

# Enhancing Environmental Sustainability through Public Procurement: A Case Study of the National Environment Management Authority

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## ABSTRACT

The researcher examines the impact of public procurement on environmental concerns. The purpose of the study was to find out the impact of public procurement on environmental concerns. This study focused on the National Environment Management Authority as a case study. This study might help the National Environment Management Authority better advise the public on how to protect the environment through minimizing, reusing, and recycling the environment. The study was both descriptive and analytical, and the following instruments were used for collecting data: interviews, questionnaires, and documentary reviews. A sample section was used to select respondents who could participate in the research. The researcher recommends two types of public procurement. The government was to set minimum environmental standards for the procurement of a variety of goods. These standards were mandatory within the central government departments and agencies, as well as elsewhere in the public sector. The government was committed to sustainable procurement, which means only purchasing goods and services that are needed and buying items whose production, use, and disposal minimize negative impacts on the environment and society. Procurement is an important tool for helping a government meet its targets for operating sustainably, for example, by minimizing its use of energy and carbon dioxide emissions, water consumption, and waste levels, and increasing its recycling rates. Sustainable procurement also offers the opportunity and power to influence suppliers and the products they develop and design for the wider benefit of the economy and the environment. Partnership is a long-term collaborative form of relationship that is based on a high level of trust. The reason for this relationship with suppliers is risk reduction and product development to achieve better solutions.

**Keywords:** Public procurement, Environment Management, Public law, Climate change

## INTRODUCTION

Public procurement is the process used by governments, regional and local public authorities or bodies governed by public law (financed, supervised, or managed for more than 50% by public authorities) to obtain goods and services with taxpayer money. An informative document explains in detail the purpose and use of Green Public Procurement. Detailed rules for public procurement have been established at the national level through the Public Procurement and Disposal of Assets Act [1, 2] to ensure the best value for money, equal treatment of bidders, and transparency of specifications. 'Best value' in this sense can mean the best price, and best quality, and should also include the best environmental value. The law is now in operation, and all Government departments and other Government-owned bodies are obliged to follow the law. The law emphasizes best practices, including procurement and disposal principles, rules,

administrative review systems, and Codes of Conduct, as well as the suspension of providers for offenses and disciplinary measures against public officers who commit malpractices. The law is also complemented by Regulations, Guidelines, Forms, and Standard Bidding Documentation. These serve to assist the procuring and disposing entities and providers of services, supplies, and works in carrying out procurement to avoid issues associated with the environment [3]. According to the Public Procurement and Disposal of Assets Authority Act [1], government departments and their agencies spend on the procurement of non-capital goods and services. The government is committed to sustainable procurement, which means only purchasing goods and services that are really needed and buying items whose production, use, and disposal minimize the negative impact on the environment and society. Procurement is an

important tool for helping the government meet targets for operating sustainably across the government estate, for example, by minimizing its use of energy emissions, water consumption, and waste levels, and increasing its recycling rates. Sustainable procurement also offers the opportunity and purchasing power to influence suppliers and the products they develop and design, for the wider benefit of the economy and the environment. In particular, minimizing the environmental impact of procurement practices is one of the tools for mitigating climate change. Sustainable procurement is all about considering social and environmental factors alongside financial factors when making purchasing decisions [4]. It involves looking beyond the traditional economic parameters and making

decisions based on the whole life cost, associated risks, measures of success, implications for society and the environment. Making decisions in this way may require strategically setting environmental factors into a broader procurement context that includes value for money and performance management. Green Public Procurement means that contracting authorities and entities take environmental issues into account when tendering for goods or services. Green Public Procurement should not be mistaken for Sustainable Public Procurement, which adds social and ethical issues to environmental ones. However, many public authorities adopt an integrated approach by promoting sustainable public procurement.

#### **Purpose of the Study**

The purpose of the study was to establish the relationship between public procurement and

environmental concerns, focusing on the National Environment Management Authority.

#### **Research Objectives**

The research was carried out with the following objectives:

To establish the relationship between public procurement and environmental concerns.

To examine the challenges facing public procurement regarding environmental concerns.  
To identify other measures to be used in the protection of the environment.

#### **Research Questions**

The research aimed to answer the following questions:

What is the relationship between public procurement and environmental concerns?

What are the challenges facing public procurement regarding environmental concerns?  
What measures should be used in the protection of the environment?

#### **Significance of the Study**

The study may help promote transparency and accountability in public procurement-related programs, including environmental protection. Additionally, the study may assist the National Environment Authority in providing better guidance to the public on reuse and recycling, thus positively impacting the environment. Furthermore, this study is important as it fulfils the researcher's requirement

for the award of a Bachelor's degree in Supplies and Procurement. Moreover, other researchers, students of Kampala International University, lecturers, and administrators can refer to it for further study. Lastly, scholars and researchers who have analyzed the research findings can identify areas that require additional research.

### **LITERATURE REVIEW**

#### **To Establish the Relationship Between Public Procurement and Environmental Concerns**

The relationship between public procurement and environmental concerns is crucial for governments to meet their targets for operating sustainably. In 2003, the government spent resources on non-capital goods and services, with a commitment to sustainable procurement. The Department for Environment, Food, and Rural Affairs (Defra) develops government policy on sustainable development, products, and sustainability policies[5]. The Office of the Government (OGC) supports sustainable procurement in central government and four of the biggest procured governments. The UK has set a goal to be

recognized as a leader in sustainable procurement across EU member states, but measures for international benchmarking are still under development. In 2006, the government established a sustainable procurement task force to assess progress in sustainable procurement. However, only NHS PASA claimed to be at this level by that date. The Kenyan government implemented reforms in 2003 to address inefficiency in the use of public resources and weak governance institutions. These reforms included anti-corruption strategies, the Public Officer Ethics Act, the Anti-Corruption and Economic Crimes Act, the Financial Management

Act, and the Public Procurement and Disposal Act. The 2005 Independent Procurement Review identified several critical problems with Kenya's procurement system, leading to the enactment of the Public Procurement and Disposal Act and the creation of the Public Procurement Oversight Authority (PPOA)[6]. The Kenya Threshold Program (TP) was approved in 2007 to support public procurement reform, with a special focus on the Ministry of Health. The principal GoK partners in the implementation of the TP will be the Ministry of Finance, the PPOA, the Ministry of Health, the

Kenya Medical Supplies Agency, and the Kenya Institute for Public Policy Research and Analysis[7]. Procurement has become a crucial aspect of corporate performance, with increasing attention from senior management. Andreas Gocke, BCG partner and managing director, discussed the critical challenges facing procurement organizations over the next decade, including training and employee development, managing global sourcing offices, and ensuring collaboration across corporate departments.

#### **What Are the Challenges Facing Public Procurement on Environmental Concerns**

Legislative issues affect sustainability issues at various stages of the procurement process, such as specification, selection of tenderers, contract award, and contract management. EU rules allow public bodies to specify sustainable options, provided they do not distort competition or discriminate against products and suppliers from other EU Member States or elsewhere in the UK. Selection criteria must focus on candidates' economic and financial standing and technical capacity, while CSR issues must be directly related to the performance of the contract[8]. Contract management allows authorities to work cooperatively with suppliers to reduce their environmental impact and supply chain

by reducing packaging, delivery frequency, scheduling, or addressing hazardous material content in products. Social issues can be incorporated earlier in the procurement process, such as ensuring accessibility for disabled users or catering for special diets [9]. Economic issues are not permitted under EC rules, but it is permissible to remove obstacles that might prevent suppliers from competing for public business. Public bodies can restrict participation in a tendering exercise to only supported factories or businesses, but this does not mean contracts can be placed with particular factories or businesses without competition.

#### **Establish Other Measures to be used in Protection of the Environment**

The Environmental Management System (EMS) is a crucial tool for addressing environmental issues. It involves various measures such as Type II Environmental Labeling, Type III Environmental Product Declaration, ISO 14001, Environmental Management Accounting, Green Public Procurement (GPP), Ecodesign, Life Cycle Assessment (LCA), Environmental Benchmarking, voluntary environmental agreements, environmental reporting, evaluation of cleaner production possibilities, Monitoring and Targeting (M&T), voluntary instruments, and interconnectable voluntary instruments[10]. Voluntary instruments can be combined with other environmental protection instruments, such as IPPC and CP (EMAS), to improve prevention and eco-effectiveness. Corporate Social Responsibility (CSR) is another concept that integrates social and environmental concerns in business operations. OHSAS 18001 (Occupational Health and Safety

Management System) can be effectively combined with Quality Management Systems (QMS) and EMS. In the case of Adicho and Sons of Lira and Freedom Associates and Auctioneers of Kampala, the public procurement authority suspended two firms for fraud practices. This highlights the need for effective monitoring and evaluation of public procurement systems, identifying risks and vulnerable points at each stage of the procurement or disposal process, emphasizing political commitment and support from the highest levels of government, and building partnerships to combat corruption. The Public Procurement and Disposal of Assets Act of 2003 established the Public Procurement and Disposal Authority (PPDA) as the national regulatory body for public procurement. The PPDA began with a capacity-building strategy to promote awareness of the PPDA Act through training programs for PDEs, providers, and CSOs involved in anti-corruption efforts.

### **METHODOLOGY**

#### **Research Design**

The researcher used both qualitative and quantitative methods of data collection and analysis.[11]

#### **Area of Study**

The study was carried out at the National Environment Management Authority. Most of the respondents were obtained from accounting officers,

secretariats, suppliers, contract committees, and various public sectors of government institutions.

**Study Population**

The population under study comprised 50 respondents, selected from different public procurement sectors.

**Sampling Design**

The researcher used simple random sampling techniques, considering whether one is on probation or confirmed. Respondents were identified based on their willingness and availability to participate in the exercise or study. The various sectors of public procurement formed samples where respondents were selected randomly.

**Data Collection Instruments**

The data collection instruments were primarily self-administered questionnaires, consisting of open and closed-ended questions requiring respondents to answer to the best of their knowledge. Interviews were also conducted for data collection, where the researcher asked questions and respondents answered from selected sectors of public procurement.

**Interviews**

An interview guide was used, especially with secretariats, accounting officers, and contract committees. Face-to-face interviews were conducted with the respondents. The researcher also explained to the respondents why the study was carried out. The research preferred this method for face-to-face interaction with the respondents and to ask probing questions relevant to the study.

**Questionnaires**

These were pre-formulated sets of written questions to which respondents recorded their answers. It is an efficient data collection mechanism when the researcher knows exactly what is required and how

to measure the variables of interest. Questionnaires can be administered personally or mailed to respondents. For this case study, the questionnaire was self-administered to the targeted respondents. Questionnaires were preferred because they saved time, especially when respondents from different places in the town council were grouped together, enabling straightforward answers and easy evaluation.

**Observation**

In addition to interviews and questionnaires, observation enabled the researcher to gather data without asking questions by observing people in their natural work environment and recording their behaviors. The researcher could play one of two roles: a non-participant observer or a participant observer. As a non-participant observer, the researcher collected data in the role of a pure researcher without trying to become an integral part of the procurement process.

**Research Procedure**

The researcher obtained an introduction letter from Kampala International University, School of Business and Management, to the National Environment Management Authority. Permission was granted by the District authorities to allow the researcher to conduct this study. Participants willing to provide information were guided through the questionnaire filling process, and questions were asked by the researcher for clarification.

**Data Analysis and Presentation**

After the data collection, only correctly filled questionnaires were recorded, edited, and analyzed. Analyses were carried out using frequencies and percentages, and the findings were presented using tables.

**RESULTS**

**Respondents' Characteristics**

Preliminary findings about the respondents covered education, and sections in government institutions. variables such as age, sex, marital status, level of The findings are presented in Tables 1 to 14.

**Table 1: Findings on the age of the respondents**

Age range	Frequency	Percentage
20-26	5	20
26-30	25	50
31- above	20	30
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary data

Table 1 shows that many of the workers were in the medium age group (between 26-30). According to the research, there were few respondents in the ages of 20-26, where the youths who didn't have viable

capital to start up a business entity resided. The data provided in Table 1 indicates that all respondents

were mature adults capable of comprehending the questions put to them, making the data reliable.

**Table 2: Findings on the sex of the respondents**

Sex	Frequency	Percentage
Males	39	65
Females	11	35
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary data

Findings on Table 2 show that there were more male staff than females, with percentages of 65% and 35% respectively. This is because domestic work is often assigned to females. One respondent revealed that females have higher chances of breaking the glass ceiling if involved in the procurement process.

**Table 3: Findings on the marital status of the respondents**

Gender category	Frequency	Percentage
Married	45	90
Single	5	10
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary data

Table 3 indicates that the majority of the staff are married (90%) compared to the single ones (10%).

According to one respondent, most of the staff are married because they work to support their families.

**Table 4: Findings on the education level of the respondents**

Level of Education	No. of Respondents	Percentage
Primary	5	13
Secondary	20	40
Diploma	10	30
Graduate	15	17
<b>Total</b>	<b>50</b>	<b>100</b>

Source: Primary data

Table 4 shows that most of the respondents were literate, with percentages of 13% for primary leavers, 40% for secondary, 30% for diploma, and 17% for

graduates. This implies that the respondents were able to comprehend the questions, making the responses valid and reliable.

**Table 5: Findings on the departments or sections respondents belong to**

Department/sectors	Frequency	Percentages
Finance	0	0
Administration	0	0
Suppliers/local communities	50	100
Law enforcement	0	0
<b>Total</b>	<b>50</b>	<b>100</b>

**Source: Primary data**

Table 5 indicates that the questionnaire forms were distributed to suppliers and other local communities only, as they were the only respondents involved in answering the questionnaire.

**Table 6: Findings on opinions of the respondents on the effective public procurement policy**

Procurement policy	Frequency	Percentage
Yes	30	60
No	20	40
Total	50	100

**Source: Primary data**

Table 6 shows that 60% of the respondents understand the public procurement policy used in the national environmental management authority, while 40% believe that most suppliers do not understand sustainable procurement.

**Table 7: Findings on the response for the period worked in the organization**

Response from staffs	Frequency	Percentage
Six month	0	0
One year	0	0
Two year	10	20
More than two year	30	60
Non	10	20
Total	50	100

**Source: Primary data**

Table 7 reveals that respondents who worked for more than two years (60%) were considered to have appropriate information about the organization compared to those who worked for shorter durations.

**Table 8: Findings on how environment assessment forms had been delivered to the public**

Mode of communication	Frequency	Percentage
Verbal	2	4
Written	48	96
<b>Total</b>	<b>50</b>	<b>100</b>

**Source: Primary data**

According to Table 8, 48 respondents, constituting 96%, revealed that environmental assessment forms are delivered to the public in written form. These forms contain categories under which the environment is to be protected, guidelines on public participation, and instructions on how to respond to environmental issues to the National Environment

Management Authority office. Two respondents noted that environmental assessment forms should not be delivered to the public in verbal form because they might not be understood due to inadequate knowledge of environmental concerns. Therefore, the authorities concerned need to go door-to-door collecting information.

**Table 9: Findings on whether respondents understand sustainable procurement**

Understand sustainable procurement	Frequency	Percentage
Yes	5	10
No	45	90
<b>Total</b>	<b>50</b>	<b>100</b>

**Source: Primary data**

According to Table 9, 45 respondents, representing 90%, informed the researcher that most of them understood sustainable procurement due to the differences in policies imposed by the government, such as packaging, recycling, and reuse, which have a positive impact on the environment. On the other

hand, 5 respondents, representing 10%, stated that they do not understand sustainable procurement due to a lack of knowledge about it. They suggested that the government should educate public institutions about sustainable procurement and its importance to economic development.

**Table 10: Findings on the effects of the environment**

Category response	Frequency	Percentage
Yes	40	80
No	10	20
<b>Total</b>	<b>50</b>	<b>100</b>

**Source: Primary data**

According to the findings in Table 10, 40 respondents said that public procurement affects them much more negatively than positively because they have not committed themselves to

understanding and managing the environmental and social impact on operations, including the public procurement of goods and services. However, 10 respondents claimed that they didn't feel the impact.

**Table 11: Findings on the methods commonly used to protect our environment**

Methods	Frequency	Percentage
Recycle	10	20
Reuse	35	70
Package	5	10
<b>Total</b>	<b>50</b>	<b>100</b>

**Source: Primary data**

Findings in Table 11 show that the majority of the respondents, 70% in total, stated that the methods used, such as recycling and reuse, are effective in minimizing waste. These methods are important because they allow for the recycling of materials into new products and the reusing of containers or boxes for other purposes, resulting in a positive impact on the environment. Additionally, 10 respondents

mentioned that the government should play a role in influencing suppliers and the development and design of products for the greater benefit of the economy and the environment. Furthermore, 5 respondents, representing 10% of the total, suggested that environmental authorities should conduct door-to-door surveys to gather information about the packaging of products.

**Table 12: Findings on communities' participation in protecting the environment**

Category response	Frequency	Percentages
Yes	45	90
No	5	5
<b>Total</b>	<b>50</b>	<b>100</b>

**Source: Primary data**

According to Table 12, 45 respondents, representing 90%, informed the researcher that most of the local communities are involved in the environment and comprehend the impact of environmental concerns through their participation with government

institutions. Conversely, 5 respondents, representing 10%, expressed the opinion that not all communities should be involved in protecting the environment due to insufficient facilities.

**Table 13: Findings on the solutions to the problems for sustainable environment**

Solutions	Frequency	Percentage
Public awareness	30	60
Government to impose laws	20	40
<b>Total</b>	<b>50</b>	<b>100</b>

**Source: Primary data**

Findings in table 13 show that the major solution for sustainable environment is public awareness through our relationship with local communities and suppliers. 30 of the respondents represented by 60% said that, the environment is our primary concern that should not only be protected by the government

but also, individuals and society in order to have positive impact on our environment. While 40% of the respondents said that government should impose laws which should govern the public from degrading the environment.



**Table 14: Suggested measures to improve public procurement on environment concerns**

Suggestions	Frequency	Percentage
Government to set minimum standard	25	58
A serious examination of each public procurement institutions	15	25
Environment administrators should advise the public on how to participate in protecting our environment	10	17
<b>Total</b>	<b>50</b>	<b>100</b>

**Source: Primary data**

In view of the mitigation measures for the above listed, respondents expressed the following; Government should set minimum environmental standards for the procurement of variety of goods. These should be within central Government departments and Agencies and elsewhere in the public sectors. A serious examination of each public procurement institution to probe whether their policy has integrated with environmental and social consideration into its procurement policies hence

meeting the minimum environmental standards. Lastly, they also expressed that the environment administrators should advise the public on how to participate in protecting our environment. The environment is our primary concern and therefore it is also a social mission to be our work, through our relationship with local communities and suppliers in protection of our environment.

**DISCUSSION**

Preliminary findings reveal demographic characteristics of respondents, including age, gender, education level, and departmental affiliations. Most respondents were between 26-30 years old, with a majority being male and holding secondary or diploma-level education. The study also elucidates respondents' perspectives on public procurement

policies, environmental awareness, and community participation in environmental protection. Key findings underscore the need for greater understanding of sustainable procurement practices and enhanced collaboration between government and local communities.

**CONCLUSION**

In conclusion, this study underscores the critical role of public procurement in advancing environmental sustainability objectives. By integrating environmental considerations into procurement policies and practices, governments can mitigate negative impacts and promote sustainable

development. The findings of this study offer valuable insights for policymakers, practitioners, and researchers seeking to enhance environmental stewardship through effective procurement strategies.

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