	0.099	0.384	3.889	0.000

The regression model was as follows:

$$\mathbf{Y = 0.354+0.378X_1 +0.385X_2 + 0\varepsilon}$$

According to the results, procurement planning has a significant effect on performance of coffee cooperative societies in Central Region, Kenya (β_1=0.378, p value= 0.001). The relationship was considered significant since the p value 0.001 was less than the significant level of 0.05. The findings are in line with the findings of Salim and Kitheka (2023) who indicated that there is a very strong relationship between procurement planning and organization performance.

The results also revealed that material acquisition has a significant effect on performance of coffee cooperative societies in Central Region, Kenya (β1=0.385, p value= 0.000). The relationship was considered significant since the p value 0.000 was less than the significant level of 0.05. The findings are in line with the findings of Younus, Zaidan and Mahmood (2022) who indicated that there is a very strong relationship between material acquisition and organization performance.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study concluded that procurement planning has a positive and significant effect on performance of coffee cooperative societies in Central Region, Kenya. Findings revealed that need identification, solicitation process and award process influences performance of coffee cooperative societies in Central Region, Kenya.

In addition, the study concluded that material acquisition has a positive and significant effect on performance of coffee cooperative societies in Central Region, Kenya. Findings revealed that Sourcing, Transportation and Cost influences performance of coffee cooperative societies in Central Region, Kenya.

Recommendations

The study recommends that the management of coffee cooperative societies in Central Region should prioritize and enhance their procurement planning processes. This can be achieved by adopting a more structured and forward-thinking approach to identifying material needs, forecasting demand, and aligning procurement strategies with the cooperative's long-term goals.

In addition, the study recommends that the management of coffee cooperative societies in Central Region should focus on optimizing their material acquisition processes. This can be achieved by establishing strong relationships with reliable suppliers to ensure the timely delivery of high-quality materials at competitive prices.

REFERENCES

Abderrahim, C., Javed, I.,Khan, Q., Mahmood, A., Husain, M., & Jehad, S. A. (2023). *The mediating role of strategic procurement sourcing and manufacturing performance.* Retrieved from file:///C:/Users/user/Downloads/

Adda, G. (2021). Examining the relationship between strategic procurement sourcing and organizational performance of Ghanaian firms: How does strategic procurement drive organizational success? *Management and Sustainability*, *9*(2), 20-28.

Cooper, D. R., & Schindler, P. S. (2018). *Business Research Methods (Twelfth ed.).* Boston: Irwin McGraw Hill International.

Creswell, R. (2018). Research design: *qualitative, quantitative, and mixed methods approaches*. USA: Sage Publications.

Cronbach, L. J. (2018). *My Current Thoughts on Coefficient Alpha and Successor Procedures.* Washington, D: Educational and Psychological Measurement.

Cronbach, L. J. (2019). *Test Validation. In R. L. Thorndike (Ed).Educational Measurement (2nd Ed.)* Washington, DC: American Council on Education.

Crowther, D. & Lancaster, G. (2018). *Research Methods: A Concise Introduction to Research in Management and Business Consultancy*. New York: Butterworth-Heinemann.

Effa, G. A., Ovharhe, O. H., Ezirim, A. C., & Igwe, S. (2022). Strategic procurement sourcing and logistics performance in Nigeria. Intern*ational Journal of Marketing and Communication Studies, 7*(1), 31-49.

Kamau, J., & Thogori, M. (2023). Influence of strategic procurement sourcing on procurement performance of tier one Commercial Banks in Kenya. *International Journal of Social Science Management and Entrepreneurship, 7*(11), 236-248.

Kanyarat, T., & Ungul, L. (2023). *The impact of strategic procurement sourcing and e-procurement on supply chain performance management*. Retrieved from https://d1wqtxts1xzle7.cloudfront.net/

Kariuki, M. C & Wabala, S. (2021). Influence of procurement planning on the procurement performance of selected county governments in Kenya. *International Research Journal of Business and Strategic Management, 2*(2), 227-248.

Kinuthia, J. K & Amuhaya, J. (2023). Sourcing strategies and organizational performance of Muranga Co-Operative Creameries Kenya. *Journal of Business and Strategic Management, 8*(5), 92-115.

Korir, P. K & Kagiri, A. (2022). Effect of material acquisition on organizational performance: a case of James Finlay (Kenya) Limited. *International Journal of Supply Chain Management, 2*(3), 1-17.

Kothari, C. R. (2019). Research methodology: Methods and techniques. New Age International

Kyarisiima, J. (2022). Effect of contract management practices on procurement performance a case of Nyarugenge District. International Journal of Scientific Research and Management, 10(12), 4293-2302.

Liban, A. J., & Ibrahim, H. M. (2022). The impact of strategic procurement sourcing on organizational performance. *Journal of Logistics, Informatics and Service Science, 11*(1), 119-135.

Lütfi, S., (2020) Validity and reliability in quantitative research. *Business and management studies. An International Journal, European Leadership University*

Maina, P. W & Paul, S. N. (2023). Supplier selection practices and organizational performance of food processing industry in Nairobi County Kenya. *International Journal of Social Science and Humanities Research, 1*(1), 277-290.

Mutuku, S. M, Ochieng, V. O & Sanga, W. (2021). Influence of supplier selection criteria on performance of public corporations in Kenya: a case of water resources authority. *The Strategic Journal of Business & Change Management, 8*(4), 372-387.

Muvunyi, G & Mulyungi, P. (2022). The effect of strategic sourcing on procurement performance of manufacturing sector in Rwanda: A Case Study of Bralirwa Ltd. *International Journal of Research in Management, Economics and Commerce, 8*(5), 152-158.

Muwolya, D. A. (2023). *The impact of strategic procurement sourcing on organizational performance.* Retrieved from https://irbackend.kiu.ac.ug/server/api/

Sekaran, U., & Bougie, R., (2019). *Research methods for business:* A skill building approach (5th ed.). Chichester, West Sussex:

Sigat, M. A & Chege, W. P. (2020). Effect of material acquisition on financial performance of the Kenya Meat Commission in Kenya. *International Journal of Business Management, Entrepreneurship and Innovation, 2*(2), 105-111.

Tanui, a. k & Moronge, M. Influence of contract management practices on operational performance of state corporations in Kenya. *International Journal of Social Sciences Management and Entrepreneurship 4*(2): 76-92.

Thrulogachantar, P., & Suhaiza, Z. (2024). The influence of strategic procurement sourcing on manufacturing performance. An empirical study in Malaysia. *Journal of Manufacturing Technology Management, 22*(5), 641-663.

Younus, A. M, Zaidan, M. N & Mahmood, D. S. (2022). *The effects of material acquisition on organizational performance in Malaysian small and medium sized enterprises (SMEs)*. Retrieved from, file:///C:/Users/user/Downloads/.

Zafar, T, Chughtai, M. A, Ihsan, F & Ahsan, Q. (2023). The moderating role of ethical leadership between the factors influencing procurement performance: a case of home textile industry of Pakistan. *Research Journal for Societal Issues, 5*(1), 27-53.

Zakaria, H, Kamarudin, D, Azizul, F, Yuden, M. M & Abdullah, A. (2023). Examined on the how significant are supplier selection criteria to the performance of a company? reviewing Kuantan, Pahang Textile Industry. *Global Business and Management Research: An International Journal, 1*5(2), 87-100