IMPLICATIONS OF ETHICAL PROCUREMENT AND SUPPLY MANAGEMENT PROCESS ON REDUCTION OF WASTE IN PUBLIC SECTOR:

A CASE OF NATIONAL CEREALS PRODUCE BOARD (NCPB)

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UNITED STATES INTERNATIONAL UNIVERSITY

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A CASE OF NATIONAL CEREALS PRODUCE BOARD (NCPB)

MWANIA MUTINDA

A Project Report Submitted to the School of Business in Partial Fulfillment of the Requirement for the Degree of Masters in Business Administration (MBA)

UNITED STATES INTERNATIONAL UNIVERSITY

SUMMER 2019
STUDENT’S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University in Nairobi for academic credit.

Signed: ________________________ Date: ________________________

Mwania Mutinda (ID 657044)

This project has been presented for examination with my approval as the appointed supervisor.

Signed: ________________________ Date: ________________________

Dr. Francis Wambalaba

Signed: ________________________ Date: ________________________

Dean, School of Business
DEDICATION

This research is dedicated to my lovely wife Victoria Nzilani Kisambi, for her relentless encouragement to pursue this wonderful and most fulfilling academic course. To my children Collins Mutinda Mwania, Franklin D. Mwania and Tess Kanyiva Mwania, who have stood with me throughout the academic path. To my mother Rhoda Kanyiva, a God fearing and a mentor I have always cherished. Lastly, to the Lord God Almighty for His blessing, grace and a sound mind that He gave me to write this paper. The Lord enabled me to overcome all the obstacles that I encountered during the period of study.
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ABSTRACT

The study sought to assess the relationship between ethical procurement and supply management process and its implication on reduction of waste in public sector organizations. Specifically, the study examined the contribution of ethical procurement practices including avoidance of conflict of interest, loyalty and respect for rules and regulations, and impartiality and fairness on reduction of waste at National Cereals and Produce Board (NCPB).

The study adopted an explanatory research design. The primary data was collected using quantitative data collection methods. Specifically, a structured questionnaire based on a 5 point likert scale was used. The target population of the study was 347 respondents selected using stratified random sampling technique. A sample size formula was used to determine the sample size of 185 but the actual sample size was 97 respondents indicating a response rate of 52.4 %.

The first objective of the study was to assess how avoidance of conflict of interest affects reduction of waste in NCPB. The descriptive analysis showed that the overall mean score for avoidance of conflict of interest was 2.96 out of a scale of 5 which means that avoidance of conflict at NCPB was practiced to a large extent. The correlation analysis revealed positive and significant association between avoidance of conflict and waste reduction ($r = 0.617, p = 0.000$) at NCPB. The regression results further confirmed a positive effect of avoidance of conflict on waste reduction with a Beta value of 0.676.

The second objective of the study was to evaluate how loyalty and respect for rules and regulations contribute to reduction waste in NCPB. The descriptive analysis showed that the overall mean score for loyalty and respect for rules and regulations was 2.46 out of a scale of 5 which means that loyalty and respect for rules and regulations at NCPB was practiced to a large extent. The correlation analysis revealed positive and significant association between loyalty and respect for rules and regulations and waste reduction ($r = 0.671, p = 0.000$) at NCPB. The regression results further confirmed a positive effect of loyalty and respect for rules and regulations on waste reduction with a Beta value of 0.711.
The third objective of the study was to examine implications of impartiality and fairness on reduction of waste in NCPB. The descriptive analysis revealed that the overall mean score for loyalty and respect for rules and regulations was 2.19 out of a scale of 5 which means that loyalty and respect for rules and regulations at NCPB was practiced to a large extent. The correlation analysis revealed positive and significant association between loyalty and respect for rules and regulations and waste reduction ($r = 0.542, p = 0.000$) at NCPB. The regression results further confirmed a positive effect of loyalty and respect for rules and regulations on waste reduction with a Beta value of 0.519.

In view of the influence of avoidance of conflict on reduction of waste, it is this study's conclusion that the strict rules and policy on receiving gifts had a positive influence on reducing waste in the organization; that adhering to internal audits and authorization limits had a significant effect on reduction waste at NCPB. The study also concludes that loyalty and respect for rules and regulations had the greatest effect on waste reduction at NCPB; that there is need for clear stipulations in tender documents to reduce waste in procurement at NCPB.

In reference to the influence of avoidance of conflict on reduction on waste, the study recommends that the procurement officers should be trained or sensitized on reporting on any arising cases of any conflict of interest emerging in any of the procurement processes at NCPB. In terms of loyalty and respect towards rules and regulations, the study recommends for the management of NCPB to enforce monitoring of procurement processes at NCPB. This can be done by increasing the staff and strengthening the M&E system in the procurement department. In terms of impartiality and fairness, the study recommends that NCPB procurement department should be more proactive to handling complaints from suppliers by providing avenues and channels that suppliers can follow when making a formal complaint.
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# ABBREVIATIONS AND ACRONYMS

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<tbody>
<tr>
<td>EACC</td>
<td>Ethics and Anti-Corruption Commission</td>
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<td>APCC</td>
<td>Australia Procurement and Construction Council</td>
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<tr>
<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>IAPWG</td>
<td>Interagency Procurement Working Group</td>
</tr>
<tr>
<td>IDA</td>
<td>International Development Association, World Bank</td>
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<tr>
<td>IDB</td>
<td>Inter-American Development Bank (IDB)</td>
</tr>
<tr>
<td>IBRD</td>
<td>Inter Bank for Reconstruction and Development</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
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<tr>
<td>NCPB</td>
<td>National Cereals and Produce Board</td>
</tr>
<tr>
<td>OECD</td>
<td>The Organization for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PPP</td>
<td>Public Private Partnerships</td>
</tr>
<tr>
<td>SEC</td>
<td>US Securities and Exchange Commission</td>
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<tr>
<td>SESM</td>
<td>Standards of Ethical Supply Management</td>
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<td>SFR</td>
<td>Strategic Food reserves</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<tr>
<td>UNCITRAL</td>
<td>United Nations Commission on International Trade Law</td>
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Problem

The procurement and supply management function is pivotal in ensuring that an organization maintains consistency of adequate quantities of quality-assured, effective products and services to consumers obtained at the lowest reasonable cost as per the national and international laws (Indiana University of Pennsylvania, 2014). It is therefore evident that the function is of strategic importance to the organization as it determines the responsiveness and flexibility in meeting its customer needs and expectations.

According to Baily, Farmer & Jones (2008), procurement and supply function in any specific organization is often responsible for up to 70% of the company’s revenue and is important largely through forecasting and planning the required materials, obtaining reliable suppliers and processing of orders. The function has significant outcomes including reduction in acquisition cost which is considered an essential tool after cost of production in order to increase revenue of shareholder (Burritt and Schaltegger, 2012). From recent trends, an improvement in procurement practices has a positive impact of completing projects as well as improving their quality by 7% (Wild and Zhou, 2011). From time and beyond, organizations have mainly focused on obtaining the highest quality of goods, services and works while maintaining costs as low as possible (Saini, 2010). With the evolvement of market conditions, the procurement function has emerged as a significant function within the organization (Saini, 2010).

According to World Bank (2012), effective governance is based on specific pillars that comprise of value for money, elevating delivery of public service delivery and creating an environment for private sector-led growth. Therefore, there exists a relationship between public procurement to these pillars which further relates to reforms in governance. A procurement procedure that factors openness, accountability and competitive participation of stakeholders can be considered as an effective tool in achieving reforms in governance (Allen and Overy 2011). OECD (2009) states that public procurement has grown to be a strategic function that is crucial in the prevention of mismanagement while reducing the likelihood of
corruption related activities of public funds. Additionally, it is viewed as a tool of public policy and a catalyst for broad change in the social and economic environment. In the event procurement is used as a social tool, funds from taxes are able to be regenerated in creation of value such as creation of employment opportunities and reducing imports. The EU’s view of the procurement and supply function in achieving the EU 2020 strategy is mainly based on attaining smart and sustainable growth (European Commission, 2007). Based on the above arguments, the procurement and supply function is rather the most suitable way of attaining a triple bottom line level of success (Wild and Zhou, 2011).

According to ADB/OECD (2008), it is estimated that public procurement represents nearly 20% of all global governments’ expenditures. It is noted by the European Commission (2007) that the overall share of public procurement in the GDP of 28 European Union (EU) member states is estimated to be around 16%. Also, the OECD’s numbers on the share of public procurement in its 35 member countries, put at 12% of GDP in 2011 (OECD/DAC/World Bank, 2011). Moreover, the Department of Environment, Food and Rural Affairs (2007) noted that the UK’s public sector is responsible for a yearly expenditure of £150 billion on mainly goods and services. The Australian procurement and construction council (2008) pointed out that the cost of procuring capital assets, maintanance, goods and services the federal government as per the Australia Procurement and Construction Council (APCC) had exceeded AUD $100 billion dollars annually.

Despite good procurement practices being at the core of economic growth, poor governance of these systems can overshadow public investments into being liabilities to development goals which adds up overall costs (World Bank 2012). According to Deloitte (2015), the overall impact of ineffective practices in procurement is valued to be about 5.4% of the overall funds collected by professional services offered by organizations within public infrastructure projects which are inclusive of direct price increase of 3.6%, indirect price surges of 1.5% from decreased rivalry and improper expenses of bidding worth 0.3% of project costs. Additionally, Deloitte (2015) noted that the entire cost impacts inflicted on the government due to poor procurement techniques is estimated to be about $239 million annually. There are unethical practices such as preferential treatment and nepotism that have
been identified through research linked to the procurement and supply function (Cox, La Caze, & Levine, 2003).

The most common issues that emerge in public procurement revolve around ethics. There are numerous occurrences of fraudulent activities that have been recorded over the years including that of a deal to win a firearms supply contract which is noted by the Logistics Bureau’s article by O’Byrne dated 18th September, 2018. The SEC found that employees and representatives of the Massachusetts-based firm, Smith & Wesson Inc., had engaged in a pervasive effort to win overseas contracts by offering, authorizing or making illegal payments or providing gifts meant for officials in five countries, including in Indonesia. Eventually, it led to loss of jobs of the sales teams of the organization and a further $2 million fine imposed by US Federal regulators. In US again, Enron Incorporation and other corporate scandals are classic examples that involved related person transactions in 2002 thus attracting new attention from government officials, business and labour leaders. The Enron scandal was a clear case of conflict of interest where Arthur Anderson LLP supplied both consulting and audit services to Enron Corporation.

In an attempt to do away with ethical concerns within the procurement function, there has to be a procurement ethics policy in place in order to uphold standards within organizations (Badenhorst, 2014). An example includes the 2002 Sarbanes-Oxley Act that was put in place after the Enron Scandal in the US (Pearler 2018, August 16). The Act has new guidelines for establishing new or enhanced standards for US public company boards, management, and public accounting firms. Other significant institutions that regulate public procurement include the World Bank, the European Bank for Reconstruction and Development (EBRD) and the Inter-American Development Bank (IDB). For example, the World Bank has in place certain policies and guidelines that govern the selection of consultants within projects that are financed by banks. Perhaps, the most recent guidelines are popularly known as the *Procurement Guidelines under IBRD Loans and IDA Credits & Grants* that were issued in January 2011 (World Bank Group, 2010). There is also a methodology in place for evaluating a nation’s procurement system as well as proposals for improving and upgrading the system through putting to use Bank’s ‘*Assessment of Procurement System*’ Portal (World Bank Group, 2010). Further, World (2010) pointed out that civil law nations
including China, Japan, Germany, France and Spain have also place mechanisms of procurement for cases of delegated management contracts.

Within developing nations, about $820 billion is lost on transactions that are procurement related due to corruption (The International Budget Partnerships, 2016). Transparency International (2017) stated that about a fifth of entire government contracts are lost as a result of corruption where firms that have strong political links strive. On the other hand, firms from the same industry may rig bids in their favor. Eventually, it leads to an increase in the overall public service costs. Based on Amundsen (2009) point of view, corruption can lead to an increase of 50% of entire project costs.

An evaluation of public procurement systems in Chile in 2002, as highlighted by (Durant & Durant, 2013), revealed multiple rules among public agencies, low installed capacity, little attention to contracting management, scarce incentives for improvement particularly in terms of savings, limited transparency, high operational costs, and extended contract delivery times. E-procurement was conceived as an excellent solution to tackle most of these areas, if not all.

Some Middle East and North Africa (MENA) economies have taken serious steps toward reforming their procurement systems (such as updating and consolidating legal frameworks in Jordan, Morocco, Tunisia, West Bank and Gaza, and the Republic of Yemen) (Murray, 2017). Others are at various stages of addressing the fragmentation and incompleteness of their public procurement systems (McKay, 2014). McKay (2014) stated that the largest challenge facing the MENA region remains the inadequacy of fair, transparent, and competitive multistage bidding. The absence of fair and transparent bidding hinders competition due to the high transaction costs incurred by bidders. Other relevant challenges include raising the technical standards of project preparation, management, and execution.

Public procurement in Botswana surpasses $1 billion (Lionjanga, 2003). On the other hand, 43.8% of Ghana’s national budget is spent on public procurement while 90% of the entire development partners’ inflows are used on activities related to procurement (World Bank 2010). South Africa’s government expenditure accounts for about 13% of the country’s GDP while there exists an additional $5 billion in procurement by enterprises owned by the state resulting to 17% of the total GDP (Woolcock, 2008). A significant number of African nations
have strived to reform regulations within public procurement. They comprise Ghana, Uganda and Botswana whose reforms have not only focussed on regulations but also public procurement processes, methods, structure and workforce (Ameyaw, Mensah, & Osei-Tutu, 2011).

For nations like Kenya, there is a major concern for ethical conduct in procurement. Based on the 2017 National Ethics and Corruption Survey conducted by EACC, more than 27% of all respondents at some point were asked for a bribe, 9.8% implicitly asked for a bribe and 2.1% offered a bribe voluntarily in order to obtain services (Osongo, 2018). The survey also identified corruption as the main challenge affecting Kenya at 43.6% followed by poverty at 37%, unemployment at 32.2% and political instability at 21.8%. To curb corruption in procurement function, Kenyan government has put in place the Public procurement and Asset Disposal Act, 2015 as well as its attendant Regulations 2016. Other significant laws include Public Officers Ethics Act, Ethic and Anti-Corruption Commission Act and Whistle Blowing Act. On the other hand, the PPOA(2007) highlighted that unethical procurement practices were non-enforceable by law as a result of lack of transparency, accountability, poor management systems, and lack of integrity and abuse of power.

Craig et al (2002) noted that procurement ethics is significantly emerging to be vital just as technology and consumer perspective. The same attention given to cutting costs should also be directed towards ethical concerns (McKay, 2014). To most firms, procurement ethics mainly revolves around social responsibility. Martin et al (2017) emphasize on the relevance of ethical procurement since it has benefits such as promoting good public relations. Equally, problems associated to unethical practices are avoided by most firms. According to Baily (2008), ethical practices in procurement provide an opportunity for businesses to increase their competitiveness. Scott (2018) supports this idea by arguing that value is created when ethical procurement is part of the brand.

The study aimed to dwell on the impact of ethical procurement practices in National Cereals and Produce Board (NCPB). One of the NCPB’s main roles involves procuring and distribution of subsidized fertilizer on behalf of the Kenyan government. Loss of harvest greatly contributes to food insecurity in Kenya. Additionally, poor storage facilities by grain
farmers have led to loss of the crop. In order to deal with this issue, NCPB provides storage services, drying and cleaning services for grains. NCPB also offers office space as well as residential housing. Moreover, it offers clearing and forwarding services of goods. Based on the report of 2017/18 financial year, out of the overall budget of Kshs. 9.2 billion, Kshs. 8.3 billion was used to procurement maize, fertilizer and other food items while the balance was utilized for purchase of office consumables and works.

1.2 Statement of the Problem

Procurement ethics is a significant challenge in most organizations around the world. Despite unethical practices occurring in many organizations, there are no stringent measures to curb them. An example consists of Hungarian employees of Kozee Sleep Inc., a bed making organization, who supplied the beds to renowned people within the society. As a requirement by law, they were expected to practice ethical business practices but this appeared not to be the case. Most of the Hungarians working in the firm had been trafficked thus promoting slave workforce.

NCPB has had its fair share of corporate scandals. Bii (2018) underscored the maize scandal in the organization where cheap maize suspected to be from Uganda and Mexico was delivered and its payment was made promptly to the cartels at the expense of genuine farmers. The purge led to the resignation of the NCPB’s Managing Director, Newton Terer, and suspension of five top managers and investigation of 59 other officials. This is not the first time NCPB has been hit by maize scams. In 2008, more than 800,000 bags of maize worth Sh150 million were allocated to briefcase millers as the country faced a maize shortage. The Kenya Anti-Corruption Commission investigated and recommended disciplinary action. Nothing happened. In May 2016, twenty-two NCPB officers were suspended for stealing subsidized fertilizer. They were involved with traders who repackaged and sold the government fertilizer to farmers at high prices. Based on those happenings, Rift Valley farmers called for an overhaul of NCPB and urged an in-depth probe. From the findings, there was a great concern which even provoked the need to assume a more critical and in-depth study of the grain handling in Kenya so as to understand the extent to which ethical issues affect procurement performance in public sector.
1.3 Objective of the Study
The objective of the study was to establish the implications of ethical procurement and supply management process on reduction of waste in public sector organizations: A case of National Cereals and Produce Board.

1.4 Specific Objectives
The specific objectives of the study were:
1.4.1 To assess how avoidance of conflict of interest affects reduction of waste in NCPB
1.4.2 To evaluate how loyalty and respect for rules and regulations contribute to reduction of waste in NCPB
1.4.3 To examine the implications of impartiality and fairness on reduction of waste in NCPB

1.5 Importance of the Study
The study will document the areas where ethical practices are flouted and identify ways of reducing waste. The waste reduction includes decreased cost of acquiring goods and services, increasing quality of procured goods and services, and delivering goods and services in an efficient and faster way. The study will be useful to:

1.5.1 Customers and Consumers
Consumers have a sense of satisfaction and safety when goods and services they acquire are managed by firms that conduct their operations ethically. An understanding of how operations are managed ensures consumers are protected from unfavorable practices.

1.5.2 Employees
A bad reputation from the heads of an organization can have a negative impact to a business reflected on potential investors and employees. Focus on short term gains can have significant effects to a business thus the need for ethical conduct that safeguards the interests of stakeholders.

1.5.3 Academicians and Researchers
The research findings will contribute to a better understanding of ethical procurement practices and their impact on waste reduction of resources in public sector organizations. In so doing, they can contribute to the available body of knowledge.
1.5.4 General Public
Secondary stakeholders that being the general public, the media, unions and communities will also benefit from the findings of the study. The brand and image created by an organization is very important and lasts long in the minds of the general public. Therefore, unethical behavior would damage the reputation of the organization in the eyes of the general public. The general public will be able to understand the strategies put in place to ensure ethical behavior within the organization. Ethics are not just about the internal activities in the organization but also the external activities and how the organization deals with it. For example, ethical behavior is needed to sustain and maintain good environments and avoid pollution for is part of corporate social responsibility of an organization.

1.6 Scope of the Study
The study confined itself to the influence of ethical procurement practices that include avoidance of conflict of interest, loyalty and respect for rules and regulations, and impartiality and fairness in reducing waste in NCPB. The study focused on senior, middle and low level management staff in majorly procurement, finance and operations departments in NCPB. Other departments whose officers were involved in procurement process were also considered. There were eighty-three (83) top management staff of which seventeen were departmental heads and were housed at the head office in Nairobi. The middle level officers were one hundred and twenty-one (121) out of which seventy nine (79) were at various depot/stations spread across the country and forty two (42) housed at the head office. A total of one hundred and forty three (143) low management staff were both from the head office and depots. The respondents were selected from senior, middle and low level officers at the head office and from the depots. The study took a period of one month from 20th February, 2019.

1.7 Definition of Terms
1.7.1 Ethics
It is the basis to which entirely all of the principles of procurement including fairness, integrity and transparency are based on (IAPWG 2012). Dubinsky & Gwin, 2016) state that for one to be ethical, they have to adhere to the rules for the right practice particularly in matters to do with profession.
1.7.2 Unethical Practices
These are practices considered to be contrary to the public policy and welfare (Badenhorst, 2014). Some of the common unethical behaviors include conflict of interest, confidentiality of information, biasness and lack of integrity.

1.7.3 Conflict of Interest
Conflict of interest arises when buyers or their close family members or friends have direct financial interest in a supplier’s organization (Indiana University of Pennsylvania, 2014). As stressed by IAPWG (2012), conflict of interest can be defined as a direct or mutually exclusive clash between the interest of the organization and the private or personal interest of the organization’s procurement official. IAPWG (2012) continues and points out that the Standards of Conduct in the International Civil Service (standards of conduct) states, “Staff members shall not use their office or knowledge gained from their official functions for private gain, financial or otherwise, or for the private gain of any third party”. In addition, “staff members shall not be actively associated with the management of, or hold a financial interest in any profit-making business or other concern, if it were possible for the staff member or the profit-making, business or other concern to benefit from such association or financial interest by reason of his or her position with the United Nations”.

1.7.4 Confidentiality of Information
Information that is confidential is to be shared with liable parties within and outside an organization (Indiana University of Pennsylvania, 2014). Some of the vital information considered to be confidential include customer information, pricing, trade secrets, cost break ups and supplier information.

1.7.5 Impartiality and Fairness
This refers to treating all suppliers with impartiality and fairness (Indiana University of Pennsylvania, 2014). Fairness as a fundamental principle relates to getting what a person deserves by due process and just allocation. Any biased treatment to any particular vendor raises unethical behavior, adds (Scott, 2018)
1.7.6 Integrity
Integrity is considered as the quality of honesty as well as maintaining firm moral principles (OECD 2009). Any compromise on integrity results to significant effects towards the procurement process. OECD (2009) further defines integrity as putting to use resources in relation to the intended purpose while using it in line with public interest.

1.7.2 Reduction of Waste of resources
As emphasized by Loges (2018), reduction of waste is the quantitative assessment of the degree to which the procurement and supply management function and those employed therein achieve the general or specific objectives assigned to them. The parameters of waste reduction are low cost of procurement process, accepted quality of delivered goods and services, and timely delivery of goods and services.

1.8 Chapter Summary
This chapter presents the background of the study, the problem statement including lack of stringent measures to curb unethical procurement practices despite being a big challenge in most organizations around the world, the study’s significance and the research objectives of the study that include; to assess how avoidance of conflict of interest affects reduction of waste in NCPB, to evaluate how loyalty and respect for rules and regulations contribute to reduction of waste in NCPB, and to examine the implications of impartiality and fairness on reduction of waste in NCPB. The respondents were selected from senior, middle and low level officers at the head office and from the depots. There were eighty three (83) top management staff, one hundred and twenty one (121) middle level officers and one hundred and forty three (143) low cadre staff. The chapter concludes by defining various terms used in the study.

Chapter two of the study presents the literature review. Chapter three of the study presents and justifies the research methods that the study will use to conduct this study. Chapter four presents the results and findings and chapter five presents the discussion, conclusion, and recommendations of the study.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction
This chapter presents various types of literature derived from a variety of sources. Specifically, avoidance of conflict of interest, loyalty and respect for rules and regulations, and impartiality and fairness in the procurement process are covered.

2.2 Avoidance of Conflict of Interest
Despite the fact that unethical behavior is exhibited within procurement and supply management in different forms that include taking kick-backs from suppliers, buying from personal companies among others, perhaps the most common form relates to conflict of interest (Handfield and Baumer, 2006). As per expectations, employees are always required to uphold the company’s interests compared to theirs (Baumer and Poindexter, 2004). Based on the roles imposed on employees by their employers, they vary based on facts of the situation. There are several likely causes of conflicts that have been associated to procurement and the supply chain.

2.2.1 Giving or Receiving Gifts
According to Handfield and Baumer (2006), taking or giving gifts potentially create conflict of interest or alternatively a perception of the same. Despite the scope to which conflicts arise in this case, they still are tolerated by some organizations. Governments and public institutions are always expected to serve at the public’s interest (OECD 2009). It is the expectation of governments to ensure that private interests do not affect decision making of officials within the public sector.

A survey done by Choo (2017) on the effects of ethical procurement and supply process in reducing waste of public resources in the Republic of Chile showed that avoiding bribery plays an ever increasingly important role in the supply chain especially in an economic downturn. Choo (2017) further emphasized that in so doing the procurement function reduces cost of raw material and services hence allowing the organization competitively market the price of its finished goods to win in a business antagonism. (Choo, 2017), finally concluded that organizations that embrace ethical procurement behavior, source goods and services at
the right quality, the right quantity and the right price hence saving money for the organization.

2.2.2 Family or Personal Relationships
Conflicts of interest also arise in personal relationships. Amundsen (2009) argued that showing favoritism toward specific suppliers that share family background may have a significant harm to organizations. An example includes a case of Ford Motor Company published in the Wall Street Journal article by Emshwiller John (2003). Two directors from the company were paid lump sum of money arising from directors’ pay and dividend of their Ford Stock.

Based on an internal audit by the Office of Internal Oversight Services (OIOS), it was established that the United Nations office in Nairobi suffered a loss of Kenyan shillings. 10 billion from procurement and administrative scandals in 2004, 2005 and 2006. In the scandal involving a conflict of interest, one firm belonging to a senior employee to the organization yet owned by the spouse was awarded a tender. It became evident that contracts were awarded based on personal relationships.

2.2.3 Investments or Business Interests
In this case, a buyer for an entity may be an active investor in the entity acting as a supplier for goods and services. As highlighted by Parliamentary Account Committee report (2009), the ministry of Works and Transport, Uganda opted to lease out vehicles at a cost of Ugandan Shillings. 4.17 billion for a period of one year (2007) by direct sourcing to favor one company, Motor Care Uganda Limited because of a conflict of interest either among the officers involved in procurement or Cabinet Ministers’ interest in the purchase of the vehicles. The Ministry could have purchased vehicles through competitive bidding at an estimated total cost of Ushs.6 billion. This would have resulted in huge savings in the Ugandan government.

A report by Okwembah (2008), highlighted an internal audit report prepared by the Office of Internal Oversight Services (OIOS), where UN employees colluded with suppliers during the procurement process. A number of the employees had links to the organizations that were awarded contracts with United Nations Environment Programme (UNEP) and UN-Human
Settlement (UN-Habitat). In a different case, a top official in one of the organizations contracted to maintain buildings within UN premises eventually was an employee of the UN in charge of a unit. The employee’s responsibilities included overseeing all ground works within the UN Gigiri Complex.

2.2.4 Use of Company Resources
Generally, use of organizational equipment or resources for non-business related activities is inappropriate. In the Wall Street Journal of 29th December, 2003, former CEO to Apple Inc., Steve Jobs was paid almost $1.2 million as compensation for incurred costs accrued while using his Gulfstream V jet. With society demanding more from organizations, conflicts of interests that are poorly managed affect public’s trust on government institutions (Allen & Overy, 2011).

2.2.2 Measures to Curb Conflict of Interest
Conflict of interest statements are incorporated in organizations to guide employees as part of code of ethics (Handfield and Baumer, 2006). Ethical codes will entail diversity and environment. Whenever a conflict of interest arises, honesty, truthfulness, impartiality and incorruptibility can be put to use. According to the Indiana University of Pennsylvania (2014), any employee with financial interests in an organization is expected to disclose this information to management or omit himself/herself from taking part in the procurement process.

Conflict of interest can affect a firm’s profitability, cast it in an unfavorable light with suppliers and customers and even subject the Chief Executive Officer to legal violations of Procurement Act. Therefore, as emphasized by Eltantawy and Giunipero (2009), an essential prerequisite for procurement function to impact performance is its perceived reputation. Procurement department would only change performance favorably when it is perceived to be making a strategic, value-adding contribution to the firm. Conflict of interest increases waste in public sector organizations. As summarized by (Report of the parliamentary account committee on common wealth heads of government meeting, 2009), conflict of interest results in poor quality of materials purchased, likelihood of inflation of prices of goods procured, loss of government funds, and slows down economic development of a country.
2.3 Loyalty and Respect for Rules and Regulations

According to Mazibuko and Fourie (2017), within the procurement process, effort should be directed towards identifying corrupt acts since most governments globally process their procurements through the procurement unit. It is against this background that international and local Procurement Acts, guidelines and regulations have been formulated and institutionalized as part of the strategies to prevent corruption and in line with the broader public financial management reforms that are being initiated worldwide (Mazibuko and Fourie, 2017).

2.3.1 Leading Procurement Laws and Regulations

Examples of leading procurement laws and regulations include Sarbanes-Oxley Act, 2002, EU Procurement Rules and Regulations, 2011, Procurement Guidelines under IBRD Loans and IDA Credits & Grants in collaboration with the World Bank, the European Bank for Reconstruction and Development (EBRD) and the Inter-American Development Bank (IDB). Other laws and regulations examples include; Agency law, Contract and commercial laws, Electronic commerce laws, Trade agreements, Trade regulations, Patent, Copyright, and Trademark laws (Wilson, 2016). The United Nations Charter, Article 101, Para. 3, states: “the paramount consideration in the employment of the staff and its determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competency, and integrity.”

While focusing on the procurement sector in Malaysia, it was determined that most procurement officers were responsible for non-compliance to general policies and procedures (Hunja 2011). In Jeppesen (2010) point of view, compliance results only if the target completes a requested action, ends up being apathetic instead of enthusiastic thus placing minimal effort. On the other hand, Philly and Nkirina (2017) observed that compliance has over the years been perceived as adherence to regulations in relation to organizational outcome.

Within South Africa, for any procurement practices to be applied, legislative requirements have to be met (Fourie, 2015). The sole purpose of public procurement legislation is to clarify and enact the procedures that bring about satisfactory outcomes while putting in mind the nature of the process and fairness (Mazibuko and Fourie, 2017). Such legislative
decisions arose due to the fact that corruption hindered citizen rights apart from affecting sustainability and credibility of governments. These frameworks are founded within the constitution of each nation that requires government institutions to contract for goods, services and works while maintaining fairness equity, transparency and competitiveness (Fourie, 2015).

Fourie (2015) notes that there is the need for procurement officials to maintain a clear understanding of legal concepts regulating their actions as organizational representatives. There exists the need for these officials to acquaint themselves with both the Chartered Institute of Purchasing and Supply (CIPS) Principles and Standards of Ethical Supply Management Conduct and its Principles of Social Responsibility. Whatever process is used, there must be a measurement to assess the officials understanding of the ethical procurement practices. As Eltantawy and Giunipero (2009) pointed out, organizations should aim for 100 percent compliance failure to meet minimum standards should result in remedial training or termination of employment in the worst cases.

2.3.2 Guidelines to Understanding and Complying with Laws and Regulations
According to IAPWG (2012), recommended guidelines for understanding and complying with applicable laws, regulations, and trade agreements include but not limited to:

2.3.2.1 Training in Legal Aspects
Through training, supply and procurement professionals increase responsibility and understanding of regulations and conflict resolutions. Despite organizations having supply management ethics policy, the level to which they are applicable differ (Handfield and Baumer, 2006). According to studies that have been conducted, financial executives tend to base their organizations ethics code during strategic decision processes only when pressure from the market is experienced. It is to their belief that this culture brings about a good impression of the entity (Wilson, 2016).

2.3.2.2 Interpreting the Laws
It is important for procurement managers involved in governmental procurement to be conversant with and apply the procurement laws that are specific to their particular governmental body in order to identify and reduce impacts.
In Kenya, Public Procurement and Assets Disposal Act, 2015 and Regulations 2006 are used to guide the procurement process in public sector. Non-compliance by ministries and government agencies or non-existence of effective enforcement of regulations implementation promotes rampant unethical procurement practices in Kenya (GoK 2006). Based on the findings on the procurement of goods, services and works in the Ministry of Works and Transport when the Public Procurement and Assets Disposal Act, 2015 was followed to the letter, majority of the employees were of the view that it contributed to procurement of quality products (Muchiri, 2011).

2.3.3 Procurement Laws and Regulations as Guidelines to Procurement Process

According to (Cox, La Caze, & Levine, 2003), laws and regulations cannot cover every situation and do not take the place of good judgment or sensitivity to other cultures, laws, customs, and practices. The United Nations Procurement Practitioner’s Guide also alludes to this as it states, “No matter how hard policy-makers try, they will never specify in law, code, regulation, rule, or other written requirement everything that a procurement officer needs to know regarding what is allowed or appropriate and what is prohibited or shunned. It is necessary for procurement officers to understand what the law or rule is intended to accomplish.” Additionally, definition of unethical practice varies from place to place (Bayles, 2016). While one party may consider an act to be corrupt, another may take it for granted while conducting business. A great example is of the aerospace and defense sector, whereby, certain buyers from the public sector may request foreign suppliers for offset contracts to local entities (Allen & Overy, 2011).

An example includes a recent procurement scandal involving India and the Italian firm Agusta-Westland in the sale of helicopters that included offset contracts. There exists no public law in Italy about the same. Ethical procurement practices still possess a great challenge globally (Rwoti, 2005). The fact that organizations use procurement ethics as a means of portraying a positive image calls for supply chain management to consider ethics as a core in daily operations. Despite this, the sums of money that flow within procurement functions within government possess a great possibility of unethical procurement practices occurring. Additionally, indulging in unethical public procurement practices has a ripple
effect on the final cost of goods and services when being accessed by the public (Fourie, 2015).

2.4 Impartiality and Fairness

Fox (2010) notes a number of principles that facilitate human effectiveness including fairness, integrity, honesty, impartiality, excellence among others. Among these, impartiality and fairness are never given but have to be renewed time and again considering they involve self-awareness and command. Administrative reasonableness further becomes essential in when fairness is factored in the public sector. In order for fairness to be obtained within the public procurement process, there has to be the concern of biasness, compliance to stipulations, reasonable pricing and technical capability, and equal treatment.

Impartiality, as stressed by (International Civil Service Advisory Board, 2017), is a key requirement and that suppliers need to be handled in a fair and non-biased way. Any biased treatment to any particular vendor raises unethical behavior. Therefore, procurement officials should not be biased when executing their duties because repeated actions of partially will weaken an organization. The attributes of impartiality and fairness are; transparency, integrity, openness, competition and accountability.

Fairness in public sector procurement is an obligation of the public officials as administrative moderation can be tested against procedural fairness and impartiality (Roy, 2015). According to Amundsen (2009), to achieve fairness in the public procurement process, decision–making and actions must be neutral and no preferential treatment should be extended to individuals or organizations given that public procurement activities are undertaken with public funds. The most common attributes of impartiality and fairness include;

2.4.1 Transparency

All information entailing the process of public procurement should be availed to every stakeholder including contractors, suppliers, service providers and public at large unless there are specific restrictions (International Civil Service Advisory Board, 2017). Such restrictions include copyright information of organizations taking part in the process as well as military related procurement. Whenever there is a request from a specific supplier on additional information, every other supplier involved should be notified within the same period.
(International Civil Service Advisory Board, 2017). In the event an offer becomes invalid within the evaluation process and an award is placed with next highest offer, details on the disqualification of the lower offer must be adopted uniformly. According to Jorge (2013), in the event an announcement is made concerning any public procurement on any medium, it should contain sufficient information for interested parties about closing dates, mode of evaluation, scope, deadlines, queries, place of submission etc. Additionally, the documents for the tender should be priced reasonably.

2.4.2 Integrity

In public procurement, integrity is twofold. There is the integrity of the procurement process, and that of public procurement practitioners.

2.4.2.1 Integrity of the Public Procurement Process

According to Orlitzky et al. (2003), all information provided by the procuring entity should be sufficient and not misleading to bidders. Integrity impacts confidence levels within the procurement system. Information provided in the tender documents should be free from bias and ambiguity. During the review of the tender documents, prospective bidders should be able to know whether they meet the set criteria to undertake the assignment.

Bidders should also clearly know of what is required of them and they manner in which they get evaluated (Cox, La Caze, & Levine, 2003). The mode of evaluation and selection should clearly be stipulated in tender documents and thus should never be changed unless necessity arises. In the event changes are mandatory, then, amendments should be made, published and made available to every interested bidder. There has to be sufficient time that enables bidders to make adjustments in the event of changes in the tender documents for them to meet deadlines.

2.4.2.2 Integrity of Public Procurement Practitioners

Integrity has to be displayed at all levels of the procurement process for all government officials involved (Transparency International, 2017). At all times they should maintain the procurement requirement purpose as they go about the different activities and try to make sure that public procurement is handled in a responsible manner as stipulated in the guidelines.


2.4.3 Openness
As noted by Transparency International (2017), the requirements of public procurement should be accessible to every qualified entity and individuals. Any information relating to procurement requirements should be availed to the public though restrictions may be imposed to some level. Organizations’ and individuals’ confidential information should not be disclosed to the public and the level to which such information is to availed should be governed by other regulations (Transparency International, 2017). During the evaluation process of offers received, all information regarding every bidder should be confidential until a verdict has been arrived upon and a report cleared by the responsible authority (Transparency International, 2017). Except for special procurements like that of defense, all other procurement information should be publicly released through different mediums.

2.4.4 Competition
The public procurement process should not be influenced in a manner that aims to benefit a specific party (Jorge, 2013). The fact that public procurement is mainly as a result of revenue generated from taxes, any party eligible to take part in the tendering process is not to be restricted provided they are qualified. The requirements of public procurement are to be widely circulated in order to raise the levels of responses from the public which results to increased competition (Transparency International, 2017).

It is important to note that not every contract can be awarded through the usual competitive bidding since it depends on factors such as urgency of need and the need to satisfy certain requirements. Despite this being justified, it is usually expected that such methods of tendering being kept to the minimum (Cox et al. 2003). The most common methods of restrictive tendering include the request for quotation (RFQ) and direct sourcing.

2.4.5 Accountability
Indiana University of Pennsylvania (2014) highlights that anyone taking part in the public procurement process is held accountable for their actions as well as decisions. Therefore, every individual is tasked with reporting or answering to the respective oversight entity as well as the public on the outcomes of the decisions made.
As a result, such values promote objectivity and eradication of conflict of interests (Transparency International, 2017). While practicing their respective duties, procurement officials should deal with their trading partners in a manner that is professional although adhering to the set regulations (Australian procurement and construction council., 2008). Anyone with the ability to sway decision must refrain from any move that seeks or appears diminishing to the decision making process (Cox et al. 2003).

To do away with the likelihood of partiality as well as the creation of any disparity within the procurement process, every stakeholder is to be treated consistently while communication is maintained equally. In the event of doubt concerning how a process is to be conducted, procurement officials can as well provide supplementary information and invitations (Bayles 2016). Even when such moves are perceived to be time consuming, they still enable an organization save on resources and reputation.

2.5 Chapter Summary
This chapter presents the literature review of the study. The chapter is presented in sections that cover the variables of the study including avoidance of conflict of interest, loyalty and respect for rules and regulations, and impartiality and fairness and their impact on reduction of waste in NCPB. In each section, the literature review shows the sub-sections for each of these variables and highlighted statements and questions that were used in the research instrument. The next chapter of the study presents the research methods that the study adopted to achieve the objectives of the study.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction
This chapter covers the research design, population and sample, data collection methods, research procedures, and data analysis methods. The justification of use of each strategy and method is provided. In addition, the chapter validates and justifies the use of these research techniques and methods.

3.2 Research Design
There are three classifications for the research design. According to Neuman and Dickson (2003), they include explanatory, descriptive, and exploratory. Exploratory studies are popularly used in the event there is insufficient knowledge with respect to specific occurrence. The purpose of exploratory studies is to help come up with clear insights concerning certain aspects, to come up with innovative data as well as develop a basis for future research (Seraran 2000). Descriptive research begins with an enhanced concept regarding a certain happening. Descriptive statistics are often tailored to determine the traits displayed in research questions (Neuman et al. 2003). Lastly, explanatory research is aware of the issue and has a clear description of the issue. The method helps establish the highlights of the intricate inter relationship portrayed within the issues suggested in research questions (Miles & Huberman 1994). The sole purpose of this study was to identify the influence of ethical procurement process such as avoidance of conflict of interest, respect for rules and regulations, and impartiality and fairness on reduction of waste. As descriptive research assists to study the ethical variables of ethical procurement process, explanatory method will be put to use in order to illustrate the correlation between variables.

3.3 Population and Sampling Design

3.3.1 Population
According to (Mugenda & Mugenda, 2003), the population represents a sum of total elements of which are of interest to the study and of which have a common characteristics. The study targets the NCPB’s staff members. The population of the study is therefore three hundred and forty seven (347) staff members.
3.3.2 Sampling Design

3.3.2.1 Sampling Frame

Saunders et al. (2003) describes a sampling frame as a set of information that is used to identify a sample population for statistical treatment. It comprises of a numerical identifier for every individual, plus other identifying information concerning traits of the individuals, to assist in analysis and facilitate for division into further frames for more in-depth analysis. The sampling frame of this study consists of staff from the top, middle, and low management staff at NCPB’s departments of procurement, finance and operations to ensure that all areas concerned with procurement will be covered. Table 3.1 shows the sampling frame of the study.

Table 3.1: Sampling Frame

<table>
<thead>
<tr>
<th>Group Description</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management staff</td>
<td>83</td>
</tr>
<tr>
<td>Middle management staff</td>
<td>121</td>
</tr>
<tr>
<td>Low management staff</td>
<td>143</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>347</strong></td>
</tr>
</tbody>
</table>

Source: NCPB (2019)

3.3.2.2 Sampling Technique

A sampling technique is the name or other identification of the specific process by which the entities of the sample have been chosen (Saunders et al., 2003). There exist different forms of sampling techniques that lead to the selection of the study sample. First, is the random sampling technique which is regarded as the simplest means of sampling simply because each respondent has the same opportunity of being chosen. Nonetheless, as observed by Saunders et al. (2003), if the population is large it becomes hard to choose the definite sample size. Secondly, is the systematic sampling technique, which involves the selection of the sample at regular intervals from the sampling frame. In fact, it is popularly considered as nth name selection approach because the respondents are chosen from the nth record as pointed out by Saunders et al. (2003). Thirdly, is the stratified sampling technique, whereby, respondents are divided into different layers by depending on the traits and similar samples are selected from every category (Saunders et al., 2003).
Fourth, is convenience sampling which is a non-probability sampling technique, whereby, subjects are chose due to their convenient accessibility and proximity to the researcher. In this method, only a certain group of respondents are selected from the entire population because of restrictions in costs and time (Saunders et al., 2003). Lastly, is the judgment sampling which is a non-probability sampling technique, whereby, the researcher chooses units to be sampled in relation to their knowledge and professional judgment. This type of sampling technique is also known as purposive sampling and authoritative sampling. As noted by Saunders et al. (2003), purposive sampling is used in cases where the specialty of an authority can choose a more representative sample that can bring more precise outcomes than by using other probability sampling techniques. The process involves nothing but purposely handpicking individuals or subsets from the population based on the researcher's knowledge and judgment. The study adopted the stratified random sampling technique where the population was divided into strata from the top management, middle-level management, and low management staff.

### 3.3.2.3 Sample Size

The sample size is an important feature of any study or investigation in which the aim is to make inferences about the population from a sample. Singh & Masuku (2014) emphasize that sample sizes should be carefully fixed in order to adequately draw valid and generalized conclusions. The study adopted Yamane (1967) sampling formula to determine the sample size of the study as 185 respondents as summarized in Table 3.2.

\[
n = \frac{N}{1 + N (e^2)}
\]

Where;

- \( n \) = sample size
- \( N \) = study population
- \( e \) = tolerance at the preferred level of confidence
- \( \alpha = 0.05 \) at 95% confidence level.

\[
n = 347 / 1 + 347 (0.05)^2
\]
\[
= 347 / 1.8675
\]
\[
= 185
\]
Table 3.2: Sample Distribution

<table>
<thead>
<tr>
<th>Group Description</th>
<th>Population</th>
<th>Percent</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management staff</td>
<td>83</td>
<td>24.0%</td>
<td>44</td>
</tr>
<tr>
<td>Middle management staff</td>
<td>121</td>
<td>35.0%</td>
<td>65</td>
</tr>
<tr>
<td>Low management staff</td>
<td>143</td>
<td>41.0%</td>
<td>76</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>347</strong></td>
<td><strong>100.0</strong></td>
<td><strong>185</strong></td>
</tr>
</tbody>
</table>

3.4 Data Collections Methods

There are mainly two types of data collection methods. They include the Primary data collection and Secondary data collection. Based on the study, both primary and secondary data collection methods were adopted. Primary data was collected using the questionnaire method. The Research instrument development was preceded by detailed literature review as described in the research design for identifying the variables. The validity of the content was cross-checked by pre-testing the questionnaire and through a series of interviews organized with different level of staff in NCPB. All of these steps are considered an effective way to increase response rate as shown by other similar research studies including (Frohlich, 2002). Secondary data was gathered using various methods, in which quantitative data is collected. Some of the important secondary data sources are books, websites, journals, and newspapers in the literature review. The study used a structured questionnaires where Likert-type scale items were used for it will make statistical analysis of the collected data easy (Jackson, 2009).

3.5 Research Procedures

The questionnaires were validated and pre-tested. This involved piloting prior to their distribution where a member from the three groups was issued with a questionnaire. The pilot study was done to ensure a high response rates as well as allowing for clarifications of possible ambiguities related to questions asked (Churchill, 1995). Following the pilot study, the questionnaire was adjusted to incorporate various views got from the pilot. The validity of research instrument was measured using the Content Validity Index. Reliability of the instrument will be tested using the Cronbach Alpha Coefficient. According to (Cronbach, 1951) a coefficient of 0.5 and above is considered reliable. The study has independent and dependent variables.
Independent variables were specific research objectives such as avoidance of conflict of interest, loyalty and respect of rules and regulations, and impartiality and fairness. The dependent variables were reduction of costs. A 5 point Likert scales ranging from 5-not applicable to 1-a very large extent was used. Measures included percentage of rejections, rejection of services from service provider and direct supply quality standards.

3.6 Data Analysis Methods
The data analysis process began with the making sure that all the questionnaires were filled and met the quality for data entry. The instrument was pre-coded and this made it easier for the process of data entry. The data was entered into the Statistical Package for the Social Sciences (SPSS). The first step of the study was using descriptive statistics to analyze and summaries the data into frequencies, percentages, mean, and standard deviation. The study then used correlation analysis and linear regression analysis to measure the relationship between the independent and dependent variables.

In correlated data, the change in the magnitude of 1 variable is associated with a change in the magnitude of another variable, either in the same (positive correlation) or in the opposite (negative correlation) direction. On the other hand, regression aims to measure the size and direction of effect of the independent variables on the dependent variable. Linear regression will be conducted for each of the independent variables on the dependent variable separately. The data will be presented in tables and figures and supported by interpretations from the researcher.

3.7 Chapter Summary
This chapter illustrates about the rationale and research method to be employed to choose different features that are associated with the research. The explanatory research design was adopted and a sampling formula was used to determine the sample size of 185 from a population of 347. A structured questionnaire was designed to collect data and its reliability was determine using Cronbach’s Alpha. Descriptive, correlation, and regression analysis was used to analyze the data. The next chapter of the study presents the results and findings of the research.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the results and findings of the study. The chapter is presented in major sections that include the general information and sections that are presented in line with the study objectives. The response rate of the study and the demographic information of the participants are presented in the beginning and later followed by the descriptive, correlation, and regression analysis of the study variables for each of the objectives.

4.2 General Information

4.2.1 Response Rate

The sample size for the study was 185 respondents. The researcher was able to administer 185 questionnaires to the selected sample of the study. Out of these, the researcher was able to get back 97 questionnaires which were used for analysis which corresponds to a response rate of 52.4 %. Mugenda and Mugenda (2003) recommend that response rate of above 50 % is adequate.

Table 4.1: Study Response Rate

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaires administered</td>
<td>185</td>
<td>100.0%</td>
</tr>
<tr>
<td>Questionnaires received</td>
<td>97</td>
<td>52.0%</td>
</tr>
<tr>
<td>Non-response</td>
<td>88</td>
<td>48.0%</td>
</tr>
</tbody>
</table>

4.2.2 Demographic Information

4.2.2.1 Departments by Respondents

The findings indicate that the majority of the respondents were depot managers and accounted for 15.2 % of the sample. Other respondents were from the procurement department and represented 13.0% of the sample, 8.7 % of the respondents were from Accounting, Finance, and Logistics department and accounted for 8.7 % respectively for each of these departments. Responses from the Monitoring and Evaluation and Personal
Secretary Categories were the least represented in the sample and accounted for 2.2 % respectively as shown in Table 4.2.

The findings are in line with the population distribution among the targeted departments of NCPB. Depots are the majority of the units in the organization and this was reflected in these findings along with members from the procurement department being the second largest group of respondents. This is attributed to the fact that depot managers and procurement officers are an integral part of the supply management process on at NCPB.

Table 4.2: Respondent’s Department at NCPB

<table>
<thead>
<tr>
<th>Department</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>9</td>
<td>4.1</td>
</tr>
<tr>
<td>Administration</td>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td>Depot Manager</td>
<td>15</td>
<td>15.2</td>
</tr>
<tr>
<td>Finance</td>
<td>9</td>
<td>4.1</td>
</tr>
<tr>
<td>Quality Assurance</td>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td>ICT</td>
<td>6</td>
<td>3.0</td>
</tr>
<tr>
<td>Regional Manager</td>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td>Logistics</td>
<td>9</td>
<td>4.1</td>
</tr>
<tr>
<td>Compliance</td>
<td>6</td>
<td>3.0</td>
</tr>
<tr>
<td>Corporate Affairs</td>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td>Monitoring and Evaluation</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Personal Secretary</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Procurement</td>
<td>13</td>
<td>6.2</td>
</tr>
<tr>
<td>Sales and Marketing</td>
<td>6</td>
<td>3.0</td>
</tr>
<tr>
<td>Technical Department</td>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>97</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2.2.2 Respondents’ Position

Figure 4.1 shows the results on the position of respondents in the hierarchical structure of the NCPB. The findings revealed that 56.5 % of the sample fell to the middle management level, 32.6% were in the top management level, and 10.9 % were in the low management levels
staff. This finding is significant as middle level staff is involved in making decisions to undertake actions in an organisation whereas top management makes the strategic decisions in the firm. This means that information collected was critical because middle level and top management staff has the ability to influence ethical procurement and supply management process at NCPB.

![Figure 4.1: Level of Staff among Respondents](image)

**4.2.2.3 Respondents’ Experience**

The study also aimed to find out the experience of the respondents in the organization. The higher the number of years a member of staff was in the organization enhanced the validity of the findings as they had firsthand experience with the procurement and supply chain process at NCPB. The findings indicated that 37.0% of respondents had been at NCPB for more than 19 years, 34.8% had been at NCPB for 3-10 years, and 28.3% had 11-18 years as shown in Figure 4.2. The results thus provide further validity on our findings as majority (65.3%) of the staff had more than 10 years’ experience at NCPB.
4.2.2.4 Education

The study aimed at establishing the level of education among the respondents, the results show that 54.3% of the sample had Bachelors level of education, 19.6% had Masters Level of education, 15.2% had a Diploma level of education, 8.7% had Certificate and 2.2% had a PhD level of education as shown in Figure 4.3. The results can be attributed to the minimum education level for majority of the employment opportunities at NCPB are from the Bachelors level of education. The high competition that characterizes the current employment scene has seen more and more staff pursues further education opportunities as shown by a significantly higher Masters level representation in the sample. The majority of staff at NCPB belong to the millennial generation which is characterized by higher educational attainment goals. Diploma and Certificate holders are representative of the technical and operational staff at the NCPB.
4.3 Avoidance of Conflict of Interest Influence on Reduction of Waste in NCPB

The first objective of the study addressed the influence of avoidance of conflict of interest on waste reduction at NCPB. This section of the study aimed to present the descriptive statistics for avoidance of conflict and interest statements. The section also shows the correlation results between avoidance of conflict of interest and waste reduction and also the regression between these two variables. The respondents were asked to indicate to what extent they agreed with the statements on avoidance of conflict of interest at NCPB. According to the findings shown in table 4.3, the overall mean score is 2.96 out of a score of 5 and a standard deviation of 1.159. This finding means that the respondents agree that conflict of interest practice at NCPB was to a large extent.
<table>
<thead>
<tr>
<th>Conflict of Interest Statements</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement officials or officers executing procurement process always immediately declare any potential conflict of interest</td>
<td>97</td>
<td>3.43</td>
<td>0.886</td>
</tr>
<tr>
<td>All the officers executing procurement process fill a written form when they perceive a potential conflict of interest</td>
<td>97</td>
<td>3.59</td>
<td>0.956</td>
</tr>
<tr>
<td>Officers who declare any potential conflict of interest do not participate in the conflicting procurement process</td>
<td>97</td>
<td>3.30</td>
<td>1.051</td>
</tr>
<tr>
<td>Procurement officials executing procurement process fail to utilize the office or knowledge acquired from their official duties for personal enrichment, financial or otherwise</td>
<td>97</td>
<td>3.13</td>
<td>1.147</td>
</tr>
<tr>
<td>Any other officials executing procurement process fail to utilize the office or knowledge acquired from their official duties for personal enrichment, financial or otherwise</td>
<td>97</td>
<td>3.13</td>
<td>1.024</td>
</tr>
<tr>
<td>Procurement officials do not place procurements with firms which employ a member of the staff person's immediate family</td>
<td>97</td>
<td>3.11</td>
<td>1.197</td>
</tr>
<tr>
<td>Procurement officials do not place procurement with firms in which the staff holds a significant financial interest</td>
<td>97</td>
<td>2.89</td>
<td>1.159</td>
</tr>
<tr>
<td>Procurement staff resist undue political pressure or otherwise in making decision</td>
<td>97</td>
<td>3.28</td>
<td>1.004</td>
</tr>
<tr>
<td>NCPB has strict rules and policy regarding employees receiving gifts</td>
<td>97</td>
<td>2.02</td>
<td>1.183</td>
</tr>
<tr>
<td>Procurement staff are discouraged from accepting meals, gratuities, entertainment or other favors paid for by suppliers</td>
<td>97</td>
<td>2.07</td>
<td>1.272</td>
</tr>
<tr>
<td>Officials negotiating on procurement requirements put the interest of the employer first</td>
<td>97</td>
<td>2.87</td>
<td>1.240</td>
</tr>
<tr>
<td>It is the management’s responsibility to determine if the gift could be accepted or if it should be returned to the giver</td>
<td>97</td>
<td>2.74</td>
<td>1.405</td>
</tr>
<tr>
<td>NCPB allows employees to receive gifts of specified nominal value</td>
<td>97</td>
<td>2.87</td>
<td>1.544</td>
</tr>
<tr>
<td><strong>Overall Mean Score</strong></td>
<td><strong>2.96</strong></td>
<td><strong>1.159</strong></td>
<td></td>
</tr>
</tbody>
</table>
As shown in table 4.3, there was application of ethical procurement at NCPB at a small extent as procurement officials or officers executing procurement process always immediately declare any potential conflict of interest was found to be practiced at a small extent as indicated by a mean score of 3.43 and a standard deviation of 0.886. The findings also showed that all officers executing procurement process filled a written form when they perceive a potential conflict of interest was practiced at a small extent by a mean score of 3.59 and standard deviation of 0.956. Equally, the respondents statements indicated that officers who declared any potential conflict of interest did not participate in the conflicting procurement process was practiced at a small extent by a mean score of 3.30 and standard deviation of 1.051. Likewise, the practice in regard to procurement staff resisting undue political pressure or otherwise in making decision was at a small extent as shown by a mean score of 3.28 and standard deviation of 1.004.

However, the individual statements showed respondents acknowledged that NCPB has strict rules and policy regarding employees receiving gifts to a large extent by a mean score of 2.02 and standard deviation of 1.183. Similarly, procurement officials were discouraged from accepting meals, gratuities, entertainment or other favours paid for by suppliers at a large extent by a mean score of 2.07 and standard deviation of 1.272. Further, the results indicated that it was the management’s responsibility to determine if the gift could be accepted or if it should be returned to the giver at a large extent.

A further examination of the data revealed that all the officers executing procurement process filled written forms when they perceive a potential conflict of interest to a very small extent as cited by 69.6 % of the sample as shown in Figure 4.4. This finding suggests that procurement officers did not submit any written forms to report any conflict of interest that comes up during a procurement process.
The correlation findings indicate that there existed a positive and significant association between avoidance of conflict of interest and waste reduction \((r = 0.617, p = 0.000)\) as indicated in Table 4.4. This means that an increase in avoiding conflict of interest resulted to an increase in reduction of waste.

Table 4.4: Conflict of Interest and Cost Reduction Correlation Results

<table>
<thead>
<tr>
<th>Conflict of Interest</th>
<th>Reduction of waste</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

A simple linear regression was conducted to determine the influence of avoidance of conflict of interest variable on reduction of waste. Table 4.5 shows a summary of the regression results which indicate that the coefficient of determination \(\left( R^2 \right) \) was 0.381 which means that conflict of interest explained 38.1\% of change in waste reduction. The ANOVA table shows that the model was good fit as the significance value was less than 0.05 \((p = 0.000)\). Conflict of interest practice had a positive and significant effect on waste reduction with a Beta value of 0.676. This means that a unit increase in avoidance of conflict of interest resulted to a 0.676 increase in waste reduction.
Table 4.5: Conflict of Interest and Reduction of Waste Correlation Results

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>.617&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.381</td>
<td>.367</td>
<td>.48093</td>
</tr>
<tr>
<td>a. Predictors: (Constant), Conflict of Interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>6.272</td>
<td>27.116</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>10.177</td>
<td>95</td>
<td>.231</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>16.449</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Dependent Variable: Reduction of Waste</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Predictors: (Constant), Conflict of Interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td></td>
<td>1.465</td>
<td>.505</td>
<td></td>
<td>2.900</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.676</td>
<td>.130</td>
<td>.617</td>
<td>5.207</td>
</tr>
<tr>
<td>Conflict of Interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>a. Dependent Variable: Reduction of Waste</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.4 Loyalty and Respect for Rules and Regulations Impact on Reduction Waste

The second objective of the study aimed at determining the influence of loyalty and respect on waste reduction at NCPB. This section of the study aims to present the descriptive statistics for loyalty and respect statements. The section also shows the correlation results between loyalty and respect and waste reduction and also the regression between these two variables.
As shown in table 4.6, the descriptive summary indicates that the overall mean score for loyalty and respect for rules and regulations was 2.46 on a scale of 5 and a standard deviation of 1.089. According to the scale, the result means that loyalty and respect was practiced at NCPB to a large extent.

**Table 4.6: Loyalty and Respect for Rules and Regulations Descriptive Statistics**

<table>
<thead>
<tr>
<th>Loyalty and Respect statements</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement officials understand the Public Procurement and Asset disposal, 2015 Act, attendant regulations and policies pertaining to their profession and organization</td>
<td>97</td>
<td>2.22</td>
<td>1.052</td>
</tr>
<tr>
<td>There is adherence to the procurement rules, policies, regulation and procedures in NCPB leading to reduced audit queries</td>
<td>97</td>
<td>2.50</td>
<td>1.070</td>
</tr>
<tr>
<td>Staff who execute procurement process are trained and sensitized on the procurement rules, regulations and procedures at least once per quarter</td>
<td>97</td>
<td>2.96</td>
<td>1.115</td>
</tr>
<tr>
<td>The trained procurement staff cascade the procurement laws or regulations to departments initiating procurement process</td>
<td>97</td>
<td>3.04</td>
<td>1.115</td>
</tr>
<tr>
<td>The management has clearly defined ethical procurement standards which are in line with the Chartered Institute of Purchasing and Supply (CIPS) code</td>
<td>97</td>
<td>2.37</td>
<td>1.254</td>
</tr>
<tr>
<td>The ethical procurement standards are actively applied during the procurement process</td>
<td>97</td>
<td>2.85</td>
<td>1.210</td>
</tr>
<tr>
<td>The ethical procurement standards are actively monitored during the procurement process</td>
<td>97</td>
<td>3.04</td>
<td>1.115</td>
</tr>
<tr>
<td>Procurement function adheres to purchasing authorization limits</td>
<td>97</td>
<td>1.67</td>
<td>0.845</td>
</tr>
<tr>
<td>Procurement function complies fully with internal audits</td>
<td>97</td>
<td>1.67</td>
<td>0.967</td>
</tr>
<tr>
<td>Procurement function complies fully with external audits</td>
<td>97</td>
<td>1.74</td>
<td>0.999</td>
</tr>
<tr>
<td>Procurement function encourages and supports development of small local suppliers</td>
<td>97</td>
<td>2.48</td>
<td>1.169</td>
</tr>
<tr>
<td>Procurement officials stand by decisions that are in the organization’s interest even if they are unpopular</td>
<td>97</td>
<td>2.96</td>
<td>1.154</td>
</tr>
<tr>
<td><strong>Overall Mean Score</strong></td>
<td></td>
<td>2.46</td>
<td>1.089</td>
</tr>
</tbody>
</table>
The findings showed that procurement function adhered to purchasing authorization limits, procurement function complied fully with internal audits, and procurement function complied fully with external audits to a very large extent with mean scores of 1 out of a scale of 5. Additionally, the findings showed that procurement officials understood the Public Procurement and Asset disposal, 2015 Act, attendant regulations and policies pertaining to their profession and organization at a large extent by a mean score of 2.22 and standard deviation of 1.052. Also, statements from the respondents showed that the management had clearly defined ethical procurement standards which are in line with the Chartered Institute of Purchasing and Supply (CIPS) code at a mean score of 2.37 and standard deviation of 1.254. Similarly, findings indicated that procurement function encouraged and supported development of small local suppliers at a large extent by a mean score of 2.48 and standard deviation of 1.169.

Further findings indicated the trained procurement staff cascaded the procurement laws or regulations to departments initiating procurement process at a small extent by a mean score of 3.04 and standard deviation of 1.115. Correspondingly, the findings showed that ethical procurement standards were actively monitored during the procurement process at a small extent by a mean score of 3.04 and standard deviation of 1.115. Also, results indicated that officials who executed procurement process were trained and sensitized on the procurement rules, regulations and procedures at least once per quarter was practiced at a small extent as cited by a mean score of 2.96 and standard deviation of 1.115. Similarly, the outcomes indicated that procurement officials stood by decisions that are in the organization’s interest even if they are unpopular at a small extent as shown by a mean score 2.96 and standard deviation of 1.154.

Figure 4.5 shows the summary of significant results from the above statements where each of the statements of the statements that were implemented to a very large extent were that procurement function adheres to purchasing authorization limits as cited by 52.2 % of the sample, procurement function complies fully with internal audits as mentioned by 60.9 %, and that procurement function complies fully with external audits as cited by 58.7 %. The finding is a clear illustration that a large proportion of the respondents agreed that the procurement function at NCPB were loyal to and respected these practices of ethical practice in procurement.
The correlation results show that there was a positive and significant association between loyalty and respect and waste reduction ($r = 0.671$, $p = 0.000$) at NCPB as shown in Table 4.7. This finding means that an increase in loyalty and respect for rules and regulations would result in an increase in waste reduction.

**Figure 4.5: Loyalty and Respect to Rules and Regulations**

The findings from the linear regression show that the coefficient of determination ($R^2$) was 0.451 which means that loyalty and respect influenced changes of 45.1% in waste reduction as shown in Table 4.8. The ANOVA part of the table shows that the model was a good fit as the significance level was less than 0.05 ($p = 0.000$). The regression coefficients show that loyalty and respect for rules and regulations has a Beta value of 0.711. This means than a unit increase in loyalty and respect resulted in a 0.711 increase in reduction of waste and this was significant ($p = 0.000$).
Table 4.8: Loyalty and Respect and Reduction of Waste Correlation Results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.671a</td>
<td>.451</td>
<td>.438</td>
<td>.45316</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Loyalty and Respect

ANOVAa

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>7.413</td>
<td>36.098</td>
<td>.000b</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>95</td>
<td>.205</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>96</td>
<td>16.449</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Reduction of Waste
b. Predictors: (Constant), Loyalty and Respect

Coefficientsa

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.083</td>
<td>.501</td>
<td>2.159</td>
<td>.036</td>
</tr>
<tr>
<td>Loyalty and Respect</td>
<td>.711</td>
<td>.118</td>
<td>.671</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Reduction of Waste

4.5 Implications of Impartiality and Fairness on Reduction of Waste in NCPB

The third objective of the study was to examine the implications of impartiality and fairness on reduction of waste at NCPB. This section of the study aims to present the descriptive statistics for impartiality and fairness statements. The section also shows the correlation results between impartiality and fairness and waste reduction and also the regression between these two variables. The overall means score for this variable is 2.19 on a scale of 5 and a standard deviation of 1.041. This finding implies that impartiality and fairness in the procurement process was practiced at a large extent at NCPB.
Table 4.9: Impartiality and Fairness Descriptive Statistics

<table>
<thead>
<tr>
<th>Impartiality and fairness statements</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bidders have a clear understanding of the requirement and know how they will be evaluated</td>
<td>97</td>
<td>1.74</td>
<td>0.855</td>
</tr>
<tr>
<td>Information on procurement process is always kept confidential until the evaluation team reaches the</td>
<td>97</td>
<td>2.50</td>
<td>1.070</td>
</tr>
<tr>
<td>final conclusion and after the evaluation report is cleared by a designated approving authority</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff who execute procurement requirements make decision that are not biased and without preferential</td>
<td>97</td>
<td>2.72</td>
<td>1.109</td>
</tr>
<tr>
<td>treatment extended to individuals or organizations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All procurement requirements are considered on the basis of their compliance with the criteria of</td>
<td>97</td>
<td>2.37</td>
<td>1.218</td>
</tr>
<tr>
<td>the tender documents in terms of technical capability and price</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The procurement process is competitively based with the award going to the lowest evaluated bidder</td>
<td>97</td>
<td>2.33</td>
<td>1.076</td>
</tr>
<tr>
<td>The procurement department handles complaints from potential suppliers in a fair manner</td>
<td>97</td>
<td>2.78</td>
<td>1.246</td>
</tr>
<tr>
<td>Tenders are not rejected for reasons other than those specifically stated in the tender documents</td>
<td>97</td>
<td>2.30</td>
<td>1.113</td>
</tr>
<tr>
<td>Tenders are widely disseminated to increase the chances of a good market response, leading to the</td>
<td>97</td>
<td>2.30</td>
<td>0.986</td>
</tr>
<tr>
<td>award of competitively-priced contracts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procurement officials always make information on the public procurement process available to all</td>
<td>97</td>
<td>2.26</td>
<td>1.021</td>
</tr>
<tr>
<td>suppliers unless there are valid and legal reasons for keeping certain information confidential</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Penalties are clearly spelt out in the tender documents for non-adherence to procurement rules,</td>
<td>97</td>
<td>1.85</td>
<td>1.032</td>
</tr>
<tr>
<td>regulation, policies and procedures leading to reduced procurement malpractices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criteria for award of tenders are clearly stipulated in the tender documents to the participating</td>
<td>97</td>
<td>1.48</td>
<td>0.809</td>
</tr>
<tr>
<td>suppliers thus enhancing transparency and accountability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tender documents contain information that is dependable and free of ambiguities or bias</td>
<td>97</td>
<td>1.70</td>
<td>0.963</td>
</tr>
<tr>
<td><strong>Overall Mean Score</strong></td>
<td></td>
<td><strong>2.19</strong></td>
<td><strong>1.041</strong></td>
</tr>
</tbody>
</table>
The findings showed criteria for award of tenders were clearly stipulated in the tender documents to the participating suppliers thus enhancing transparency and accountability at a large extent by a mean score of 1.48 and standard deviation of 0.809. The results also indicated that tender documents contained information that was dependable and free of ambiguities or bias at a large extent as shown by the mean score of 1.70 and standard deviation of 0.963. Similarly, bidders had a clear understanding of the requirement and knew how they would be evaluated at a large extent as indicated by a mean score of 1.74 and standard deviation of 0.855. The results also indicated that penalties were clearly spelt out in the tender documents for non-adherence to procurement rules, regulation, policies and procedures leading to reduced procurement malpractices at a large extent as cited by a mean score of 1.85 and standard deviation of 1.032.

On the contrary, the findings showed that the procurement department handled complaints from potential suppliers in a fair manner at a small extent as evidenced by the mean score of 2.78 and standard deviation of 1.246. Again, staff who executed procurement requirements made decisions that were not biased and without preferential treatment extended to individuals or organizations at a small extent as shown by the mean score of 2.72 and standard deviation of 1.109.

Figure 4.6 shows that 65.2 % of the respondents believed the criteria of tenders are clearly stipulated in tender document to suppliers thus increasing accountability and transparency, 54.3 % agreed to a large extent that tender documents contained information that was dependable and free of ambiguities, and also 43.5 % agreed to a large extent that penalties are clearly spelt out on tender documents in case the procurement officers have not adhered to rules and regulations.
The correlation analysis shows that there existed a positive and significant association between impartiality and fairness and waste reduction \((r = 0.542, p = 0.000)\) at NCPB as shown in Table 4.10. This means that an increase in impartiality and fairness resulted to a linear increase in waste reduction at NCPB.

**Table 4.10: Impartiality and Fairness and Cost of Reduction Correlation Results**

<table>
<thead>
<tr>
<th>Cost Reduction</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impartiality and Fairness</td>
<td>.542**</td>
<td>.000</td>
<td>97</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

The simple linear regression indicates that the coefficient of determination \((R^2)\) was 0.294 which means that impartiality and fairness explained 29.4% of variation in waste reduction. The ANOVA part of the table shows that the model was a good fit as the significance was less than 0.05. Impartiality and fairness had a Beta value of 0.519 which means that a unit increase in impartiality and fairness result to a 0.519 increase in waste reduction at NCPB as shown in Table 4.11 and this was significant \((p = 0.000)\).
Table 4.11: Impartiality and Fairness and Cost of Reduction Regression Results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.542a</td>
<td>.294</td>
<td>.278</td>
<td>.51367</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Impartiality and Fairness

**ANOVA**<sup>a</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4.839</td>
<td>1</td>
<td>4.839</td>
<td>18.339</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>11.610</td>
<td>95</td>
<td>.264</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16.449</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Reduction of Waste

b. Predictors: (Constant), Impartiality and Fairness

**Coefficients**<sup>a</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.272</td>
<td>.426</td>
<td>5.327</td>
<td>.000</td>
</tr>
<tr>
<td>Impartiality and Fairness</td>
<td>.519</td>
<td>.121</td>
<td>.542</td>
<td>4.282</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Reduction of Waste
4.6 Chapter Summary

This chapter presented the results and findings of the study. The findings show that procurement officers did not fill written forms when they identified potential conflict of interest. In regard to loyalty and respect to rules and regulations showed that procurement function adheres to purchasing authorization limits, procurement function complies fully with internal audits, and procurement function complies fully with external audits to a very large extent. In terms of impartiality and fairness, the findings show that most of the respondents believed the criteria of tenders were clearly stipulated in tender document to suppliers thus increasing accountability and transparency. The regression findings indicate that loyalty and respect for rules had the greatest effect on reduction of waste followed by conflict and interest and the least factor was impartiality and fairness. The next chapter of the study presents the discussion, conclusions, and recommendations of the research.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter presents the discussion, conclusions, and recommendations for practice and recommendations for future research. The discussion, conclusions, and recommendations for practice are presented in line with the study research objectives.

5.2 Summary of the Study
The study sought to assess the relationship between ethical procurement and supply management process and its implication on reduction of waste in public sector organizations. Specifically, the study examined the contribution of ethical procurement practices including avoidance of conflict of interest, loyalty and respect for rules and regulations, and impartiality and fairness on reduction of waste at National Cereals and Produce Board (NCPB).

The study adopted an explanatory research design. The primary data was collected using quantitative data collection methods. Specifically, a structured questionnaire based on a 5 point likert scale was used. The data was analyzed using descriptive statistics, correlation, and linear regression analysis to assess relationships between the study variables. The target population of the study was 347 respondents selected using stratified random sampling technique. A sample size formula was used to determine the sample size of 185 but the actual sample size was 97 respondents indicating a response rate of 52.4 %. The data was analysed using descriptive statistics, correlation analysis, and regression analysis.

The first objective of the study was to assess how avoidance of conflict of interest affects reduction of waste in NCPB. The descriptive analysis showed that the overall mean score for avoidance of conflict of interest was 2.96 out of a scale of 5 which means that avoidance of conflict at NCPB was practiced to a large extent. The correlation analysis revealed positive and significant association between avoidance of conflict and waste reduction ($r = 0.617, p = 0.000$) at NCPB. The regression results further confirmed a positive effect of avoidance of conflict on waste reduction with a Beta value of 0.676.
The second objective of the study was to evaluate how loyalty and respect for rules and regulations contribute to reduction waste in NCPB. The descriptive analysis showed that the overall mean score for loyalty and respect for rules and regulations was 2.46 out of a scale of 5 which means that loyalty and respect for rules and regulations at NCPB was practiced to a large extent. The correlation analysis revealed positive and significant association between loyalty and respect for rules and regulations and waste reduction ($r = 0.671, p = 0.000$) at NCPB. The regression results further confirmed a positive effect of loyalty and respect for rules and regulations on waste reduction with a Beta value of 0.711.

The third objective of the study was to examine implications of impartiality and fairness on reduction of waste in NCPB. The descriptive analysis revealed that the overall mean score for loyalty and respect for rules and regulations was 2.19 out of a scale of 5 which means that loyalty and respect for rules and regulations at NCPB was practiced to a large extent. The correlation analysis revealed positive and significant association between loyalty and respect for rules and regulations and waste reduction ($r = 0.542, p = 0.000$) at NCPB. The regression results further confirmed a positive effect of loyalty and respect for rules and regulations on waste reduction with a Beta value of 0.519.

5.3 Discussion
5.3.1 Avoidance of Conflict of Interest Influence on Reduction of Waste in NCPB

The findings indicate that avoidance of conflict was in fact practiced to a large extent at NCPB. The results also showed that by avoiding conflict of interest at NCPB explained 38.1% of change in waste reduction which was the second highest influence among the three variables. The regression analysis also confirmed that an increase in avoidance of conflict and interest in procurement and supply chain process at NCPB would lead to a reduction in wastage. According to Handfield and Baumer (2006), despite there being different forms of unethical behavior within procurement and supply management, perhaps the most popular one is conflict of interest behavior. Once a person becomes an employee of a company or is associated to the company, they enter into a fiduciary relationship with the firm.

The descriptive findings indicated that NCPB had strict rules and policy regarding employees receiving gifts and this was practiced to a large extent. The findings also indicated that procurement officials were discouraged from accepting meals, gratuities, entertainment or
other favours paid for by suppliers. In addition, NCPB’s management was responsible in determining if the gift could either be accepted or if it was to be returned to the giver. The descriptive findings showed that NCPB allowed employees to receive gifts of specified nominal value.

This finding supports (Handfield and Baumer, 2006), study that indicated that taking or giving gifts potentially create conflict of interest or alternatively a perception of the same. Additionally, the findings back (Choo, 2017) study on the effects of ethical procurement and supply process in reducing waste of public resources in the Republic of Chile as it was found that avoiding bribery plays an ever increasingly important role in the supply chain especially in an economic downturn. Choo goes further and emphasises that in so doing the procurement function reduces cost of raw material and services hence allowing the organization competitively market the price of its finished goods to win in a business (Choo, 2017).

To facilitate guidance to employees, most companies include a conflict of interest statement within their corporate codes of ethics (Handfield and Baumer, 2006). For most companies, ethical codes include company ideals on a variety of issues, such as diversity and the environment, but conflict of interest statements are an important component of such codes. It is also good practice to have officials involved in the procurement process, including those participating in offer opening panels, evaluation committees or contracts committees sign, in advance of their duties, a declaration of no conflict of interest (Bayles, 2016). The findings agree with the guidelines where procurement officials and other officials executing procurement process do not use their office or knowledge gained from their official functions for private gain, financial or otherwise was practiced at large extent.

Conflicts of interest also arise in personal relationships. Amundsen (2009) argued that showing favoritism toward specific suppliers that share family background or personal relationships may have a significant harm to organizations. According to (Report of the parliamentary account committee on common wealth heads of government meeting, 2009), conflict of interest results in poor quality of materials purchased, likelihood of inflation of prices of goods procured and loss of government funds. The findings of the study agree with
the guidelines where procurement officials do not place procurements with firms which employ a member of the staff person's immediate family was practiced at a large extent.

It is significantly essential to have officials take part in the process of procurement not forgetting those taking part in offer opening panels and committees. Before embarking on their duties, they should declare no conflict of interest (Bayles, 2016). Findings from this study agree with the guidelines where officials involved in procurement fail to utilize the office or knowledge acquired from their official duties for personal enrichment, financial or otherwise was practiced at large extent. However, the findings disagree with past studies that show that companies have these written forms which the staff is supposed to indicate any potential conflict of interest. Although the NCPB has this function, the findings indicate that procurement staff and other officers executing procurement process were neither always immediately declaring any potential conflict of interest nor filling in the written forms when any potential sources of conflict arise.

Findings revealed that procurement staff resisted undue political pressure or otherwise in making decision at a small extent. This means that procurement officials were not able to make decisions independently and objectively as they were influenced by eternal forces including politicians or otherwise. The study finding is in line with Parliamentary Account Committee report (2009) where the Ministry of Works and Transport in Uganda opted to lease out vehicles at a cost of Ugandan Shillings. 4.17 billion for a period of one year (2007) by direct sourcing to favor Motor Care Uganda Limited because of a conflict of interest either among the officers involved in procurement or Cabinet Ministers’ interest in the purchase of the vehicles.

5.3.2 The Effect of Loyalty and Respect for Rules and Regulations on Waste Reduction

In regard to loyalty and respect for rules and regulations influence on reduction waste at NCPB, the findings showed that this variable contributed to 45.1 % of variation in reduction waste which was the largest change among the three variables. Therefore, among the three independent variables, loyalty and respect for rules and regulations had the greatest influence on waste reduction at NCPB. The public procurement is the primary procedure via which the government uses public resources, mainly money, by obtaining goods, services and works. Mazibuko and Fourie (2017) point out that each attempt must be geared to protect or
introduce checks that eliminate chances of malpractices during public procurement since governments all over the world process their procurements through the procurement unit.

A look at the descriptive statistics results showed that three rules and regulations were practiced at NCPB at a very large extent. These were: procurement function adheres to purchasing authorization limits; procurement function complies fully with internal audits; and procurement function complies fully with external audits. These findings agree with past studies that have shown the importance of complying with procurement rules and regulations that contribute to less waste in public procurement. For instance, in Morocco, Rwoti (2005) reported that proper use of procurement ethics was a significant problem for the government. The large proportion of finances flowing or moving via the public sector procurement may tempt or attract unethical practices.

The findings revealed that NCPB was to a small extent that the trained procurement staff cascade the procurement laws or regulations to departments initiating procurement process. This means that staff trained in ethical procurement did not enforce the laws and regulations to a great extent in the company. The study outcome is in line with the argument of Wilson (2016) who states that financial executives are more prone to integrate their organization’s ethics code into their strategic decision processes.

The study was interested in finding out about the adherence of the procurement function to rules and regulations at NCPB. The findings showed that procurement function adheres to purchasing authorization limits as cited by 52.2% of the sample, procurement function complies fully with internal audits as showed by 60.9%, and that procurement function complies fully with external audits as cited by 58.7%. The findings are clear illustration that the procurement function at NCPB was loyal to and respected these practices of ethical practice in procurement process. On the other hand, finding from this study also contradict previous studies including Hunja (2011) who conducted his research in Malaysia and noted that procurement officers were largely to be blamed for malpractice and non-compliance to the procurement policies and procedures.

The finding discovered at a small extent that staff who execute procurement process are trained and sensitized on the procurement rules, regulations and procedures at least once per quarter. This contradicted Fourie (2015) study that showed that there is the need for procurement officials...
to maintain a clear understanding of legal concepts regulating their actions as organizational representatives. Further, Fourie (2015) observed that whatever process is used, there must be a measurement to assess the officials understanding of the ethical procurement practices. Eltantawy and Giunipero (2009) pointed out that organizations should aim for 100 percent compliance failure to meet minimum standards should result in remedial training or termination of employment in the worst cases.

Further findings revealed that the ethical procurement standards are actively monitored during the procurement process at a small extent. Further, the results indicated that the ethical procurement standards are actively applied during the procurement process at a small extent. These outcomes disagree with CIPS principles and SESM conduct and its principles of social responsibility. The CIPS principles maintain that ethical procurement practices must be adhered to throughout the entire procurement process. The results also disagreed with the EU Procurement Rules and Regulations, 2011, Procurement Guidelines under IBRD Loans and IDA Credits & Grants in collaboration with the World Bank, the European Bank for Reconstruction and Development (EBRD) and the Inter-American Development Bank (IDB). These guidelines require that the entire procurement process be actively monitored and the ethical practices maintained.

5.3.3 Implications of Impartiality and Fairness on Reduction of Waste in NCPB
The third objective of the study was to examine implications of impartiality and fairness on reduction of waste in NCPB. In regard to which the findings showed that the respondents agreement that impartiality and fairness was practiced to a large extent in the organisation. The regression showed that impartiality and fairness had the least influence on waste reduction at NCPB among the three study variables. Impartiality is a key requirement and that suppliers need to be handled in a just and non-biased way (International Civil Service Advisory Board, 2017). On the other hand, fairness within public procurement is a duty of the public sector where the rationality of the administration is experimented against the fairness of the process. According to Fox (2010), impartiality and fairness are never given, but are always quests that need to be reinvigorated and restructured with time and they require self-awareness and command.

The findings showed at a large extent that criteria for award of tenders were clearly stipulated in the tender documents to the participating suppliers thus enhancing transparency and accountability.
This finding was in line with the guidelines of International Civil Service Advisory Board (2017) that stipulate that all information entailing the process of public procurement should be availed to every stakeholder including contractors, suppliers, service providers and public at large unless there are specific restrictions. According to International Civil Service Advisory (2017), whenever there is a request from a specific supplier on additional information, every other supplier involved should be notified within the same period.

The results also indicated that tender documents contained information that was dependable and free of ambiguities or bias at a large extent. This agreed with the study conducted by Jorge (2013), indicating that in the event an announcement is made concerning any public procurement on any medium, it should contain sufficient information for interested parties about closing dates, mode of evaluation, scope, deadlines, queries, place of submission etc. The finding again agreed with (Orlitzky et al. 2003) study that showed that all information provided by the procuring entity should be sufficient and not misleading to bidders. The respondents statements at a large extent indicated that tender documents contained information that is dependable and free of ambiguities or bias.

The finding showed at a large extent that bidders had a clear understanding of the requirement and knew how they would be evaluated. This agreed with the study done by Cox, La Caze, & Levine (2003) that showed that bidders should clearly know of what is required of them and the manner in which they get evaluated. Also, Cox, La Caze, & Levine (2003) pointed out that the mode of evaluation and selection should clearly be stipulated in tender documents and thus should never be changed unless necessity arises. In the event changes are mandatory, then, amendments should be made, published and made available to every interested bidder. There has to be sufficient time that enables bidders to make adjustments in the event of changes in the tender documents for them to meet deadlines.

The findings illustrated that nearly 65.2 % of the participants were convinced that the criteria of tenders are clearly stipulated in tender document to suppliers thus increasing accountability and transparency, 54.3 % agreed to a large extent that tender documents contained information that was dependable and free of ambiguities, and also 43.5 % agreed to a large extent that penalties are clearly spelt out on tender documents in case the
procurement officers have not adhered to rules and regulations. (Transparency International, 2017) suggests that procurement officials should.

These findings agree with past research such as (Transparency International, 2017) who agreed that public procurement needs must be broadly relayed to elevate the probability of productive response from the market, resulting in introduction of contracts that are competitively price.

5.4 Conclusion

5.4.1 Avoidance of conflict of interest influence on reduction of waste in NCPB

The findings show that avoidance of conflict of interest had a significant effect on reduction of waste at NCPB. The findings also revealed that NCPB had strict rules and policy regarding employees receiving gifts and these were practiced to a large extent in the organisation. The findings showed that most of the respondents felt that procurement staff did not write or fill any forms that they were required to fill when they came across any potential conflict of interest. It is this study’s conclusion that the strict rules and policy on receiving gifts had a positive influence on reducing waste in the organisation. Furthermore, the study concludes that avoidance of conflict of interest had the second largest effect on waste reduction at NCPB.

5.4.2 Loyalty and respect for rules and regulations influence on reduction waste

The results indicated that loyalty and respect for rules and regulations had an influence on waste reduction at NCPB. The findings further showed that procurement function adheres to purchasing authorization limits and procurement function complied fully with internal audits and this had a significant contribution towards waste reduction. The adherence of the procurement function towards rules and regulation increased the reduction to waste. The study therefore concludes that adhering to internal audits and authorization limits had a significant effect on reduction waste at NCPB. The study also concludes that loyalty and respect for rules and regulations had the greatest effect on waste reduction at NCPB.

5.4.3 Implications of impartiality and fairness on reduction of waste in NCPB

The results revealed that impartiality and fairness had an effect on reduction of waste at NCPB. specifically, the findings showed that criteria for award of tenders were clearly
stipulated in the tender documents to the participating suppliers thus enhancing transparency and accountability to a very large extent. The study findings reveal that there was a high level of accountability and transparency with regard to the procurement process. The study therefore concludes that clear stipulations in tender documents resulted to waste reduction at NCPB. The study further concludes that impartiality and fairness had the least impact on waste reduction at NCPB which can be attributed to the accountability and transparency that exists in the procurement process and thus has no large effect on reduction in waste since it is one of the best practices of procurement in the firm.

5.5 Recommendations

5.5.1 Recommendations for Improvements

5.5.1.1 Avoidance of conflict of interest influence on reduction of waste in NCPB
The findings showed that avoidance of conflict resulted in waste reduction at NCPB. However, the descriptive findings showed that procurement officials or officers executing procurement process did not immediately declare any potential conflict of interest. The study, therefore recommends that the procurement officers should be trained on sensitised on reporting on any arising cases of conflict of interest during the procurement processes at NCPB.

5.5.1.2 Loyalty and respect for rules and regulations influence on reduction waste
The findings found a positive influence of loyalty and respect for rules and regulations on waste reduction at NCPB. The descriptive findings however also showed that the ethical procurement standards were actively monitored during the procurement process to some extent. The study, therefore recommends for the management of NCPB to enforce monitoring of procurement processes at NCPB. This can be done by increasing the staff and strengthening the M&E system in the procurement department.

5.5.1.3 Implications of impartiality and fairness on reduction of waste in NCPB
The findings found a positive effect of impartiality and fairness on reduction of waste at NCPB. However, the descriptive findings show that the procurement department handled complaints from potential suppliers in a fair manner only to some extent. The study therefore recommends that NCPB procurement department should be more proactive to handling
complaints from suppliers by providing avenues and channels that suppliers can follow when making a formal complaint.

5.5.2 Recommendations for Further Research

This study reviewed the influence of ethical procurement and supply management process on waste in public sector: a case of National Cereals Produce Board (NCPB). The study recommends for further similar research in all the other state agencies in Kenya. The study was restricted to influence of avoidance of conflict of interest, loyalty and respect for laws, and objectivity and fairness as components of ethical procurement. However, there is need for further research on other elements of ethical procurement such as confidentiality of information, conducting due diligence, avoidance of appearance of impropriety by behaving appropriately at work and transparency during procurement process.
REFERENCES


Committee Development (OECD)/Development Assistance Committee/ World Bank.


APPENDICES

APPENDIX 1: QUESTIONNAIRE

INTRODUCTION

This questionnaire has been designed for the purpose of academic research only. It aims to establish the implications of ethical procurement and supply management process on waste in public sector organizations. Please answer the questions as honestly as possible and note that the data that you provide will be treated with utmost confidentiality and privacy.

SECTION A: GENERAL INFORMATION

Answer the following questions by ticking alongside your choice.

1. What department do you belong to in the organisation?
   - Logistics ( )
   - Accounting ( )
   - Administration ( )
   - Depot Manager ( )
   - Finance ( )
   - Quality Assurance ( )
   - ICT ( )
   - Regional Manager ( )
   - Compliance ( )
   - Corporate Affairs ( )
   - Monitoring and Evaluation ( )
   - Personal Secretary ( )
   - Procurement ( )
   - Sales and Marketing ( )
   - Technical Department ( )

2. What level of the organisation do you belong to?
   - Top management ( )
   - Middle management ( )
   - Low management ( )

3. How long have you worked in the organization?
   - 3-10 years ( )
   - 11-18 years ( )
   - More than 19 years ( )

4. What is the highest level of your education?
   - Certificate ( )
   - Diploma ( )
   - Bachelor’s Degree ( )
   - Master’s Degree ( )
   - PhD ( )
**SECTION B: INDEPENDENT VARIABLES**

Extent to which avoidance of conflict of interest, loyalty and respect for rules and regulations, and impartiality and fairness are practiced in National Cereals and Produce Board (NCPB). Please indicate the extent to which you concur with the following statements in regard to carrying out procurement ethics in your organization’s procurement process.

Use the scale of: 1= very large extent, 2= large extent, 3= small extent, and 4= very small extent, and 5 = N/A for Not Applicable

<table>
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<tr>
<th>No</th>
<th>ITEM DESCRIPTION</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (N/A)</th>
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<tr>
<td>A</td>
<td><strong>Conflict of Interest</strong></td>
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</tr>
<tr>
<td>1.</td>
<td>Procurement officials or officers executing procurement process always immediately declare any potential conflict of interest</td>
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<td>2.</td>
<td>All the officers executing procurement process fill a written form when they perceive a potential conflict of interest</td>
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<td>3.</td>
<td>Officers who declare any potential conflict of interest do not participate in the conflicting procurement process</td>
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<td>4.</td>
<td>Procurement officials executing procurement process do not use their office or knowledge gained from their official functions for private gain, financial or otherwise</td>
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<td>5.</td>
<td>Any other officials executing procurement process do not use their office or knowledge gained from their official functions for private gain, financial or otherwise</td>
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</table>
6. Procurement officials do not place procurements with firms which employ a member of the staff person's immediate family

7. Procurement officials do not place procurement with firms in which the staff holds a significant financial interest

8. Procurement staff resist undue political pressure or otherwise in making decision

9. NCPB has strict rules and policy regarding employees receiving gifts

10. Procurement staff are discouraged from accepting meals, gratuities, entertainment or other favors paid for by suppliers

11. Officials negotiating on procurement requirements put the interest of the employer first

12. It is the management’s responsibility to determine if the gift could be accepted or if it should be returned to the giver

13. NCPB allows employees to receive gifts of specified nominal value

15. Procurement officials understand the Public Procurement and Asset disposal, 2015 Act, attendant regulations and policies pertaining to their profession and organization
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<tr>
<td>16.</td>
<td>There is adherence to the procurement rules, policies, regulation and procedures in NCPB leading to reduced audit queries</td>
<td></td>
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<td>17.</td>
<td>Staff who execute procurement process are trained and sensitized on the procurement rules, regulations and procedures at least once per quarter</td>
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<td>18.</td>
<td>The trained procurement staff cascade the procurement laws or regulations to departments initiating procurement process</td>
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<td>19.</td>
<td>The management has clearly defined ethical procurement standards which are in line with the Chartered Institute of Purchasing and Supply (CIPS) code</td>
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<td>20.</td>
<td>The ethical procurement standards are actively applied during the procurement process</td>
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<td>21.</td>
<td>The ethical procurement standards are actively monitored during the procurement process</td>
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<td>22.</td>
<td>Procurement function adheres to purchasing authorization limits</td>
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<td>23.</td>
<td>Procurement function complies fully with internal audits</td>
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<td>24.</td>
<td>Procurement function complies fully with external audits</td>
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<td>25.</td>
<td>Procurement function encourages and supports development of small local suppliers</td>
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<tr>
<td>26.</td>
<td>Procurement officials stand by decisions that are in the organization’s interest even if they are unpopular</td>
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<tr>
<td></td>
<td><strong>Impartiality and Fairness</strong></td>
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<tr>
<td>28.</td>
<td>Bidders have a clear understanding of the requirement and know how they will be evaluated</td>
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<tr>
<td>29.</td>
<td>Information on procurement process is always kept confidential until the evaluation team reaches the final conclusion and after the evaluation report is cleared by a designated approving authority</td>
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<tr>
<td>30.</td>
<td>Staff who execute procurement requirements make decision that are not biased and without preferential treatment extended to individuals or organizations</td>
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<tr>
<td>31.</td>
<td>All procurement requirements are considered on the basis of their compliance with the criteria of the tender documents in terms of technical capability and price</td>
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<tr>
<td>32.</td>
<td>The procurement process is competitively based with the award going to the lowest evaluated bidder</td>
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<tr>
<td>33.</td>
<td>The procurement department handles complaints from potential suppliers in a fair manner</td>
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<tr>
<td>34.</td>
<td>Tenders are not rejected for reasons other than those specifically stated in the tender documents and the procurement rules</td>
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<td>35.</td>
<td>Tenders are widely disseminated to increase the chances of a good market response, leading to the award of competitively-priced contracts</td>
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<td>36</td>
<td>Procurement officials always make information on the public procurement process available to all suppliers unless there are valid and legal reasons for keeping certain information confidential</td>
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<td>37</td>
<td>Penalties are clearly spelt out in the tender documents for non-adherence to procurement rules, regulation, policies and procedures leading to reduced procurement malpractices</td>
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<td>38</td>
<td>Criteria for award of tenders are clearly stipulated in the tender documents to the participating suppliers thus enhancing transparency and accountability</td>
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<td>39</td>
<td>Tender documents contain information that is dependable and free of ambiguities or bias</td>
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</table>
## SECTION B: DEPENDENT VARIABLE

<table>
<thead>
<tr>
<th>No</th>
<th>REDUCTION OF WASTE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (N/A)</th>
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<tbody>
<tr>
<td>A.</td>
<td>Reduction of Cost</td>
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<tr>
<td>1.</td>
<td>Most of the strategic contracts are awarded after going through open and competitive process</td>
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<td>2.</td>
<td>Prices paid for the goods and services are in alignment with the market prices and Public Procurement Regulatory Authority’s index price</td>
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<td>3.</td>
<td>Contracts provisions, pricing agreements, terms and conditions remain unchanged for over 90 percent of the signed contracts</td>
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<td>4.</td>
<td>Specifications for a high value purchasing are made based on the detailed understanding of total cost of acquisition of the projects</td>
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<td>5.</td>
<td>Benchmarking data from public and private organizations is used to undertake price comparisons on key goods and services</td>
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<td>6.</td>
<td>NCPB has identified and developed strategic partners for collaborative procurement and can demonstrate measurable cashable benefits over a period of one (1) year</td>
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<td>7.</td>
<td>The procurement function most of the times purchases goods and services below the set budgets leading to efficiency</td>
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<td>8.</td>
<td>Efficient and modern procurement practices are used, including timely supply of good quality products and inventory management to minimize on inventory holding costs are being used</td>
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</table>
9. Suppliers are always paid in time i.e. thirty (30) days after successful delivery of goods and services as stipulated in the contract

10. Suppliers do not chase for their payments in finance department as payment is processed on a first-come-first-served basis

**B Quality**

1. Users’ complaints on delivered goods and services are extremely minimal

2. Suppliers deliver the correct goods and services as per the contract terms and conditions leading to low non-conformances and rejects

3. Users’ satisfaction level of delivered goods and services is at the highest

4. Procurement department procures goods and services that fulfill or exceed the requirements of the internal customers/user departments

5. Delivered goods and services are thoroughly inspected and accepted through as per the regulations and rules

6. The personal interests at the various stages of procurement process affect quality of goods procured in the organization

7. The procurement staff have been certified by the professional body thus there is quality of procured goods and services in the organization

8. Procurement function is represented in top-management where it is fully involved in early
purchase process i.e. designing specifications, identifying estimated cost of major strategic goods and services etc.

9. Procurement professionals acknowledge and device strategies for managing complex challenges thus increasing quality of procured goods and services

10. NCPB’s evaluation process of the tender documents and the product’s or service’s effectiveness is evaluated separately from the price, and that the price is considered only after the completion of the evaluation process

C **Delivery of Goods and Services**

1. Most of the contracted suppliers deliver goods and services as per the expected lead times

2. Most of the contracted suppliers deliver goods and services in the right quality, quantity and place

3. There are no frequent delays in executing procurements i.e. from requisition stage to delivery of goods stage

4. Most of the frequently used products have framework contracts to reduce user requisition lead times

5. Tender processing that include evaluation of tender bids, awards and contracting etc is undertaken as per the time stipulated in the tender documents, rules and regulations

6. Procurement officials are qualified and empowered by management to acquire new
The organization’s ERP system (Navision 2017) has improved digitizing the whole procurement cycle thus increasing efficiency.

Modern inventory strategies of reduced inventory levels and on-time deliveries are practiced and thus improve delivery of goods and reduce their handling costs.

NCPB has outsourced major services like catering, cleaning etc to improve efficiency of their delivery.

Inspection of goods sometimes occurs at the supplier premises in order to reduce length of procurement cycle.