

# Effect of Different Strategies on Procurement Efficiency in Public Secondary Schools: A Survey of Public Secondary Schools in Ndhiwa District, Kenya

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## To cite this article

Ondore Jeremiah Owuor, Odoyo Collins Otieno, JohnMark Obura, Johnson Opiyo Kobiero, Alphonse Odondo, Simeon Okello. Effect of Different Strategies on Procurement Efficiency in Public Secondary Schools: A Survey of Public Secondary Schools in Ndhiwa District, Kenya. *American Journal of Business, Economics and Management*. Vol. 3, No. 2, 2015, pp. 104-112.

## Abstract

Public procurement system in Kenya has undergone significant developments. The purpose of this study was to determine the impact of different strategies adopted by public schools on their procurement processes. The research objectives were to: Establish the status of different procurement strategies used in public secondary schools, identify factors that influence prices, settlement time and customer satisfaction in public procurement in public schools and Determine the impact of procurement strategies on prices, settlement time and customer satisfaction. The study examined procurement strategies in local public secondary schools that covered sampled schools in Ndhiwa district. The study employed survey design in which the existing procurement strategies were considered. A sample was selected from the entire population using stratified random sampling technique in order to classify the entire population of 51 school administration officers and 340 staff member. Data was collected using structured and unstructured questionnaire. The collected data was analyzed using descriptive statistics. It was then classified and presented by frequency distribution tables, charts and graphs. Likert scale analysis was used to weigh the respondents' perception. The study revealed that using strategies in the procurement improves efficiency and minimizes the costs of purchases. The study also revealed that many challenges face the stakeholders when applying the framework of procurement practice in the public secondary schools and that there is need to identify the underlying challenges with an aim of reviewing the procurement procedures, training all persons involved in procurement; have free access to procurement information by procurement practitioners in public institutions to enable prosecution of those who flout the laid down procurement rules. On recommendation, the researcher observed the need to adopt procurement strategies, identify the underlying challenges to implementation of the procurement regulations to foster accountability and transparency in the public institutions.

## Keywords

Procurement Strategies, Procurement Efficiency, Accountability, Procurement Processes

## 1. Introduction

Public procurement system in Kenya has undergone significant developments, from being a system with no regulations in the 1960s, and a system regulated by Treasury Circulars between 1970 and 2000, to a system with regulations in the late 2000s (through introduction of the

Public Procurement and Disposal Act (PPDA) of 2005 and the Public Procurement and Disposal Regulations (PPDR) of 2006) (Public Procurement Oversight Authority, October 2007). The aim of this was for accountability and transparency in the public sector to reduce abuse of public funds – obtained from the tax-payer.

This law led to the creation of the Public Procurement Regulations (PPR) and the Public Procurement Directorate

(PPD) in 2001. Between 2001 and 2004, the Public Procurement and Disposal Bill were drafted and after several modifications, were assented to by the President to become the Public Procurement and Disposal Regulations act in 2006. This act contains regulations to effectively ensure that procurement processes are fair and just.

The act was fully operational from 1<sup>st</sup> January 2007, a year before the introduction of free secondary education. With free secondary education, there has been more focus on the public secondary schools' expenditure as they are direct beneficiaries of the public funds.

Public procurement has been adopted by governments in order to increase efficiency, transparency and for accountability in purchasing goods, services or works in the public sector using public funds. Public procurement is aimed at reducing, if not eliminating, fraud, wastage and corruption in the public sector. It is believed that through public procurement, governments provide quality services, goods or works to its citizens and hence, increasing value for money.

Public procurement is aimed at promoting fair competition among suppliers which is effective in bridging the gap between suppliers - both establishing and established. This is because of the presumed equity and openness in awarding the tenders for supplies of goods/services/works to various government departments.

While public procurement has seen improved efficiency and accountability in most government departments, little if no research has been focused on procurement strategies in public institutions (secondary schools) of which, almost all are direct beneficiaries of the exchequer.

Studies have revealed that with introduction of the public

procurement and regulations, public institutions have come up with different strategies with the aim of reducing expenditure.

The purpose of this study therefore tries to determine the impact of different strategies adopted by public secondary schools on their procurement processes.

### 1.1. Objective of Study

#### 1.1.1. General Objective

The broad objective of this research was to determine the effect of different strategies on procurement efficiency in public secondary schools.

#### 1.1.2. Specific Objectives

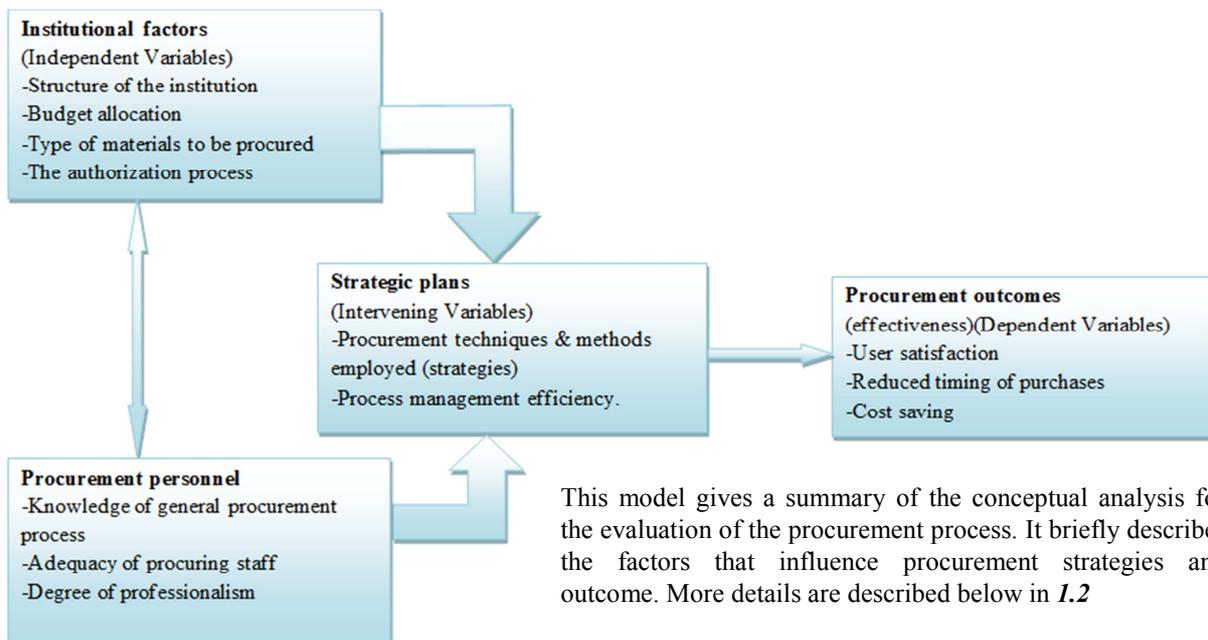
The specific objectives were to:-

- i Establish the status of different procurement strategies used in public secondary schools
- ii Identify factors that influence prices, settlement time and customer satisfaction in public procurement in public schools.
- iii Establish whether public secondary schools have rules/regulations in place that govern their procurement processes.

#### 1.1.3. Research Questions

- i What is the status of different procurement strategies used in public secondary schools?
- ii What factors influence prices, settlement time and customer satisfaction in public procurement in public schools?
- iii What is the effect of procurement strategies on prices, settlement time and customer satisfaction?

### Institutional Framework for Public Procurement



This model gives a summary of the conceptual analysis for the evaluation of the procurement process. It briefly describes the factors that influence procurement strategies and outcome. More details are described below in 1.2

## 1.2. Conceptual Framework

### *Analytical framework for evaluation.*

Procurement strategies are influenced by the efficacy of procurement rules and regulations which are determined principally by two sets of factors. These are the institutional factors of the procuring entity and the quality of procurement personnel (independent variables) particularly the degree of professionalism, knowledge of the general procurement processes and whether there is enough staff to carry out the process. The institutional factors include its structure i.e. complexity in terms of departments, etc, the level of budget adequacy i.e. the allocated finances, especially with regard to the procurement function, role clarity of different organs regarding the procurement process and the type of goods, services or works (materials) to be procured. The above factors in turn influence the implementation of a procurement strategy (intervening variables) to be used e.g. the methods/techniques to used and their efficiency. These will ultimately determine the quality of the procurement outcomes (dependent variables) e.g. reduced timing, costs and user satisfaction.

## 2. Literature Review

### 2.1. Empirical Review

Until the early 1970s, public procurement in the East Africa was largely undertaken by external entities. This was primarily because most of the needs of the then colonial government and the incoming new governments could only be met from external sources, as local supplies were still not adequate. With increasing procurement needs, the East Africa governments found it necessary to pass over the responsibilities of procurement to ministries. In Kenya, the Ministry of Finance was charged with the responsibility of overseeing the procurement process and preparing guidelines for procurement. By 1974, the three countries had in place an elaborate procurement system with supplies offices within their ministries and departments. Supply officers were appointed to take charge of procurement (Odhiambo and Kamau, 2003).

The supplies system for each entity was independent and autonomous, though major procurements were done through the Central Tender Boards. In line with the ideals of the then East African Community, a Supplies Manual was developed in the country. This manual detailed procedures that the public sector followed in purchasing goods and services. The use of the manual was, however, short-lived, as it ceased to exist with the collapse of the EAC in 1977 (Odhiambo and Kamau, 2003). Thereafter, the three countries reverted back to individualised procurement systems. Kenya prepared its supplies guide in 1978, which remained in force until 2001.

In Kenya, public procurement continued to be decentralised with supplies officers procuring for their own ministries but reverting to the Central Tender Boards for larger value procurement. The Ministry of Finance controlled

ministerial procurement by issuing numerous circulars and guidelines to procurement officers in the ministries and local authorities. The main problem with the use of these circulars was that corrupt civil servants easily manipulated the process. This order gave procedures and regulations to be followed whenever procurement was to take place in any public institution. However, this document did not spell out the procedures to be followed in the process of procurement. It merely gave briefs on the acquisition of goods, completely leaving out works and consultants' services. According to this order, procurement was done at the ministerial level and there was no mechanism to regulate and control activities of different procurement entities. Although the Central Tender Board existed, it was just a department in the Ministry of Finance (Odhiambo and Kamau, 2003).

### 2.1.1. Public Procurement Reforms in Kenya

In 1986, a study was conducted by SGS Consultants to evaluate public procurement systems in Kenya. The major finding of the study was that public procurement was not operating efficiently and that the state was losing a lot of money through shoddy deals. The report strongly indicated the need for reforming the public procurement system in the country. The World Bank, the African Development Bank (ADB) and ITC, in conjunction with the Government of Kenya, initiated the public procurement reform process in the late 1990s. This reform process was meant to create a system that allowed, among other things, a proper delegation of authority, incentives, procurement thresholds, planning, and the development of supplies manuals (World Bank, 2000).

The reform process focused on addressing the issue of procurement laws, establishing appropriate procurement institutions and entities, as well as creating adequate and timely evaluation and monitoring mechanisms (Government of Kenya, 2001). The reforms would also increase transparency in procurement systems and create reputable agencies. The public procurement reforms also aimed at ensuring that the procurement laws were streamlined to conform to international procurement laws and standards (Odhiambo and Kamau, 2003).

In 1997, the Government in collaboration with the World Bank commissioned another study to assess the country's procurement processes and systems. The World Bank supported the study through the Public Procurement and Capacity Reform Project. This study identified the need for a comprehensive review and an implementation of a reform process in the procurement systems. The study revealed that the public procurement system in Kenya lacked transparency and fair competition (Odhiambo and Kamau, 2003).

The study further revealed that procurement staff were not adequately trained and lacked professionalism. Lack of a professional body that would oversee and instill discipline among procurement officers made them vulnerable to corruption. One of the major recommendations was that reforms in public procurement systems were paramount if government was to save resources otherwise lost through

exorbitant procurement. The World Bank study argued that improvement in procurement systems had a direct and beneficial effect on the overall economic situation in the country (Odhiambo and Kamau, 2003).

### 2.1.2. Procurement Methods in Kenya

The method used to procure public goods can have a significant impact on participation of newer or smaller businesses (Eagan, 2005). The type and value of the contract are important factors that determine the method of solicitation. Thus, public procurements are generally carried out using different methods. These range from complex, costly tendering methods like open tender, restricted tender to less complex methods like invitations for quotations and proposal and direct sourcing.

In Kenya, open tendering is the most used tendering system. It normally happens at two levels; first, open national tendering, which is open to participation on equal terms by all providers through advertisement. Second, open international tendering is also open to participation on equal terms by all providers. It is mainly used where local suppliers may not provide competitive bids (Odhiambo and Kamau, 2003). Open tendering is usually advertised in prescribed newspapers - national or international, although media advertising may be an expensive undertaking for public entities such as public schools.

Another method is restricted tendering, whereby bids are obtained directly without open advertisement. The method is used where the value or circumstances cannot justify open tendering process in such a case, the procuring entity uses its database of pre-qualified providers who are directly invited to tender. However, the procuring agent must demonstrate that open tendering is neither viable nor prudent. Lack of transparency in this method and the fact that most of local suppliers rarely find themselves in the pre - qualified lists, means that this method tends to act as a barrier to their participation in public procurement (Odhiambo and Kamau, 2003).

An invitation of quotation and proposal is another simplified tendering methodology where the procuring entity calls for quotations or proposals. Request for quotations should be addressed to no less than three or more candidates. This happens where the procurement agents seek to limit transactions costs, thus preferring to contact the firms that have a proven track record.

Finally, direct or single source method is used where circumstance do not allow for competitive bidding. It is used for small quantities in cases where time may not allow for competitive bidding. However, as this type of contract is conducted through informal networks. It is usually more difficult for small and medium enterprises, compared to larger, to have informal access to purchasing agents or departmental heads. Buyers rely on their own lists to solicit vendors in practice, which constitutes a barrier to small businesses, especially the new entrants (Eagan 2005).

Restricted and open tendering methods are frequently used in the acquisition of capital goods and complex services. The

methods are complex, time consuming and bear big transaction costs. Invitations for quotation/proposals and single sourcing/direct purchase are carried out for goods and services for maintenance and small items. They are simple, price-driven, with simple specifications as well as numerous competing suppliers (Talero, 2001).

## 2.2. Theoretical Literature

Public procurement department has many functions. One of these functions is to minimize the cost of goods, services and works that are used by government departments. Theoretically, a public department is expected to minimize the costs to reduce wastage of public funds and for transparency and accountability (Hayenga 1979).

According to Kingsman (1985), there are five key factors involved in maintaining and/or determining the level of supply. First, future quantity requirements of a good, service or work must be determined. This is then obtained from supplies already in inventory or ordered. Second, future requirements must be converted into a schedule of future purchases, specifying the timing and the size of the product/good to be purchased. Third, financial and operational constraints must be considered to determine the minimum and maximum lead-times needed for production. This helps determine what forward pricing mechanisms, if any, can be used. Fourth, while conforming to constraints of the buying time period, the department determines the timing for actual buys. These two time periods can be exactly the same, or if accurate price forecasts can be obtained, purchases can take place in different time periods to take advantage of price swings. Fifth, buying strategies for a good, service or work must be developed and connected to scheduled orders with appropriate on-time deliveries (Kingsman, 1985).

Another basic function of public procurement which has long been a department within the ministry of finance is to maintain the continuous supply of goods/services/works to government departments in order to meet their demands or requirements to carry out daily services to its citizens. The supply of a good or service or work is defined as: "making available of the products (goods), services or works for use by the consumer". These goods, services or works have general quality standards that must be met (Seitz 1994).

Ordinarily, government procurement includes buying, purchasing, renting, leasing or otherwise acquiring any supplies, services or construction; and all functions that pertain to the obtaining of any supply, service or construction, including description of requirements, selection, and solicitation of sources, preparation and award of contract and all phases of contract administration" (American Bar Association, 2000).

Procurement strategies have developed from purchasing strategies. These purchasing strategies that have been in place for developed countries include:

Supplier Optimization; where a company chooses an optimum mix of vendors who can provide the best prices and terms. Those suppliers who cannot provide quality service at

the terms and prices required are discarded.

Total Quality Methods (TQM); which requires vendors to provide an ever increasing quality service with zero errors.

Vendor Development; where companies work hand in hand with their vendors and develop processes that help in improving the services of the vendors. This is common where a firm has only one supplier.

Green Purchasing; which focuses on the need for recycling and purchase of products that have negative impact on the environment.

### **2.2.1. Public Procurement Strategies**

Most firms' procurement strategies are dependent on these purchasing strategies. Some of these procurement strategies used by firms; which can also be applicable in public institutions include:

First cash or spot market, which is defined as buying the good or service on the cash market and immediately taking possession of it. The cash or spot market is where institutions, have no direct contract with a supplier. Rather, they buy from whichever supplier has the lowest cash price at the time when the institution wants to possess the commodity. This method involves the institution making purchases of a certain commodity when inventory drops to a determined threshold level. Reasons for this according to Arthur (1971), is that; it involves no development of strategies or market analysis; rather it merely involves monitoring current supply and reordering; or it minimizes inventory cost, because there is no storage of commodities purchased.

The spot market is applicable when there is little price fluctuation or price fluctuations cannot be predicted and, hence, a strategy cannot be implemented to minimize or reduce the high risk of unpredictable prices. Disadvantages of using the spot market according to Arthur (1971) may include; the inherent risk of not being able to procure enough volume when needed, thus leading to inefficiencies in rendering services, eliminates opportunities of purchasing goods or services at lower prices, prices are determined solely by the timing of the need (Arthur, 1971).

The second is trading Futures which involves futures contract. A futures contract is an obligation to buy or sell a given quantity and standard quality of a commodity at a designated future time (Bittman 2001). Essentially, an institution is involved in a futures contract with suppliers at the current time period which may expire when the good or service will be supplied, assuming price changes, in order to obtain its future requirements (Bittman 2001).

Third is forward purchasing, which involves buying higher volumes when prices are lower, and lower volumes when prices are high. A forward buy is defined when an institution takes possession of a commodity in advance of its needs. It is in order to establish the per-unit cost on anticipated volume required of a good or service by advanced purchase and storage of that good or service at an earlier time period. If the cost saving on the good or service is greater than the storage cost, an advance purchase then results (Hayenga, 1979).

According to Hayenga, in the concept of forward

purchasing, the timing of good or service purchase has a significant influence on a firm's costs. A disadvantage of a forward buy is that there is price risk. There is a chance that the price could decrease and the institution/school could pay more than the market price at time of need.

### **2.2.2. Factors That Influence Prices, Settlement Time and Customer Satisfaction in Public Procurement**

Prices, settlement time and customer satisfaction dependent on many factors which include the characteristics of the good, service or works it wants to acquire. These characteristics also include:

First the Price risk, which refers to volatility, which is how much the price of a commodity varies over time. The volatility is measured in annual percentage to evaluate the historical volatility of the good/service/works. High price risk goods/services are those with high volatility, while low price risk goods/services have a relatively consistent price (Bittman 2001).

Second is the Volume, which is the amount of goods/services needed within a given time frame to fulfill consumable requirements like laboratory chemicals, foods e.t.c. A larger institution/school may require large quantities of goods/services to be procured in a given time interval. While smaller schools/institutions may not require large quantities to be procured in order to maintain the learning process.

The third is Perishability, which refers to how long it takes before goods expire, so that it cannot be used. Perishability plays a major role in procurement strategies because it determines the amount of goods that can be purchased in advance. Some goods used as foods are of relatively of high perishability hence are supplied only at the time of need.

Fourth is a Budget constraint which refers to the limited budgets that procurement committee's face. There may be high budget constraint where procurement committee is faced with limited budget for a certain time period. In this case, institutions/schools are to be involved in fewer forward buys due to high execution costs as they are expensive to execute in the short run because this school/institution delay to settle the payments for the good/service (Kingsman 1985).

Lastly is the Seasonality, which is the difference between price highs and lows across seasons historically. For example, for most goods used in institutions e.g. food, the lowest price season of the year is during harvesting when supply is at its highest while for laboratory chemicals and books, prices are highest at the beginning of the year when school open. A high degree of seasonality means that there is very strong and predictable pattern for prices of goods/services. Most of the goods/services are highly seasonal due to the growing patterns on the supply side.

### **2.2.3. Impact of Procurement Strategies on Prices, Settlement Time and Customer Satisfaction**

Institutions with good procurement strategies can benefit a lot during their purchasing processes. These benefits may

include: First, lowered overall cost where the Institutions that have initiated procurement strategies, the overall cost to procure materials and services is much lower. Such institutions know what to purchase, when to purchase it and where to purchase it from i.e. which supplier will offer the item at the lowest affordable cost. Second is faster response from suppliers, which, in addition to lower procurement costs, institutions that have procurement strategies have suppliers who are more efficient and effective in their supplies. This in turn reduces the supplier lead times risks of stock outs are also reduced. The difference in supplier lead time could be related to the closer supplier relationships possessed by institutions with procurement strategy programs. Institutions can use the visibility provided by procuring team to weed out extraneous or underperforming suppliers. This would leave an institution with fewer suppliers that it can work with to establish more efficient procurement processes.

### 3. Research Methodology

#### 3.1. Research Design

##### 3.1.1. Study Design

The research was a survey design in which the existing procurement strategies were considered. In the study, both primary and secondary data were required. Primary data was obtained through administration of questionnaires to respondents. The respondents included Head teachers of public secondary schools and their Deputies, school clerks/bursars and other members of the tendering committees. Secondary data was obtained from available procurement records in the schools but the records from the district education’s office were not available for scrutiny.

##### 3.1.2. Study Area

The study was conducted in Ndhwa district, located in Nyanza Province, Kenya. The district was carved from the mother Homa Bay in the Southern Nyanza, Homa Bay County. The district consists of six divisions namely: Pala, Riana, Kobama, Ndhwa, Nyarongi and Mirogi. Currently the school has 35 public secondary schools.

##### 3.1.3. Study Population

The study was conducted in local public county and district secondary schools within Ndhwa district. In these schools, the researcher interviewed the school administrations and other staff members of the procurement/tendering committees.

##### 3.1.4. Sample Size and Sampling Technique

Because the district has 32 registered public secondary schools in total, of which only four are county schools, all of them formed the sample of study. In each school, the respondents were divided into two strata namely: the administration which consisted of the school heads, their deputies and the clerk/bursar; and the relevant staff members not in the administrative positions. A sample was selected from the entire population using stratified random sampling

technique in order to classify the entire population of 51 school administration officers and 340 staff members. The arrival at the sample size was based on 95% level of confidence and a margin of error of ±5% using the formula suggested by Kothari C.R (2005) as

$$n = \frac{Z^2 \cdot p \cdot q \cdot N}{e^2(N - 1) + Z^2 \cdot p \cdot q}$$

Where

e= Margin of error,

Z= standard variant at a given confidence level under normal curve,

p= sample population and

q= (1-p).

This formula was applied to a finite population, N=391, and the sample size n=241, which is also indicated in the table below was arrived at.

Administration staff population,

$$n1 = \frac{(1.96)^2(0.5)(1-0.5)(51)}{(0.05)^2(51-1)+(1.96)^2(0.5)(0.5)} = 45$$

Non Administrators population,

$$n2 = \frac{(1.96)^2(0.5)(1-0.5)(340)}{(0.05)^2(340-1)+(1.96)^2(0.5)(0.5)} = 196$$

Table 1. Summary of Sample Population

	Total No	Sample	Percentage
Administrators	51	45	88.2%
Non Administrators	340	196	57.6%
TOTAL	391	241	61.6%

Thus for the purpose of this study, a sample size of 241 members of staff in all the public secondary schools in the district was used (Kothari C.R 2005).

#### 3.2. Data Collection Methods

##### 3.2.1. Primary Data

Primary data was collected using structured and semi-structured questionnaires.

##### 3.2.2. Secondary Data

Secondary data was to be generated from available records in the sampled schools but records from the district education’s office were not obtained as they were missing or unavailable for scrutiny.

#### 3.3. Data Analysis

The collected data was analyzed using descriptive statistics which included: mean and mode.

#### 3.4. Data Presentation

The data collected was classified and presented by frequency distribution tables, charts and graphs.

#### 3.5. Validation of Data Collection Instrument

The researcher carried a reconnaissance survey aiding in

improvement of questionnaire, checking ambiguity of the questions and gave professionals the questionnaires to read. After which they recommended the questionnaires as fit for the study.

### **3.6. Reliability of Data Collection Instrument**

The research tested for the reliability of the data collection instrument using the internal consistency technique in which the scores obtained from the subjects were computed to determine the correlation among the items.

## **4. Data Analysis, Findings and Discussion**

### **4.1. Results**

The study had targeted 241 public secondary schools' staff, which included the head teachers, Deputy Head teachers, teachers, bursars and clerks. Of the two hundred and forty one questionnaires given out to respondents, two hundred and thirty six were realized. This gives a response rate of 97.9%. This could be attributed to the cooperation between the researcher and the respondents, simplified questions and the quest to know more about procurement in general.

#### **4.1.1. Type of Institution**

The institutions which were under study included mixed day, mixed day and boarding, girls' and boys'. Respondents on the type of institution gave the following findings; mixed day at 14.0%, mixed day and boarding at 72.5%, Girls at 8.5% and Boys at 5.1%. This is illustrated in the table 4.1 and figure 4.1 below. Schools that were mostly surveyed were the mixed day and boarding having 71% and the least surveyed schools were boys' schools which was only 5%.

#### **4.1.2. Position in School**

Looking at the positions the respondents were holding in the school, there were 20 Head teachers, 16 Deputy Head teachers, 191 teachers and 9 Bursars or Clerks. This translates to 8.3%, 6.6%, 79.3%, and 3.75% respectively. This shows that the majority of the respondents were regular teachers, most of who are presumed to be members of the tendering committee.

#### **4.1.3. Type of Goods Purchased**

The results of the survey show that schools dwell more on consumable commodities. These were at 46.1% showing that regular while those that dwell in non-consumable commodities were 41.5%. Only 10.4% of the schools dwell in consumable and non- consumable commodities.

#### **4.1.4. Frequency of Purchasing Goods**

Majority of the schools prefer making their purchases annually as the results commands this at 61%. Those making purchase monthly were 7.5%, purchasing weekly were 16.2%, while those making daily purchase were only 2.9%. Schools in the respondents were not aware of how often purchases are made stood at 10.4%. This was an

indication that yearly purchases were preferred as this could be reducing order costs and improving in efficiency of the school operations.

#### **4.1.5. School Has Regular Contracted Suppliers**

In most schools there were no regular contracted suppliers. This was justified by 69.3% of the schools having no contracted suppliers indicating that these schools made purchases from any supplier who could provide for the goods. Only 28.6% agreeing that they have regular contracted suppliers, who provided for their needs.

#### **4.1.6. Members Sitting in Tendering Committee**

A majority of schools commanding 54.4% have six members sitting in the procurement committee, 19.9% have five members, 10.8% have seven members, and 4.1% have four members, while 8.7% have more than seven members sitting in the procurement committee.

#### **4.1.7. Procurement Methods Used by Tendering Committee**

Most of the purchases are done strictly following the laid down procurement procedures. This is done in 49% of the schools surveyed, 29.5% of the schools use open procedure, 15.4 uses Negotiated procedure, while 4.1% of the schools use other methods.

### **4.2. Status of Different Procurement Strategies in Public Secondary Schools**

Data for this research was collected based on: existence of procurement committees, use of existing strategies, application of other strategies and presence of governing rules. Of the duly completed questionnaires realized, the results scored weighted means as per table 4.10 in appendix II. This gives an indication most schools have strategies and governing rules in place compared to using other strategies not in place. However, most schools tend not to have well established tendering committees.

### **4.3. Factors That Influence Prices, Settlement Time and Customer Satisfaction in Public Procurement**

The other objective of this study was to identify factors that influence the choice of procurement process in public secondary schools and whether the factors had had any significant effect on the prices, settlement time and customer satisfaction. Data for this objective was based on three factors namely: political, social and legal. The opinions of the respondents concerning the factors having any influence on the prices, settlement time and customer satisfaction were sought. The results provides an indication that the three factors were almost having the same influence with political having the highest influence with weighted mean of 2.3517, followed closely with social at weighted mean of 2.2712 and legal at weighted mean of 2.2331, as indicated in table 4.11 of

the appendix. This may imply that the procurement entities in most public schools in the district are not autonomous as their processes are still influenced by external factors.

#### **4.4. Effect of Procurement Strategies on Prices, Settlement Time and Customer Satisfaction**

On the last objective, the research sought to determine the effect procurement strategies on the outcomes of the procurement process based on prices, settlement time and customer satisfaction. Data for this objective was also based on three factors namely: strategies suitable for procurement; strategies effective under circumstances they were applied; and conformity of outcomes to the item specification. From the results in Table 4.12 of appendix II, it was observed that procurement strategies becoming effective in the reduction of the spent in terms of costs, lowers suppliers' lead times and satisfaction of the parties involved. Strategy becoming effective under the circumstances applied had the highest weighted mean of 3.1102, the used strategy being most suitable had a weighted mean of 2.2288, outcome conformity to item specification showed a weighted mean of 2.3347. This may imply that most schools do prefer to applying laid down strategies in their procurement and may also change strategy when circumstances change. This could be the reason for achievement of their objectives.

## **5. Conclusion and Recommendations**

### **5.1. Conclusion**

This study was necessary because of the fact that suppliers and government institutions have not achieved the desired level of procurement practices. Though the current legality provides for decentralization of procurement processes, most local institutions are yet to decentralize their systems fully, with only a few leaving the process to their tendering committees. The decentralization of the procurement processes depicts a milestone in the reform process towards achieving efficient and effective procurement system. However, the application of the procurement rules in the public institutions need to thorough to enable them have effective procurement processes. Formation of independent procuring entities such as tendering committees is a necessity toward improving procurement systems in public secondary schools.

It is also very clear that the procurement function needs to be developed further and more effort put into defining strategies and making open tendering the main method of procurement. This was evident by procurement committee members having the knowledge of procurement rules governing the procurement process, but intentionally failing to use them.

From the results, it is clear that there are still many challenges that face stakeholders in the application on the procurement framework into practice and complying with the new provisions and standards as per the law stipulates. As a

result efficient public procurement in public secondary schools is far from being achieved.

The study has also revealed that many challenges face the stakeholders when applying the framework of procurement practice in the public secondary schools and as a result of this, the challenges of public financial management through efficient procurement in secondary schools are far from being achieved.

### **5.2. Recommendations**

Following the conclusions above, the study makes the following recommendations. First there is need to identify the underlying challenges with an aim of reviewing the procurement procedure. This could be done by establishing independent tendering committees in public institutions to execute their duties with minimal manipulation. Secondly there is need to train all persons who are involved in procurement like the tendering committees and the suppliers to make them knowledgeable on matters of procurement. This will reduce malpractices in public institutions. Thirdly there should be a free access to procurement information by the public as this will improve procurement process in public institutions. Things like reasons for awarding or rejecting tenders should be put public. Lastly head teachers, Deputy Head teachers, teachers, bursars/clerks, committee members and suppliers found to be flouting the laid down procurement procedure should be prosecuted.

### **5.3. Suggestions for Further Research**

- This study suggests that a further research be conducted on:
- i Challenges facing effective implementation of Public procurement Regulations of 2006.
  - ii The impact of the Public Procurement Regulations of 2006 on micro, small and medium enterprises.

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