

# International Journal of **Supply Chain and Logistics**

(IJSCL)

**Tendering Management and Performance of State Agencies under  
the Ministry of Agriculture and Livestock Development, Kenya**



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## **Tendering Management and Performance of State Agencies under the Ministry of Agriculture and Livestock Development, Kenya**



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*Accepted: 23<sup>rd</sup> August 2025; Received in Revised Form: 7<sup>th</sup> September 2025; Published: 24<sup>th</sup> September 2025*

### **ABSTRACT**

**Purpose:** The general objective of the study was to determine the relationship between tendering management and the performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The study was anchored on game theory.

**Methodology:** The study adopted explanatory research design. Positivist research philosophy was adopted. The target population was 192 management team in 32 state agencies under the Ministry of Agriculture and Livestock Development. The study adopted a census approach and hence the whole population was included in the study. The study used primary as well as secondary data. The questionnaires generated qualitative and quantitative data. Thematic analysis was used to analyze qualitative data and the results were presented in a narrative form. Descriptive and inferential statistics were used in analyzing quantitative data with the assistance of statistical software.

**Findings:** The study found that tendering management has a positive and significant relationship on performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

**Unique Contribution to Theory, Policy, and Practice:** From the findings, the study recommends management of State agencies under the Ministry of Agriculture and Livestock Development, Kenya should adopt a robust e-procurement system complemented by continuous capacity-building initiatives for procurement staff. The study advances theory by showing e-procurement's role in enhancing efficiency and transparency, informs policy by supporting stronger frameworks and staff capacity-building, and guides practice by urging state agencies to adopt robust digital procurement systems.

**Keywords:** *Tendering Management, Performance, State Agencies, Ministry of Agriculture and Livestock Development*

## Background of the Study

Agriculture plays a crucial role in enhancing several Sustainable Development Goals (SDGs) as outlined by the United Nations. The first three goals in the SDGs are directly linked to the agricultural sector. These goals include eradication of poverty, zero hunger, good health and well-being. Agriculture is a primary source of livelihood for a large percentage of the global population, especially in developing countries. It is also at the heart of food production ensuring zero hunger (Eldin, Ragab & El Mokadem, 2019). Further, agriculture influences public health through the food it produces. Promoting sustainable agricultural practices reduces the use of harmful chemicals, enhances food safety, and contributes to a more nutritious and diverse diet, thereby improving the health and well-being of communities (Ali, Saad & Zeb, 2020). State agencies play a crucial role in the agricultural sector by serving as key institutions responsible for planning, regulating, implementing, and supporting various aspects of agricultural development. Their importance stems from their ability to contribute to the overall growth, sustainability, and resilience of the agricultural sector.

Globally, the public sector is currently under pressure from both internal and external sources to demonstrate improvements in their performance through efficient service delivery. Public sector service delivery involves the provision of services by a government to people living within its jurisdiction and making sure they reach those people and places they are intended to (Eldin, Ragab & El Mokadem, 2019). The dimensions of public service performance include quality improvement, cost reduction and efficiency in service delivery, accessibility and equity. Across the world, the public sector records poor performance as compared to private organizations. The public sector, all over the world is less efficient and less effective compared to private sector. According to Akubuko (2019), procurement is one of the main factors affecting performance of public institutions.

Procurement practices encompass methods, processes, and strategies employed by organizations to acquire goods, services, or works from external suppliers or vendors (Al-Shboul, Barber & Garza-Reyes, 2017). These practices are designed to ensure efficient, cost-effective, and high-quality procurement processes. Effective procurement practices help organizations achieve cost savings through strategic sourcing, negotiation with suppliers, and optimizing purchasing decisions. By identifying the best suppliers, negotiating favorable terms, and streamlining procurement processes, organizations can reduce costs, minimize waste, and improve operational efficiency (Chileshe & Phiri, 2022). Procurement practices ensure alignment with organizational goals and strategies. By integrating procurement processes with overall business strategies, organizations can focus on sourcing the right materials, services, and suppliers that support their strategic objectives.

The relationship between procurement practices and organizational performance in public institutions is crucial to their overall effectiveness (Sahu & Rao, 2021). Effective procurement practices can enhance operational efficiency within public institutions. Streamlining processes, optimizing inventory management, and improving coordination with suppliers can result in cost savings, reduced lead times, and increased productivity. According to Al-Ghwayeen and Abdallah (2018), procurement practices directly influence the quality and timeliness of service delivery in public institutions. Well-managed supply chains ensure that necessary resources, such as equipment, supplies, and personnel, are available when and where needed. In addition, efficient procurement practices can lead to cost savings in public institutions. By optimizing procurement processes, negotiating favorable contracts, and implementing effective inventory management techniques, costs can be reduced while maintaining the desired level of service.

The performance of state agencies under the Ministry of Agriculture and Livestock Development is of paramount importance to the national economy. The performance of these state agencies directly impacts agricultural productivity, which in turn affects food availability, accessibility, and affordability for the population. Efficient and effective state agencies can provide necessary support, resources, and expertise to farmers, leading to increased agricultural production and improved food security. In addition, well-performing state agencies can contribute to the growth and development of the agricultural sector, leading to increased income generation, employment opportunities, and poverty reduction. They play a crucial role in facilitating access to markets, providing market information, and supporting value addition activities, thereby enhancing the economic well-being of farmers and agribusinesses (Ministry of Agriculture and Livestock Development, 2022). However, the performance of these state agencies has been declining over the years contributing to food insecurity in the country (KNBS, 2023).

The procurement performance of State Agencies under the Ministry of Agriculture and Livestock Development in Kenya has been a topic of much scrutiny and debate. While many agencies strive for optimal performance, certain challenges and areas for improvement exist (Ministry of Agriculture and Livestock Development, 2022). The Public Procurement and Disposal Act (2005) and its amendments provide a comprehensive framework for transparent and accountable procurement practices. In addition, the adoption of digital platforms like IFMIS has enhanced transparency and efficiency in tendering processes. Various initiatives like training programs and workshops are equipping public officials with necessary procurement skills and knowledge. Also, broader access to procurement opportunities through e-platforms and improved transparency has seen increased participation from diverse suppliers.

State agencies under the Ministry of Agriculture and Livestock Development in Kenya have been experiencing challenges in their performance. According to Public Service Commission (2020), State agencies under the Ministry of Agriculture and Livestock Development have shown an



improvement in performance in terms of service delivery in some agencies while others have performed poorly. State agencies under the Ministry of Agriculture and Livestock Development had an overall performance of 58.5 percent for the financial year 2017/2018, which decreased to 44.3 percent in the financial year 2018/2019 (Public Service Commission, 2019). The efficiency in service delivery and economic use of resources among state agencies under the Ministry of Agriculture and Livestock Development reduced from 62% in 2018 to 46% in 2019 and 44.6% in 2020. In addition, the quality of services reduced by 23% between the year 2018 and the year 2019 (Public Service Commission, 2019; Public Service Commission, 2020).

### **Statement of the Problem**

Tendering management plays a crucial role in shaping the performance of public institutions. For instance, effective tendering management can lead to cost savings through strategic sourcing, negotiation with suppliers, and bulk purchasing (Nyabuti & Miroga, 2021). By obtaining goods and services at competitive prices, public institutions can optimize their budgets and allocate resources more efficiently, ultimately improving their financial performance (Amenya, Ngacho & Nyaboga, 2022). Tendering management directly impact the quality of goods and services acquired by public institutions. Through rigorous vendor selection processes, quality assurance measures, and performance evaluations, institutions can ensure that they obtain high-quality products and services that meet their needs and standards (Chileshe & Phiri, 2022). Tendering management also facilitate collaboration and communication among these stakeholders to ensure efficient and effective operations (Chileshe & Phiri, 2022). In state agencies under the Ministry of Agriculture and Livestock Development, Procurement practices play a key role in the utilization of resources as well as ensuring efficiency in service delivery and customer satisfaction (Public Service Commission, 2020).

State agencies under the Ministry of Agriculture and Livestock Development in Kenya have been experiencing challenges in their procurement, which include overstocking, stock-outs, and inefficiencies (Magembe & Mutunga, 2019). State agencies experience challenges in their inventory management, which leads to inefficiencies, delays, and increased costs. Lack of proper inventory management makes it difficult to track inventory levels, monitor supplier performance, and respond to disruptions in a timely manner (Kaaria, Mburugu & Kirima, 2020). In addition, state agencies under the Ministry of Agriculture and Livestock Development have been performing poorly. According to the Public Service Commission (2020), efficiency in service delivery and economic use of resources among state agencies under the Ministry of Agriculture and Livestock Development reduced from 62% in 2018 to 46% in 2019 and 44.6% in 2020. In addition, the quality of services reduced by 23% between the year 2018 and the year 2019 (Public Service Commission, 2019; Public Service Commission, 2020).

To improve performance, public institutions in Kenya have adopted procurement practices such as material acquisition practice, inventory management practice, disposal management practice and procurement records management practice (Linda Ntinyari & Kirima, 2020). Regardless of the implementation of the procurement practices as guided by Public Procurement and Asset Disposal Act, 2015, the performance of state agencies under the Ministry of Agriculture and Livestock Development is still poor as a characterized by inefficient service delivery. Procurement problems such as overstocking, stock-outs, and inefficiencies, lead to reduced budgets, delayed services, increased costs, and decreased quality of service, which can have a negative impact on the public's perception of the institution and its ability to fulfill its mission effectively (Magembe & Mutunga, 2019). Internal integration, which entails the seamless coordination and collaboration of internal processes, resources, and functions, has been identified as a potential moderating factor in improving procurement management outcomes. However, the extent to which internal integration influences the relationship between tendering management, inventory management, disposal management, procurement records management, and overall performance has not been adequately explored (Nakola, 2015).

Various studies have been conducted on tendering management and organizational performance. For instance, Amenya, Ngacho and Nyaboga (2022) examined the effect of tendering management and government policies on performance of the infrastructural project in Rongo University; Okok and Mboya (2021) studied the influence of tendering management on procurement performance in Kenya Urban Roads Authority in Kenya; and Nakola (2015) studied the effect of tendering management on performance of Haco industries limited. However, Amenya, Ngacho and Nyaboga (2022) conceptualized tendering management in terms of supplier selection and tender evaluation; Okok and Mboya (2021) conceptualized tendering management in terms of supplier development, supplier evaluation and supplier collaboration; and Nakola (2015) conceptualized tendering management in terms of supplier relationship management and supplier development. Therefore, this study sought to answer the research question: What is the relationship between tendering management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya?

### **Specific Objectives**

The specific objectives of the study were;

- i. To find out the relationship between tendering management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya

## **Theoretical Review**

### **Game Theory**

Game theory was founded by John von Neumann and Oskar Morgenstern in the 1940s. Game theory is a branch of mathematics and economics that studies strategic decision-making in situations where the outcome of one individual's choice depends on the choices made by others (Taylor, Kwasnica & Ravindran, 2019). It provides a framework for analyzing and predicting the behavior of rational individuals or entities (referred to as players) in competitive or cooperative situations. The games can be divided into two branches: non-cooperative games and cooperative games. The primary focus is on understanding how individuals or organizations make decisions strategically to maximize their own outcomes, taking into account the decisions made by others. A fair tendering process follows the cooperative game theory concept (Kingori & Ndeto, 2022).

Cooperative game theory is a branch of game theory that focuses on analyzing situations where players can form coalitions or groups and cooperate to achieve mutual benefits. Unlike non-cooperative game theory, where players act independently and compete against each other, cooperative game theory explores scenarios where players can make binding agreements, form alliances, and share resources or payoffs (Hanley, 2022). In cooperative games, the main objective is to study how rational players can allocate resources and distribute the resulting benefits among themselves in a fair and efficient manner. It examines the stability, fairness, and efficiency of cooperative solutions (Muggy & Heier, 2018).

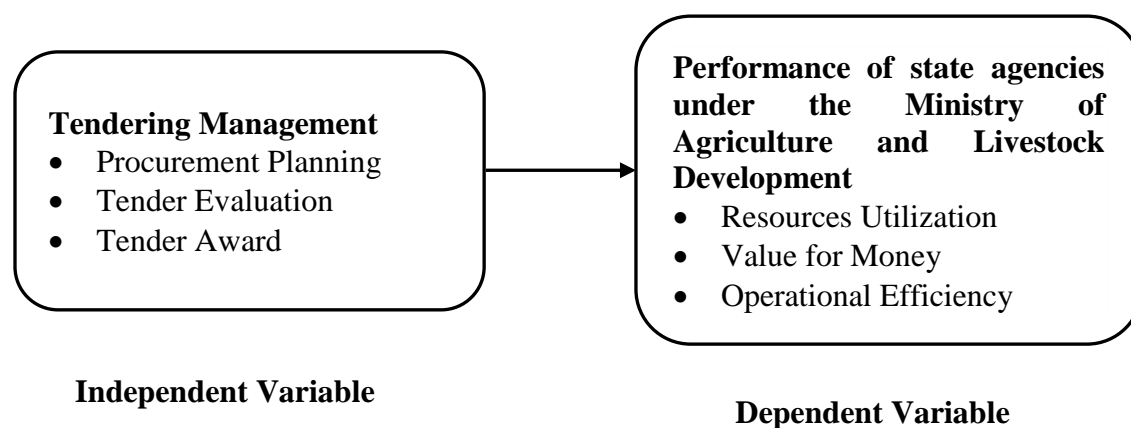
Game theory will provide valuable insights into the influence of tendering management on the performance of state agencies under the Ministry of Agriculture and Livestock Development. In these state agencies, players partake in strategic bidding, tendering, and decision-making. Suppliers strategically determine their bidding approaches, factoring in considerations such as cost, quality, and their perceptions of the agencies' preferences and evaluation criteria. Simultaneously, state agencies design tendering processes with the dual aim of attracting competitive bids and ensuring that selected suppliers align with performance and quality standards (Taylor et al., 2019). The game theory lens further illuminates the pervasive incomplete information that characterizes these interactions. Asymmetric information between suppliers and state agencies, relating to costs, market conditions, and capabilities, becomes a critical factor shaping bidding and tendering strategies. Additionally, hidden characteristics and actions, such as the actual quality of bids and the subsequent performance of suppliers, introduce an element of uncertainty into decision-making processes (Hanley, 2022).

The tension between collaboration and competition emerges as a central theme. Cooperative game theory sheds light on the possibility of collaborative planning and enduring relationships between state agencies and suppliers. Conversely, non-cooperative game theory reflects the competitive

nature of the procurement landscape, where suppliers vie against each other to secure contracts (Kingori & Ndeto, 2022). The Ministry of Agriculture and Livestock Development assumes a regulatory role within this game, establishing rules and enforcing compliance. Game theory aids in the analysis of how the regulatory framework influences the behavior of state agencies and suppliers, shaping the contours of the game. The game theory assists in addressing incentive misalignments through the lens of the principal-agent problem. State agencies, as principals, seek to align the incentives of suppliers (agents) to ensure that the tendering process results in optimal outcomes in terms of performance and value for money.

### Conceptual Framework

Conceptual framework is defined as a diagrammatical representation that portrays association between dependent as well as independent study variables (Devi, 2019). The conceptual framework which is shown in Figure 1 indicates the relationship between dependent and independent study variables, with independent variables comprising of tendering management and the dependent variable was performance of state agencies under the Ministry of Agriculture and Livestock Development.



*Figure 1: Conceptual Framework*

### Tendering management

Tendering management, or the procurement process, is a structured and formal approach organizations use to acquire goods, services, or works from external suppliers. It involves inviting bids or proposals, evaluating them, and selecting the most suitable vendor. This practice, prevalent in government, business, and non-profit sectors, ensures fairness, transparency, and efficiency in procurement (Eldin, Ragab & El Mokadem, 2019). Tender management fosters competitive procurement by promoting fair competition among potential suppliers. This open bidding process encourages suppliers to offer competitive prices, innovative solutions, and high-quality products



or services. Secondly, transparency and accountability are integral. The process is designed to be objective, with predetermined evaluation criteria communicated to all bidders. This transparency enhances accountability, providing a clear record of the procurement process and decision-making rationale (Akubuko, 2019). Tender planning, an essential aspect of strategic procurement, involves the systematic development of a plan to guide the acquisition of goods, services, or projects through the tendering process. This intricate process comprises several pivotal steps to guarantee a methodical and efficient tendering procedure. At its core, the initial step in tender planning is the meticulous definition of requirements (Sulaiman, 2018). This encompasses a detailed identification of the goods or services needed, the establishment of scope and specifications, and a comprehensive understanding of any specific criteria or standards that must be met. The significance of tender planning is underscored by its role in facilitating successful procurement outcomes. A well-structured and transparent tendering process is instrumental in achieving organizational goals.

Tender evaluation stands as a pivotal stage in the tendering process, representing the critical juncture where submitted bids or proposals undergo thorough scrutiny to ascertain the most suitable bidder for the contract or project (Nyanaro & Omwenga, 2018). This process is characterized by a systematic and objective assessment of the bids, anchored in predetermined evaluation criteria carefully crafted to align with the organization's specific needs and priorities. The overarching goal of tender evaluation is to establish a framework that ensures a fair, transparent, and objective assessment of the bids received. This meticulous assessment enables organizations to identify the bidder whose proposal aligns most closely with the project requirements and offers the best value proposition. The process aids in mitigating risks associated with supplier selection, ensuring that the chosen bidder has the requisite qualifications, capabilities, and adherence to specified standards. Moreover, tender evaluation serves as a robust mechanism for achieving compliance with established requirements and optimizing value for money in the procurement process (Sulaiman, 2018). The tender award, culminating the procurement process, signifies the pivotal moment when a winning bidder is formally chosen from the participants, and the contract or project is officially granted to them. This conclusive step involves a meticulous evaluation process by the designated committee, adhering to predetermined criteria (Gatari & Osoro, 2021). The evaluation committee plays a central role in the tender award by concluding their assessment of submitted bids, generating a comprehensive evaluation report. This report encapsulates scores, rankings, and recommendations derived from the committee's scrutiny. The outcome of this deliberation serves as the foundation for the ultimate decision on the successful bidder. The tender award is a critical juncture as it denotes the selection of the most qualified and competitive bidder to undertake the contract or project.

## **Empirical Review**

### **Tendering management and Performance of State Agencies**

In Rwanda, Munyawera, Mulyungi and Ismail (2018) conducted a study to examine the role of tendering practices on performance of state corporations. The study adopted a descriptive survey research design. The study targeted 124 employees of Rwanda Energy Group working on Rwanda Electricity Access Roll-Out Program (EARP) and the sample size was 95. Stratified random sampling method was used. A modified Likert scale questionnaire was developed. A pilot study was carried out to refine the instrument. The quality and consistency of the study was further assessed using Cronbach's alpha. Data analysis was performed on a PC computer using Statistical Package for Social Science (SPSS Version 21) for Windows. The findings revealed that there was a significant statistical relationship between procurement planning and performance.

In Uganda, Sulaiman (2018) conducted a study to examine procurement practices affecting performance in the public agencies. The study population was 215 where a sample size of 189 was selected and 159 responded. Data was collected using the interview guide, a questionnaire and analyzed using SPSS to generate both descriptive statistics to describe and summarize the data and using inferential statistics to test the hypotheses. The findings revealed that procurement planning has a positive significant relationship with procurement performance in public agencies. Procurement planning involves the systematic and strategic process of identifying procurement needs, setting objectives, developing procurement strategies, and determining the necessary resources and actions to achieve those objectives.

In Kenya, Baswet and Achuora (2018) conducted a study on the influence of procurement planning on the performance of state corporations. The study employed a descriptive research design. The target population was all the 187 heads of procurement of the state corporations in Kenya. From the four strata, a sample of 127 was selected using simple random sampling. Semi-structured questionnaires were administered to collect qualitative and quantitative data. Data was analyzed using descriptive and inferential statistics. Quantitative data was analyzed using multiple regression analysis. The qualitative data generated was analyzed by use of Statistical Package of Social Sciences (SPSS) version 21. The findings indicated that supply base leveraging, inventory management system, e-procurement and strategic sourcing have a positive relationship with performance of the state corporations.

Gatari, and Osoro (2021) studied the effect of procurement methods on performance of state corporations in Kenya. The study employed descriptive research design to help in identifying characteristics, frequencies and trends of the study population. This study was anchored on positivist Philosophy. The target population of this study included all 187 registered state corporations in Kenya. Primary data was the main data for the study which was collected using

questionnaires. The study established that procurement methods measured in terms of open tender, restricted tendering and direct procurement had a significantly influence on the performance of state corporations in Kenya measured in terms of return on investment, customer satisfaction, revenue growth, cost and quality of supplies.

Waruguru (2019) conducted a study on the relationship between tendering process and the performance of Nakuru County Government. The study used a case study design and the target population was 43 procurement officers from 10 ministries in Nakuru County Headquarters. The results indicated that tendering process promotes transparency and accountability within the government entity. It ensures that procurement decisions are based on fair competition, objective evaluation criteria, and adherence to legal and ethical standards. The tendering process enables the government to procure goods and services from qualified and competitive suppliers. Through a rigorous evaluation process, the government can select suppliers who meet the required quality standards, thereby ensuring the delivery of high-quality goods and services to the citizens.

## **RESEARCH METHODOLOGY**

### **Research Design**

The study adopted an explanatory research design. Explanatory research design is a type of research methodology that aims to identify and explain causal relationships between variables (Creswell & Creswell, 2022). In this study, an explanatory research design was used to show the relationship between procurement practices and the performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

The study adopted a positivist research philosophy. Positivism research philosophy can be used to explain the existing relationship or realities between elements under investigation, and thus can be used to make predictions. In addition, positivism research approach is used to determine the realistic occurrence of events in a particular social construct through application of scientific approaches (Bhattacharjee, 2018).

### **Target Population**

The unit of analysis in this study was 32 state agencies under the Ministry of Agriculture and Livestock Development, as per the Executive Order No. 1 of 2023 on organization of the government of the republic of Kenya. The unit of observation was the procurement assistants, senior procurement assistants, procurement officers, senior procurement officers, deputy directors of supply chain management and directors of supply chain management. These categories were selected because they are directly involved in procurement. The target population was therefore 192 procurement assistants, senior procurement assistants, procurement officers, senior

procurement officers, deputy directors of supply chain management and directors of supply chain management in 32 state agencies under the Ministry of Agriculture and Livestock Development.

**Table 1: Target Population**

Category	Target Population
Procurement Assistants	32
Senior Procurement Assistants	32
Procurement Officers	32
Senior Procurement Officers	32
Deputy Directors of Supply Chain Management	32
Directors of Supply chain Management	32
<b>Total</b>	<b>192</b>

**Source: Ministry of Agriculture and Livestock Development (2022)**

### Sampling Frame

A sampling frame refers to the list or source from which a researcher selects the potential participants or sampling units for a research study (Krishna, 2020). It is a defined population or group that serves as the basis for selecting a representative sample (Waddell, 2020). The sampling frame of this study was 192 respondents comprising of procurement assistants, senior procurement assistants, procurement officers, senior procurement officers, deputy directors of supply chain management and directors of supply chain management.

The study used census approach and hence included all the 192 respondents comprising of procurement assistants, senior procurement assistants, procurement officers, senior procurement officers, deputy directors of supply chain management and directors of supply chain management. The census approach refers to a method of data collection that aims to gather information from an entire population or a complete set of individuals or units rather than a sample. It involves collecting data from every member of the population of interest, leaving no one out (Waddell, 2020).

### Data Collection Instruments

The study used primary as well as secondary data. Secondary data refers to data that has been previously collected by someone else or for a different purpose than the current research study. It is data that already exists and is available for analysis and interpretation. This data is collected through sources such as research studies, government reports, industry publications, surveys, databases, and other publicly available sources (Mukherjee, 2020). Secondary data was derived from yearly reports of different state agencies under the Ministry of Agriculture and Livestock Development.

Primary data refers to original data that is collected firsthand by researchers for a specific research study or purpose. It is collected directly from the source and is tailored to address the specific research objectives and questions of the study (Waddell, 2020). Primary data was obtained using semi-structured questionnaires. Structured questions were in the form of a Likert scale as well as nominal scale while unstructured questions were in form of open ended questions. Structured questions were employed in effort to conserve money and time, and also encourage easier analysis since they are in immediate usable form. Moreover, unstructured questions were deployed because they encourage the participants to provide in-depth response without feeling restricted in disclosing any information. Questionnaires were also utilized in this research because they ensure anonymity as some information needed is sensitive and strategic to specific organizations.

The questionnaire contains six sections. The first section contains the respondents' background information. The second to fifth sections include questions on the study's predictor variables, the sixth section covers questions on the moderating variable and seventh section addressed questions about the dependent variable.

### **Data Analysis and Presentation**

Data analysis and presentation are essential components of the research process. They involve the examination, interpretation, and communication of the collected data to derive meaningful insights and draw conclusions (Waddell, 2020). The questionnaires generated qualitative and quantitative data. Thematic analysis was used to analyze qualitative data. Thematic analysis is a qualitative research method used to analyze and interpret textual data. It involves identifying patterns, themes, and meanings within the data to gain a deeper understanding of the research topic or research question. The results were presented in a narrative form.

Descriptive and inferential statistics were used in analyzing quantitative data with the assistance of statistical software known as Statistical Package for Social Sciences (SPSS) version 25 statistical software. Descriptive statistics are numerical measures used to summarize and describe the main features of a dataset. They provide a concise summary of the data, allowing researchers to gain insights into its central tendency, variability, and distribution (Kumar, 2019). Descriptive statistics comprised of frequency distribution, percentages, standard deviation and mean. Inferential data analysis is a statistical approach used to draw conclusions and make inferences about a population based on a sample of data. It involves analyzing sample data and using it to make generalizations or predictions about a larger population. In this study, inferential data analysis was carried out using Pearson correlation coefficient, multivariate linear regression, and step-wise regression analysis.

The multivariate regression model was as follows;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$



Whereby;

$Y$  = Performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya;

$B_0$  = Constant;

$\beta_1$  = Coefficient of determination;

$X_1$  = Tendering management;

$\varepsilon$  = Error term

## **PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA**

### **Descriptive Statistics Analysis**

#### **Tendering Management and Organization Performance**

The first specific objective of the study was to find out the relationship between tendering management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The respondents were requested to indicate their level of agreement on statements relating to tendering management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The results were as presented in Table 2.

From the results, the respondents agreed that in their organization adequate procurement planning helps in identifying the most suitable suppliers and vendors ( $M=3.973$ ,  $SD=0.981$ ). In addition, the respondents agreed that in their organization effective procurement planning reduces the risk of procurement delays and bottlenecks ( $M=3.966$ ,  $SD=0.850$ ). Further, the respondents agreed that in their organization regular review and updating of procurement plans contribute to continuous improvement ( $M=3.931$ ,  $SD=0.914$ ). Research by Munyawera, Mulyungi and Ismail (2018) emphasizes the importance of strategic procurement planning in supplier selection processes. By conducting thorough market analyses and aligning procurement strategies with organizational objectives, companies can effectively identify and engage with suppliers who offer the best value proposition. In addition, Baswet and Achuora (2018) underscores the dynamic nature of procurement environments, where market conditions, supplier capabilities, and internal requirements evolve over time. By adopting a proactive approach to plan review and adaptation, organizations can identify opportunities for efficiency gains, cost savings, and innovation in their procurement processes.

The respondents also agreed that in their organization, the tender evaluation process is conducted fairly and impartially ( $M=3.896$ ,  $SD=0.947$ ). In addition, the respondents agreed that clear evaluation criteria in their organization are communicated to all stakeholders involved in the tender process ( $M=3.889$ ,  $SD=0.856$ ). The respondents agreed that their organization ensures

transparency by documenting the entire tender evaluation process ( $M=3.786$ ,  $SD=0.876$ ). Further, the respondents agreed that in their organization the tender award process is transparent and fair, ensuring equal opportunities for all bidders ( $M=3.698$ ,  $SD=0.897$ ). Munyawera, Mulyungi and Ismail (2018) highlight the importance of adhering to established procurement regulations and guidelines to prevent favoritism or discrimination. By implementing clear award criteria and robust governance mechanisms, organizations can uphold principles of fairness and impartiality in the selection of winning bids. In addition, Gatari, and Osoro (2021) emphasizes the importance of maintaining comprehensive records of evaluation activities, including scoring sheets, meeting minutes, and correspondence with bidders. Transparent documentation allows organizations to demonstrate the integrity of their decision-making processes and facilitates post-award reviews or audits, if necessary.

The respondents also agreed that in their organization the tender award process effectively considers the quality and technical aspects of the bids, in addition to the price ( $M=3.674$ ,  $SD=0.873$ ). In addition, the respondents agreed that in their organization the tender award process promotes competition and encourages bidders to submit their best offers ( $M=3.668$ ,  $SD=0.668$ ). Gatari, and Osoro (2021) emphasizes the importance of considering not only the price but also the quality and technical aspects of bids in the tender award process. Organizations that prioritize value over cost alone are more likely to achieve long-term benefits, including enhanced supplier performance and reduced total cost of ownership. By evaluating factors such as product specifications, service levels, and supplier capabilities alongside price, organizations can make more informed decisions that align with their strategic objectives. Waruguru (2019) highlight the positive impact of competitive bidding on pricing dynamics and supplier responsiveness. When bidders perceive a fair and transparent procurement environment, they are more likely to invest time and resources in preparing competitive proposals. By fostering a competitive marketplace and maintaining open communication with suppliers, organizations can stimulate innovation, drive down costs, and ultimately achieve better value for money.

**Table 2: Tendering Management and Organization Performance**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Mean</b>	<b>Std.</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>		<b>Deviation</b>
<b>Procurement Planning</b>							
In our organization adequate procurement planning helps in identifying the most suitable suppliers and vendors.	1.2	6.6	19.2	49.1	24.0	3.973	0.981
In our organization effective procurement planning reduces the risk of procurement delays and bottlenecks.	1.6	12	15.3	51.4	19.7	3.966	0.850
In our organization regular review and updating of procurement plans contribute to continuous improvement.	4.4	6.6	17.7	51.9	19.3	3.931	0.914
<b>Tender Evaluation</b>							
In our organization, the tender evaluation process is conducted fairly and impartially.	3	12.3	11.8	55.7	17.2	3.896	0.947
Clear evaluation criteria in our organization are communicated to all stakeholders involved in the tender process.	3.6	10.2	13.8	56.1	16.3	3.889	0.856
Our organization ensures transparency by documenting the entire tender evaluation process	2.3	11.9	24.9	42.9	18.1	3.786	0.876
<b>Tender Award</b>							
In our organization the tender award process is transparent and fair, ensuring equal opportunities for all bidders.	4.6	13.8	15.9	51.3	14.4	3.698	0.897
In our organization the tender award process effectively considers the quality and technical aspects of the bids, in addition to the price.	0.6	6.9	23.6	53.4	15.5	3.674	0.873
In our organization the tender award process promotes competition and encourages bidders to submit their best offers.	2.5	13.2	10.1	50.3	23.9	3.668	0.668
<b>Aggregate</b>						<b>3.831</b>	<b>0.874</b>

### Test for Hypothesis One

The first specific objective of the study was to find out the relationship between tendering management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. The associated null hypothesis was that there is no statistically significant relationship between tendering management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. A univariate analysis was conducted in which performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya was regressed on tendering management.

The R-Squared depicted the variation in the dependent variable that can be explained by the independent variables. The greater the value of R-squared the greater the effect of independent variable. The R Squared can range from 0.000 to 1.000, with 1.000 showing a perfect fit that indicates that each point is on the line. As indicated in Table 3, the R-squared for the relationship between tendering management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya was 0.241; this is an indication that at 95% confidence interval, 24.1% of variation in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya can be attributed to changes in tendering management. Therefore, tendering management can be used to explain 24.1% of changes in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya but there are other factors that can be attributed to 75.9% change in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

**Table 3: Model Summary for Tendering Management**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.491 <sup>a</sup>	.241	.239	.69655

a. Predictors: (Constant), tendering management

The analysis of variance was used to determine whether the regression model is a good fit for the data. It also gave the F-test statistic; the linear regression's F-test has the null hypothesis that there is no linear relationship between the two variables. From the analysis of variance (ANOVA) findings in Table 4, the study found out that that  $\text{Prob} > F_{1,179} = 0.000$  was less than the selected 0.05 level of significance. This suggests that the model as constituted was fit to predict performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. Further, the F-calculated, from the table (332.39) was greater than the F-critical, from f-distribution tables (3.894) supporting the findings that tendering management can be used to predict performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

**Table 4: ANOVA for Tendering Management**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	45.87	1	45.87	332.39	.000 <sup>b</sup>
1 Residual	24.735	179	0.138		
Total	70.605	180			

a. Dependent Variable: Performance of state agencies

b. Predictors: (Constant), Tendering Management

From the results in Table 5, the following regression model was fitted.

$$Y = 2.069 + 0.433 X_I$$

( $X_I$  is Tendering Management)

The coefficient results showed that the constant had a coefficient of 2.069 suggesting that if tendering management was held constant at zero, performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya would be 2.069 units. In addition, results showed that tendering management coefficient was 0.433 indicating that a unit increase in tendering management would result in a 0.433 improvement in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya. It was also noted that the P-value for tendering management coefficient was 0.000 which is less than the set 0.05 significance level indicating that tendering management was significant. Based on these results, the study rejected the null hypothesis and accepted the alternative that tendering management has positive significant influence on performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

**Table 5: Beta Coefficients for Tendering Management**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.069	.174		11.881	.000
1 tendering management	.433	.045	.491	9.723	.000

a. Dependent Variable: performance of state agencies



## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusions**

#### **Tendering Management and Organization Performance**

The first null hypothesis test was ‘There is no statistically significant relationship between tendering management and performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya’. The study found that tendering management is statistically significant in explaining performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya’. The influence was found to be positive. This means that unit improvement in tendering management would lead to an increase in performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya’. Based on the findings, the study concluded that tendering management positively and significantly influences performance of state agencies under the Ministry of Agriculture and Livestock Development, Kenya.

### **Recommendations**

#### **Tendering Management**

The study recommends management of State agencies under the Ministry of Agriculture and Livestock Development, Kenya should adopt a robust e-procurement system complemented by continuous capacity-building initiatives for procurement staff. The implementation of an e-procurement platform will streamline and automate tendering procedures, ensuring transparency, accountability, and equal access to information for all bidders. Such a system will also minimize human intervention, reducing the risk of favoritism and corruption. Alongside this, regular training programs should be conducted to equip procurement teams with up-to-date knowledge of regulatory requirements and compliance standards, enabling them to navigate the complexities of procurement laws effectively.

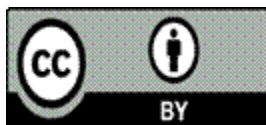
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