EFFECT OF PROCUREMENT METHODS ON PERFORMANCE OF STATE CORPORATIONS IN KENYA

¹*Gatari Catherine Njoki, ²*Dr. Noor Ismail, PhD, ³*Dr. Anthony Osoro, PhD

¹*PhD Candidate, Jomo Kenyatta University of Agriculture and Technology (JKUAT)

²*JKUAT, Kenya

³*JKUAT, Kenya

Abstract: This paper analyses the effect of procurement methods on performance of state corporations in Kenya. The study also assesses the moderating effect of public procurement disposal act enforcement on the relationship between procurement methods and performance of state corporations. 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. The study used a census where all the 187 state corporations were surveyed. To identify the unit of observation, the study purposively picked the head of finance and the head of procurement function in all 187 state corporations in Kenya. This formed 374 respondents. Primary data was the main data for the study which was collected using questionnaires. The collected data was analyzed with the aid of the Statistical Package for Social Sciences (SPSS) Version 26. Descriptive statistics was used to summarize and organize characteristics of a data set collected which was presented in form of means, modes and standard deviations. Then inferential statistics through a regression model was used to test the research hypotheses. The study established that procurement methods had a significantly influence on the performance of state corporations in Kenya. The study recommended that the management of the state corporations ought to ensure compliance with all sections of PPAD Act, of 2015 and public procurement regulations so as to improve their performance.

Keywords: Public procurement, procurement method, enforcement, organizational performance, state corporations.

1. INTRODUCTION

1.1 Background of the Study

The public procurement act of Kenya requires the public procurement activities in all public entities to be carried out in an free, fair and equitable manner upholding all the public procurement policies and procedures. The PPAD Act was enacted in January 2016 abolishing the earlier Public Procurement and Disposal Act of 2005, and all public organs and public entities within Kenya are obliged to conform to this law. The compliance to this Act is in relation to planning and carrying out procurement, inventory planning, disposal of assets and contract management (PPAD, Act 2015). PPAD, Act main focus is to ensure the public procurement system is well managed so as to contribute to the country's economic development by maximizing economy, efficiency, transparency and competitiveness

Procurement methods are the procedures that public procuring entities use to procure acquire products, consultancies and works (Kiruja, 2017). These methods can be competitive or non-competitive. There is preference of using competitive procurement methods in supplier selection and evaluation because that they tend to promote transparency, economy and efficiency (Wachiuri et al., 2018). Procurement encompasses the whole process of acquiring goods, works or services. It

begins when an agency has identified a need and decides on its procurement requirement (Mogikoyo et al, 2017). There are different procurement methods that can be used in public procurement each with different condition for use. These are competitive tendering, direct procurement, and request for quotation, restricted tendering, request for proposal, two stage tendering, force account, low value procurement, design competition, framework agreement and e- reverse auctioning (PPAD, Act 2015).

Procurement performance on the other hand is the efficiency and effectiveness in sourcing of products and services so as to achieve reduction in cost, reduction in time between when an organization place an order and delivery, improved customer satisfaction, law adherence and compliance to procurement policies and regulations (Mugo & Odari, 2018). The dimension of how well an organization is attaining this function has turned into an important aspect in current public entities authority (Muange & Chirchir, 2018). Various states entities have established performance management as a way to assess business and staff efficiency and effectiveness so as to ensure that state businesses achieve the requirements of the citizens (King'oo & Muli, 2019).

1.2 Statement of the Problem

Non-compliance with Public procurement act has been on the rise among most of the public entities in Sub-Saharan Africa, Kenyan included. This has affected performance of different organizations in regards to return on investment, market share growth, profitability, cost and quality. King'oo and Muli (2019) allude that the government of Kenya losses about Ksh. 121 billion which is equals to 17% of the state budget annually due to inappropriate procurement procedures, lack of proper contract management and poor inventory management procedures.

According to Mbati and Osoro, (2020), cases of public procurement malpractices costs Kenya approximately KSh700bn (USD 8.24 billion) during 2018/2019 financial year with more than 49% of state procuring entities failing to conform to public procurement and Assets Disposal Act of 2015 guidelines. According to a Public Procurement Regulatory Authority (PPRA) (2019) compliance assessments audit, in the financial year 2017/2018 only 95 out of 187 (50%) state corporations submitted their procurement reports as required by the public procurement Act. Empirical studies have shown mixed results on the relationship between compliance with public procurement Act and organizational performance. With the conflicting literature from the empirical evidence, and the fact that the available studies have focused on different contexts and locale as well as the low rate of compliance with the PPADA among the state corporations in Kenya, it remains imperative that there is need for a study to fill the available gaps. It is against this background this study seeks to determine the effect of procurement methods on performance of state corporations in Kenya.

1.3 Objectives of the Study

1. To assess the effect of procurement methods on performance of state corporations in Kenya

2. To analyze the moderating effect of enforcement on the relationship between procurement methods and performance of state corporations in Kenya.

1.4 Research Hypothesis

1. H_o: Procurement methods do not significantly affect performance of state corporations in Kenya.

2. H_o: There is no significant moderating effect of enforcement on the relationship between procurement methods and performance of state corporations in Kenya.

2. LITERATURE REVIEW

2.1 Theoretical Review

Tendering Theory

Tendering theory explains the relations in public organizations and how they are supposed to ensure there is realization of value for money when carrying out procurement process (Runeson & Skitmore, 1999). The theory indicates that when selecting a method of obtaining goods, services, works and consultancy services there is needs for a proper development of a specification (Buuri, 2017). A comprehensive, clear and precise specification helps an organization in applying supplier selection criteria that is not only based on the lowest price wins but also conformance with the specification.

Procurement process costs relating to public sector procurements are approximately 1.9% of the worth of the contract (Waigwa & Njeru, 2016). For that reason the procurement managers are required to ensure there is effectiveness and efficiency in all their activities when attempting for the first time since repeating a procurement process might add administration costs which may lead to poor organizational performance. In public sector procurement the procurement process costs goes further than acquisition cost but it includes even the cost of managing the contract which involves administration of contract, costs of contract enforcement, resolution of conflicts cost as well as decision-making (Ondigi & Muturi, 2015).

Theory of Regulatory Compliance

Theory of Regulatory Compliance Lazarides (2017) focuses on the implication of complying with rules or regulations and the role played by enforcement bodies to enhance compliance with the law in a given organization. An assumption of this theory is that 100 percent law and regulatory compliance leads to improvement in products and services delivered in an organization (Tukamuhabwa, 2018). It hypothesizes that entities need to frequently try to ensure that they function with the bounds and standards of their respective societies and authorities. It states that an organizations value system is similar with the value system of the larger social structure of which the organization takes part in (Zubcic & Sims, 2017).

2.2 Conceptual Framework

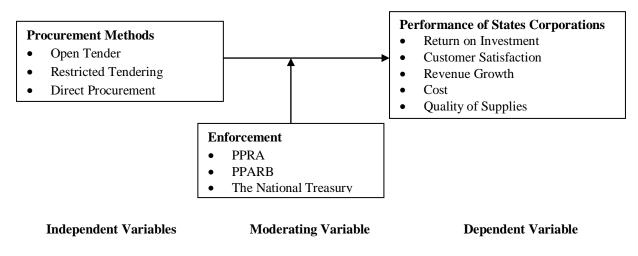


Figure 1

2.3 Empirical Review of Literature

Prier, Schwerin, and McCue, (2016) carried out a study on Implementation of sustainable public procurement methods and policies and organizational performance. The study pointed out that, regulations, working measures and routine principles are set for human resources to facilitate their understanding on what is required of them. The findings also indicated that organizational performance is greatly affected by the procurement methods. Government entrust authority to the state organizations managers who then delegate the authority to the procurement employees so as to carry out procurement activities and procedures. Enforcement has a superior regulatory effect further than the person who violates and reminds managers and all those in corporate management of their duties and the risks involved in case they fail to perform those duties (Prier *et al.*, 2016)

Iregi and Kipkorir, (2017) carried out a study on the effects of Procurement Processes on the Performance of Public Sector Organizations in Kenya. The findings revealed that procurement methods and practices had a significant influence on the performance of state corporations in Kenya. The study indicated that open tender system influences logistic firms in that it ensures competitive prices and is a flexible system as it reduces the cost of business and overstocking expenses (Iregi and Kipkorir, 2017).

3. RESEARCH METHODOLOGY

3.1 Research Design

Descriptive research design was employed in this study. Descriptive study design was ideal for this study because it describes data and characteristics about the population or phenomenon under study.

3.2 Target Population

The target population for this study included all registered state corporations in Kenya. These are the companies owned by the Kenyan Government. According to GOK (2018) there are 187 States Corporations in Kenya. The study unit of analysis will be all 187 state corporations in Kenya and the unit of observation will be each head of finance and the head of procurement function in all 187 states corporations in Kenya which formed 374 respondents.

3.3 Sampling

The study used a census which comprised of each head of finance and the head of procurement function in all 187 states corporations in Kenya which formed 374 respondents. The study used a census to obtain the units of analysis and Purposive Sampling to identify the units of observation. The head of finance and the head of procurement function were selected purposively because they have similar skills, knowledge, experience and exposure in the area of research.

3.4 Research Instruments and Data Collection

A questionnaire was used to collect data. Questionnaires are regarded as helpful tools for data gathering since they help respondents to give to a large extent of their judgment to the problem being analyzed (Ngechu, 2014). The questionnaire was administered through online platforms due to the implications of COVID-19 and the locale of some of the state corporations as way of saving costs and time.

3.5 Data Processing and Presentation

Quantitative data was analyzed using descriptive and inferential statistics. Descriptive statistics using the mean, median and standard deviation and, inferential statistics that involved correlation and regression analysis were applied to analyze quantitative data. This was made possible through the use of Statistical Package for Social Sciences (SPSS).

A multiple linear regression analysis was used to establish a mathematical model that explains the link involving the dependent variable and the significant independent variables previously shown through correlation analysis.. The following summary of a multiple linear regression model was applied to model the data:

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

Where,

 $\beta_0 = constant$

 β_1 is the coefficient for X_i

Y=Performance of State Corporations

X₁=Procurement methods

4. RESEARCH FINDINGS

4.1 Response Rate of the Study

The study had a sample of 374 respondents who were surveyed using a structured questionnaire. A response rate of 81.3% (304 respondents) was achieved and the data used for analysis.

4.2 Descriptive Results on Procurement Methods

The descriptive results in Table 1 indicated that while the tendering process in state corporations could be as open and fair, the restricted tendering process is not as effective and property adhered to by the stakeholders concerned. This compares with the arguments by Zhang, Le, Xia, and Skitmore (2017) who argued that one of the main causes of ineffectiveness sin the tendering process between businesses and the government is misuse of restricted tendering and carrying out such processes of tendering without involvement of all key stakeholders. The findings further revealed that that the procurement methods used by the state corporations to moderate extent adhere to the set guidelines but still there are flaws which could be affecting the effectiveness of the entire process. The findings compare with those by Simeon (2018) who established that the procurement methods applied by most of the state agencies are not effectively in line with what is articulated under the PPDA act and this could affect the efficiency and goodwill of the entire process towards promoting the performance of these agencies. In a different context, Corsten (2018) observed that procurement methods were essential in determining how effective the entire procurement process was towards promoting firm performance.

Table 1: Descriptive Statistics on Procurement Methods

Statement	Mean	Std. Dev.			
All open tenders are advertised in the dedicated Government tenders' portals / our website	4.09	0.96			
All open tender procurements have clear technical specifications that follow objective qualifications 4.17 criteria					
Our organization strictly follow all laid down procedures in Provision of open tender documents.	3.80	0.97			
Restricted tendering is frequently used in cases where the works are specialized in nature	3.89	1.06			
There is a database of pre-qualified providers who are invited to tender in restricted tendering process	3.51	1.20			
The tender committee always meet to consent to the use of restricted tendering	4.28	0.87			
Direct procurement is used strictly where circumstances do not allow for competitive tendering	3.91	1.04			
Direct procurement is strictly used where the total cost is within the threshold set in the Act	3.73	1.09			
There are streamlined processes in place to manage direct procurement requirements to ensure its2.98 effectiveness					

4.3 Descriptive Results of PPDA Enforcement

The descriptive Results as shown in Figure 2 revealed that while some of the authorities set aside to enforce the compliance of the PPDA have not effectively carried out their mandate and this could affect the compliance rates among the state corporations. Majority of the respondents (57.6%) were of the opinion that the enforcement of the PPDA was effective in enhancing the compliance and performance of the state corporations. While asked to comment on their opinions, the respondents stated that the enforcement by the relevant authorities was needed as a way of ensuring that every state corporation complies with the act. One statement that was frequent among most of the respondents was that the enforcing agencies were not effectively doing their mandate and this lead to reluctance among most of the state corporations.

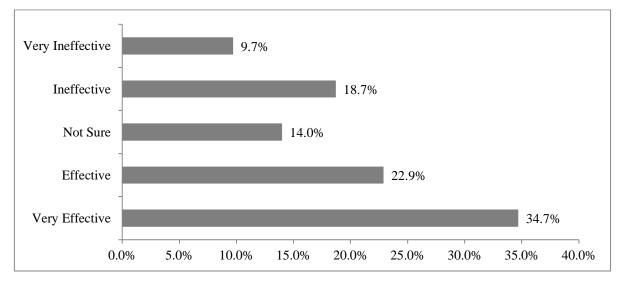


Figure 2: Rating the Effectiveness of PPDA Enforcement

4.4 Performance of State Corporations in Kenya

As the results portray, the reduction in cost of assets disposal had an average score of 17.5% while the average percent reduction in cost of procurement was 10.5%. The highest score was on the average percentage of goods and services delivered conforming to the specifications which was at 28.6% while the least was the average customer satisfaction index which was at 2.3%. The increase in return on assets had a score of 23.4% while the number of customer complaints was at 21.1%. The findings imply that the performance of most of the state corporations as far as the compliance with the PPDA act is concerned was below the average with customer satisfaction being the least scored aspect.

ISSN 2348-1218 (print)

International Journal of Interdisciplinary Research and Innovations ISSN 2348-1226 (online)

Vol. 9, Issue 2, pp: (18-25), Month: April - June 2021, Available at: www.researchpublish.com

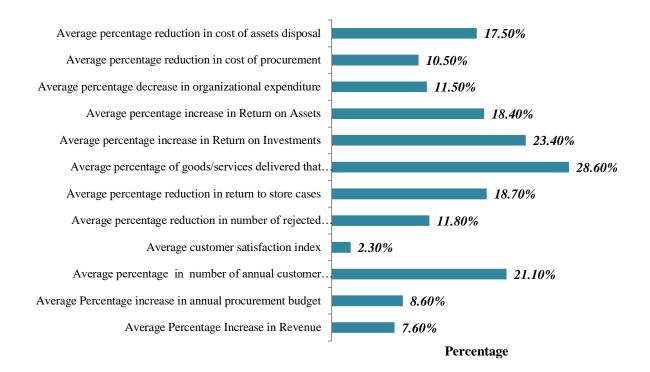


Figure 3: Descriptive Statistics on the Performance of State Corporations

4.5 Test of Hypothesis

H_o: Procurement methods do not significantly affect performance of state corporations in Kenya

The study sought to find out the influence of the variable procurement methods on performance of state corporations. A regression model of the form; $\mathbf{Y} = \boldsymbol{\beta}_0 + \boldsymbol{\beta}_1 \mathbf{X}_1$ was used to determine the relationship. The model summary results on Table 2 reveal a correlation coefficient R value of 0.660 and a coefficient of determination R² value of 0.436 an indication that a unit change in procurement methods could explain up to 43.6% increase in performance of the state corporations in Kenya.

Table 2: Model Summary (Procurement Methods)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.660 ^a	.436	.434	.54926

a. Predictors: (Constant), Procurement Methods

b. Dependent Variable: Performance of State Corporations

The ANOVA results on Table 4.3 revealed that the F calculated was 233.303 and the P-value was 0.000 an indication that procurement methods significantly predicts the performance of state corporations in Kenya. This also implies that model is significant.

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	70.383	1	70.383	233.303	$.000^{b}$
1	Residual	91.108	302	.302		
	Total	161.492	303			

Table 3: Analysis of Variance (ANOVA)

a. Dependent Variable: Performance of State Corporations

b. Predictors: (Constant), Procurement Methods

The findings from the regression coefficients as shown in Table 4 revealed that at the coefficient of determination, 73.4% of the firm performance could be explained by a unit change in procurement methods as evidenced by the Beta coefficient of 0.734. With these results the null hypothesis that procurement methods has no influence on firm performance was rejected.

The model so derived was; $\mathbf{Y} = 0.732 + 0.734 \mathbf{X}_1$. The findings also reveal that the P-value for procurement methods is 0.000 which is less than the standard p-value of 0.05 thus implying that procurement methods positively and significantly influences performance of state corporations in Kenya.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.732	.182		4.025	.000
1	Procurement Methods	.734	.048	.660	15.274	.000

Table 4: Regression Coefficients

a. Dependent Variable: Performance of State Corporations

 H_o : There is no significant moderating effect of enforcement on the relationship between procurement methods and performance of state corporations in Kenya.

The regression coefficients for the moderated model are as shown in Table 5. As the results portray, the interaction effect between procurement methods and PPDA enforcement was positive ($\beta = 0.021$) but insignificant (P>0.05).

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	1.509	.118		12.783	.000
	Procurement Methods*PPDA Enforcement	.021	.016	.109	1.275	.203

Table 5: Regression Coefficients

a. Dependent Variable: Performance of State Corporations

5. CONCLUSION AND RECOMMENDATIONS

The study concluded that the procurement methods had a significant influence on the performance of state corporations in Kenya. Through a well-defined tendering process under the open and restricted tenders, the credibility and effectiveness of the entire process is enhanced thus enabling efficiency in the tendering process. The study concluded that while open tendering was efficient in most of the state corporations, this was not the case when it comes to direct procurement and restricted tendering. The study concluded that some of the measures that were taken to streamline the restricted tendering and direct procurement were not effective towards promoting the performance of the corporations.

The management of the state corporations ought to embrace the appropriate procurement methods as a way of enhancing performance of the corporations. Upholding effectiveness ways of handling open tenders and restricted tenders would shape the openness and efficiency in the procurement process of the corporations which is essential to their performance. The enforcing agencies also should be keen in ensuring that the procurement methods utilized by the state corporations match the ones provided for under the PPAD act. Then there is need to ensure that all relevant stakeholders are involved when planning for acquiring goods, services, works and consultancy services and ensure that when using a competitive procurement method an objective qualifications criteria is applied so at award tender to the most competent bidder. The management should also develop relevant policies in order to ensure accountability, competitiveness, transparency, integrity and value for money is achieved in a procurement process.

REFERENCES

- [1] Buuri, J.M., (2017). Factors Affecting Implementation of Open Tendering Process in Public Institutions. *International Journal of Innovation and Applied Studies*, 9(4), p.16-26.
- [2] Corsten, P. (2018). Public procurement performance in developing countries. *Journal of supply chain Management*. 44, (7) 46-48.

- [3] Iregi, A. N., & Kipkorir, M. G. (2017). The Effects of Procurement Processes on the Performance of Public Sector Organizations, A Case Study of Kenya Electricity Generating Company Limited Naivasha Station. *Imperial Journal* of Interdisciplinary Research, 3(3).
- [4] King'oo, D. M., & Muli, S. (2019). Influence of procurement practices on organizational performance in Kenyan Public Sector. A case of Ministry of Education. *The Strategic Journal of Business & Change Management*, 6 (2), 2400 – 2412.
- [5] Kiruja, K. B. (2017). Procurement Methods and Procurement Performance amongst State Corporations under the National Treasury of Kenya: *International Journal of Research in Management*, 1(5), 647-667.
- [6] Lazarides, T. (2017). Public procurement legal and regulatory framework's effectiveness in Greece: A response. *Journal of Financial Regulation and Compliance*, 19(3), 244-253.
- [7] Mbati, B.A., & Osoro, A. (2020). Factors Affecting Ethics And Anti-Corruption Commission On Performance Of Procurement Personnel In Trans-Nzoia County, Kenya. *International Journal of Scientific and Research Publications*, Volume 10 (8), ISSN 2250-3153
- [8] Mogikoyo, L. K., Magutu, P. O., & Dolo, A. B. (2017). The Link between Supplier Evaluation Attributes and Supply Chain Performance of Government Owned Entities: Perspectives from Commercial State Corporations in Kenya. Noble International Journal of Economics and Financial Research, 2(1), 1-20
- [9] Muange, E., & Chirchir, M. (2018). Procurement Legislation and Performance of Constituency Development Fund Committees in Kenya. *International Journal of Supply Chain Management*, 1(1), 19-33.
- [10] Ngechu M. (2014). Understandng the Research Process and Methods: An Introduction to Research Methods Nairobi, Acts Press, 2014.
- [11] Ondigi, S. K., & Muturi, W. (2017). Factors Affecting Public Procurement of Hospital Supplies in Public Health Institutions in Kenya: International Journal of Economics, Commerce and Management, 3(11), 863-872
- [12] Prier, E., Schwerin, E., & McCue, C. P. (2016). Implementation of sustainable public procurement practices and policies: A sorting framework. *Journal of Public Procurement*, 16(3), 312-346.
- [13] Public Procurement and Asset Disposal Act, (2015). Public Procurement and Asset Disposal Act, 2015, Nairobi: Public Procurement and Asset Disposal
- [14] Republic of Kenya, (2013). Report of the presidential taskforce on parastatals reform. Nairobi: Government Press.
- [15] Republic of Kenya, (2015). Public Procurement and Assets Disposal General Manual, PPAD Act, Nairobi. Government Press.
- [16] Runeson, G., & Skitmore, M. (1999). Tendering theory revisited. *Construction Management and Economics*, 17(3), 285-296.
- [17] Simeon K. (2018) Procurement Methods and Operational Performance Of State Corporations In Kenya: *International Journal of Social Sciences and Project Planning Management*, 1(3), 147-156.
- [18] Tukamuhabwa B. R. (2018). Antecedents and Consequences of Public Procurement Non-compliance Behavior. *Journal of Economics and Behavioral Studies*. 19(5), 490-512.
- [19] Wachiuri, E.W., Waiganjo, E., Noor I., & Odhiambo, R., (2018). Influence of Supplier Evaluation Criteria On The Performance Of State Corporations In Kenya. *International Journal of Supply Chain Management*, v. 2, n. 3, p. 38 – 51.
- [20] Waigwa, M. W. & Njeru, A. (2016). Factors influencing management of procurement functions in public security agencies: A case of Kenya Police Service. *International Academic Journal of Procurement and Supply Chain Management*, 2 (2), 20-40
- [21] Zhang, B., Le, Y., Xia, B., & Skitmore, M. (2017). Causes of business-to-government corruption in the tendering process in China. *Journal of management in engineering*, *33*(2), 05016022.
- [22] Zubcic, J. & Sims, R. (2017). Examining the link between enforcement activity and corporate compliance by Australian companies and the implications for regulators: *International Journal of Law and Management:* 53(4), 299-308.