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EVALUATION OF FACTORS AFFECTING IMPLEMENTATION OF GREEN PUBLIC PROCUREMENT GOVERNMENTS IN LAIKIPIA COUNTY GOVERNMENT, KENYA

AVALIAÇÃO DOS FATORES QUE AFETAM AS IMPLANTAÇÕES GOVERNAMENTAIS DE CONTRATOS PÚBLICOS PARA O VERDE NO GOVERNO DO CONDADO DE LAIKIPIA, QUÊNIA

Elijah Mwangi Ngunjiri ¹¹ karatina university – KenyaE-mail: elijahmwangingunjiri@yahoo.com **ABSTRACT**

Green Public Procurement has been used as a tool to achieve environmental objectives by some countries especially in Europe. Public procurement in Kenya is estimated to account for between 70 and 80 percent of the national budget. This gives the government purchasing power to influence manufacturing and supply of green products for sustainable development. County governments in Kenya are allocated between 15 and 45 percent of the total country's income. Despite all these finances Counties possess, many of them do not fully use their purchasing power to achieve environmental objectives. Laikipia County for example, did very well on procurement activities to be ranked the best performing entity in public procurement in Kenya in 2014, yet it did not have a similar identity on Green Public Procurement. It is this research gap that this study sought to fill. The purpose of this study was to evaluate the factors affecting implementation of Green Public Procurement in Laikipia County government. The study was guided by knowledge gap and buyers' perception on green products as independent variables and implementation of Green Public Procurement as the dependant variable. Descriptive research design was applied in this study. The study targeted County governments in Kenya. The study population was 45 employees from Laikipia County government drawn from procurement and finance department. Primary data was collected by use of a semi structured questionnaire. The questionnaire was self administered. Descriptive statistics and statistical model of multiple regression were used in analysis of data. The study established that knowledge gap (0.561) and buyer's perception on GPP (0.143) had a positive effect on GPP implementation with knowledge gap as the major one. The study recommends County governments to organize for compulsory training of its staff on GPP. They should conduct lifecycle costing of all products procured by the County governments so as to create the right perception on these products.

Keywords: Green Products; Convectional Products; Green Public Procurement; Environmental Objectives; Resources Sustainability

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INTRODUCTION

Green Public Procurement (GPP) is the process by which public entities procure environmentally preferred goods, services and works, and incorporate environmental requirements in the procurement process. It involves the government entities using their superior purchasing power to influence the producer or market to produce or purchase goods and works that have less impact on the environment. Several government agencies have discovered their power in promoting availability of green and clean products. This is done by these agencies increasing the demand of green products during tendering by specifying recyclable products, non toxic and energy conserving products (Walker & Preuss, 2008).

Green Public Procurement is significant in countries and regions where it is largely implemented. Green Public Procurement ensures Resources sustainability to cater for future generations, transforms the market to be more innovative to produce green products, cost saving during procurement and disposal of goods and services. In addition governments through their large purchasing power have used GPP as a tool to achieve environmental objectives by buying environmentally friendly goods (Omwoha, 2015).

Langat (2013) outlined that the volume of purchases, information tools, management strategy and cost make up as some of the factor affecting implementation of GPP. Roos (2013) noted that green products are generally perceived to be expensive. Nasiche and Ngugi (2014) identified organization capacity, incentives and capacity of the suppliers as the factors that affect implementation of GPP.

The United Nations Environmental Programme (UNEP, 2013) outlined inadequacy of

knowledge on green procurement; poor leadership and attitude the staff have on green products as crucial factors that affect the implementation of GPP .Other factors cited in the UNEP document include; absence of management policy and a grossly inadequate legal framework to regulate GPP accompanied by low capacity of suppliers to participate in the implementation of GPP.

Expenditure on Public procurement accounts for 15 to 30 percent of Gross Domestic Product of the many countries (UNEP, 2013). The European Union has been keen on ensuring that products from member countries do not impact the environment much. The Union through the European Commission's sustainable consumption and production and sustainable industrial policy of 2008 has been providing guidance to member states on how to integrate environmental aspect in public contracts. The European Commission (EC, 2005) identified Finland, Denmark, United Kingdom, Germany, Austria, Sweden and Netherlands as the countries which have adopted GPP.

The United States of America (USA) adopted GPP in 2009. The country's Environmental Protection Agency that requires federal agencies to ensure that 95 percent of all contracts for products and services are green or environmentally preferred products (CDP, 2013). In China, the central and provincial governments are required to give priority to green product listed in the green products inventory in their procurement process. The list includes a range of products such as cars, and materials for construction approved by Chinese certification committee for environmental labeling.

In Africa, Ghana is named as the first African country to implement GPP (UNEP, 2013).In South Africa and Ghana the GPP has led to the

emergence of markets in foods, renewable energies, and energy efficiency [International Institute for Sustainable Development, (IISD), 2011].

Roos (2013) highlights that Kenya has taken some substantial steps toward GPP. This includes the development of several separate policies on GPP for example ; enactment of environmental policies and directives aimed at reducing paper consumption through duplex printing, prohibiting the use of high fuel consuming vehicles by public officers ,use of energy saving appliances in public institutions, and promoting the building of solar water heating houses.

Article 42 of the Kenyan Constitution 2010, acknowledges a healthy environment as a fundamental right and demand for a sustainable exploitation, usage, management and environmental conservation of natural resources. In spite of all these efforts the government had not yet integrated a uniform and mandatory national policy on GPP applicable across all public entities (Roos, 2013).

Counties in Kenya were created after the 2010 promulgation of the new constitution. [Republic of Kenya, (Rok), 2010]. However the 47 County governments came into being in 2013 after the first general election under the new constitution dispensation. Procurement in Counties is undertaken by a procurement department constituted by the County government treasury (RoK, 2015). It is regulated by the application of the Public Procurement and Asset Disposal Act of 2015. Section 60 Of the Act empowers the County accounting officer to incorporate environmentally friendly goods in specifications during the procurement process. The Act however, gives, discretion to the accounting officers to include environment aspects and does

not make it a compulsory requirement during tender advertisement, specification, contract award or evaluation criterion but puts emphasis on price, quality and time of delivery of goods and services procured. County governments have the ability to influence manufacturers to produce green products for their consumption as well as achieving their environmental objectives.

Laikipia County is one among the 47 Counties in Kenya. In the financial year 2013/2014 Laikipia County government received an allocation of Kenya shillings 2,523,013,037 from the national government exchequer. A substantial portion of this money was used in the purchasing of goods, works and services by the County government.

Laikipia County government just like all other County government is guided by the Public Procurement and Assets Disposal Act in all procurement matters (RoK, 2015). The County government managed to employ the procurement methods stipulated by the Act and Regulations effectively to receive the best ranking public entity in Kenya and even awarded. However it had not received similar accolades on environmental issues which give rise and result from green procurement matters.

Statement of the Problem

By being ranked the best performing public entity on public procurement in Kenya (Rok, 2014), Laikipia County government may have put much emphasis on efficiency in the procurement processes saving and cost effectiveness to obtain value for money for the purchases. There is a significant relationship between the GPP and efficiency in procurement and economic performance. Laikipia County did well in Public Procurement procedure but the County did not receive similar reference or even mention on GPP (Rok, 2014). It was imperative to establish

why it was ranked the best in public procurement and did not receive similar identity in green procurement. Laikipia County received shillings 2,523,013,031 from the exchequer in the year 2013/2014 much of which was consumed on procurement and disposal of convectional goods with disregard to GPP (Rok, 2013).

The consumption of exhaustible natural resources has led to destruction of water catchment areas which include Mt Kenya forest [National Environmental Management Authority (NEMA), 2013]. This is contrary to the expectations of GPP, which positively relates GPP to sustainable use of natural resources.

Little attention has been given to GPP by County governments in Kenya. There have been few local studies on GPP, which have mainly focused on the manufacturers or producers. Nderitu and Ngugi (2014) studied on the effect Green Procurement practices has in performance of organization in the manufacturing industry. He established that green purchasing resulted to improved performance. Gatari and Were (2014) studied the challenges that face of Green Procurement implementation in manufacturing sector in Kenya.

Gatari and Were (2012) outlined the benefits of Green Procurement which includes elimination of waste management costs ,better health of employees, reduced waste ,conservation of natural resources. These studies have mainly focused on the manufacturers or producers. Little attention has been given to consumers like County governments who are the largest single consumers of the manufacturing sector products. This shows that limited attention has been paid on Green Public Procurement by County governments in Kenya. This study intended to fill this gap of knowledge

GENERAL OBJECTIVE

The general objective of the study was to evaluate the factors affecting implementation Of Green Public Procurement in Devolved Governments in Kenya.

SPECIFIC OBJECTIVES

To identify the extent to which knowledge gap affects implementation of Green Public Procurement in Laikipia County Government, Kenya.

To determine the extent to which buyer's perception on green products affect Green Public Procurement in Laikipia County Government, Kenya.

LITERATURE REVIEW

Theory of Diffusion Of Innovation

Rogers (1995) sought to explain how innovations are incorporated in any given population. He argues that consumers undergo several stages in product adoption process. The first stage is awareness of the product. In this stage consumers are exposed to the product. The second stage involves consumers developing interest of the products and seeks for information of the product. The consumers then evaluate whether the products will meet their needs or not and gives a trial of the products in small quantities to assess whether they are suitable for adoption or rejection. If they are suitable, they are adopted in large scale and if unsuitable they are rejected (Schiffman, Kanuk, & Hansen, 2008).

In the process of adoption, consumers are given different categories based on how fast they adopt the new products .Some consumers come first in adopting new products and are therefore known as innovators. The early adapters first evaluate the risk involved in adopting the

products from the experience of innovators. The early majorities follows and adopt the products before the average consumers. The late majority is skeptical and will only adopt a product when the majority of consumers have tried the products and proved suitable.

The laggards are the last group of consumers to adopt the products and will only adopt them when the products have become a tradition. The theory is significant to the study as it explain the process of attaining knowledge on green products and thereby facilitating implementation of GPP at the County government.

Norm Model Theory

Hyden (2002) in his theory argued that for Green Public Procurement to become a common practice the procurement officers need to possess a certain set of values. These values motivate them towards environmental consideration, knowledge on Green Public Procurement and the possibility to practice. Hyden (2002) says that for green public policies to be converted into actions, some normative element example knowledge and systemic conditions are very essential.

The theory therefore opens a room for analysis of procurement officers and analyzes how the norms can affect the regulations and practical implementation of Green Public Procurement. Hyde's argument is that norms can be studied empirically and would help us understand the reason why some pattern of action arises while others do not.

The study of Green Public Procurement within the norm model gives an analysis of how well environmental considerations have been incorporated in the Public Procurement Practices. Hydes (2002) states that norm creates

a disposition of action. In addition a contextual factor also plays a key role of being either a drive or a barrier of a given pattern of behavior. He outline the norms as; will and evaluation, knowledge and cognition, and system opportunities. The norm model gives the motives behind an action.

It indicates ones knowledge and opportunity to act accordingly and can be used as an indicator of the driving force towards a certain pattern of action and practices. The model consists of elements of both the actors and the system theories. Will is portrayed by an individual, knowledge is portrayed by an actor performing some action and the systemic condition gives a reflection on the structure in which the procurement officers acts. This model therefore is significant to the study as it will assist in achieving the objectives of knowledge gaps and the perception of the procurement officers affecting implementation of Green Public Procurement in Laikipia County.

RESEARCH METHODOLOGY

This study considered different research paradigms, matters of ontology and epistemology which relate to the growth of knowledge, nature of the knowledge, and the assumptions on the way the researcher view and examine it (Bryman 2012). Research paradigm are perceptions, believes, assumptions, nature of reality, truth and influence the manner in which the study is undertaken , from the beginning to conclusions and they exposes and minimizes research bias (Bordens & Abbott, 2008).

The study employed epistemology philosophy guided by positivism approach. This approach believes that the reality is stable, observable and can describe from an objective point of view (Saunders, Lewis & Thornhill, 2009). Through this

philosophy prediction can be made based on the previous observations and explained realities and their interrelationships and allows generalization of the study.

Positivism advocates the application of the methods of the natural sciences to study social reality and beyond. It entails the principle of deductivism, whereby the purpose of the theory is to generate hypotheses relating to an organization context that can be tested to allow explanations of law to be assessed. The positivism principle of inductivism holds that knowledge is arrived at through the gathering of facts on what truly happens in organizations and is discovered through categorization and scientific measurement of the behavior of people and systems which provides the basis of laws (Eriksson & Kovelainen, 2008).

The study adopted descriptive research design. This design is used in preliminary and explanatory studies and enables the researcher to collect, summarize and interpolate data (Orodho, 2003). The design assisted in evaluating factors affecting implementation of Green Public Procurement in Laikipia County government.

The research study was carried out in Laikipia County government. Laikipia County is located at the leeward side of Mount Kenya. It borders Nyeri, Nyandarua, Baringo, West Pokot, Samburu, Isiolo and Meru Counties. The County area of study was selected owing to its performance in public procurement as it was ranked as the best performing public entity in Kenya (ROK, 2014). It was therefore necessary to study on Green Public Procurement in the area.

The target population composed the 47 County governments in Kenya (ROK, 2010). These County governments have common observable characteristics in that procurement activities from the 47 county governments are

funded from the exchequer, and that procurement is guided by the PPAD Act (ROK, 2015). A population of study is the subset of the target population that can accessed for research due to geographical, cultural or temporal features (Kothari, 2008). In this case, the study population comprised of 45 employees drawn from Laikipia County government procurement and finance departments.

In determination of a sample size of this study, the study used purposive sampling such that, only 45 employees from procurement and finance departments in Laikipia County governments were selected. Purposive sampling allows a researcher to get the requisite information that will meet the objectives of the study (Mugenda & Mugenda, 2003).

The study used census where the entire population of the procurement and finance departments were used owing to a small and accessible population estimated at 45 employees from Laikipia County government. A Census provided detailed information from all or most of subjects in the population. Israel (2012) argues that a census is more appropriate for populations which are 200 and below. Census also eliminates sampling errors. Kombo and Tromp (2006) argues that even though census is costly and difficult for large populations, it is attractive for small population for instance below 200.

Primary data was collected using a semi structured questionnaire with both open and closed ended questions. This enabled the respondents to add information which had not been elicited using closed ended questions. The inclusion of open ended questions allowed subjects to respond on their own understanding, enabling the study to unearth more information on the way people saw the topic. The questions assisted in gathering in-depth information to

enable the study get a comprehensive understanding of the area under study (Kombo& Tromp, 2006).

The questionnaire is an efficient data collection instrument as it ensures relevance and consistency of information gathered because the responses are objective, comparable and standardized (Serekan &Bougie, 2009). The questionnaire covers a wide geographical area though its response rate may be slow or some questions may be left unanswered resulting to on response bias. A questionnaire was preferred because of its ability to collect data from a group within a short period (Cooper & Schindler, 2008). Each question in the questionnaire was developed in line with a particular objective of the study. Secondary data sources included;

research journals, textbooks, annual reports from the government of Kenya.

Self administered questionnaires were used. This is because they are relatively cheap for the study and convenient to the respondents in the sense that they can fill them in their own free time or when they have low workload (Hawkes &Rowe, 2008).

DATA ANALYSIS, ANF FINDINGS

Regression Analysis

The regression model used was $Y=\alpha+\beta_1X_1+\beta_2X_2++\sum$

The coefficients of the regression model were calculated in the table 4.18.

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t
Knowledge Gap affect Implementation Of GPP	.610	.168	.561	3.625
Buyers Perception affect Implementation of GPP	.195	.234	.143	.835

a. Dependent Variable: County implementation of GPP

b. Linear Regression through the Origin

Table 1 - Regression Model Coefficients

The model developed was;

GPP

implementation = $0 + 0.561X_1 + 0.0143X_2 + \sum$ that is;

GPP Implementation = $0 + 0.561(\text{knowledge on GPP}) + 0.143(\text{Buyer's perception on GPP}) + \sum$

The study by use of multiple regression models above established the constant was 0 and that knowledge gap was the greatest factor (56.1 percent) that affected implementation of Green Public Procurement. Buyer's perception on green products comes had 14.3 percent.

CONCLUSIONS AND RECOMMENDATION

In conclusion, the study established that knowledge on GPP on the side of the procurement staff was critical in its implementation. Any knowledge gap on GPP on the side of procurement staff results to a hitch in its implementation. This showed a positive correlation between knowledge gap and implementation of Green Public Procurement.

In addition, the study concluded that the perception of the buyers' or the procurement staff had a positive relationship with implementation of Green Public Procurement. Whenever the procurement staff perceive green

products expensive, then implementation of Green Public Procurement becomes difficult. On the contrary, whenever the procurement staffs perceive green products as cheap and saving on costs, then the buyers' willingly adopt Green Public Procurement.

There is need for the County government to continuously create awareness of the County staff on matters of Green Public Procurement. The County government should organize and facilitate compulsory training seminars on Green Public Procurement to all procurement and finance staff at least annually. The County government should also sponsor key personnel in procurement in national and international forums on green procurement to learn and teach other county staff on GPP. The County government should also ensure availability of green procurement manuals within its premises to create awareness of GPP.

The study also suggests that a complete life cycle costs of products including the costs of disposal should be made to establish whether the green products are cheaper or expensive to establish the right perception on the side of buyers of green products.

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