



FACTORS AFFECTING EFFECTIVE IMPLEMENTATION OF SUSTAINABLE PROCUREMENT PRACTICES IN GOVERNMENT PARASTATALS IN KENYA: A CASE OF NATIONAL GENDER AND EQUALITY COMMISSION

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ABSTRACT

Sustainable procurement is about socially and ethically responsible purchasing, minimizing environmental impact through the supply chain, delivering economically sound solutions and good business practice. In the Kenyan public sector the adoption of sustainable procurement practices has been a slow process. The study aimed at identifying factors affecting effective implementation of sustainable procurement practices in government parastatals in Kenya; case of National Gender and Equality Commission. Specifically the study aimed at evaluating how organizational structure, organizational resource capacity, legal and regulatory framework, cost of sustained products affects effective implementation of sustainable procurement practices in government parastatals in Kenya. Information on previous research and the underpinning theories including systems theory, resource based view, transactional cost theory and institutional theory were clustered into themes that frame the subject of the study. The researcher conducted the study using a case study of National Gender and Equity Commission, where descriptive data research method was used with a target population comprising of 81 employees and a sample of 44 respondents from within each group in proportion that each group bear to the population as a whole was taken using Slovin's formula: $n=N/(1+Ne^2)$. The research utilized primary data that was obtained using structured and semi structured questionnaires which were administered to all NGEC employees. Data was analyzed through quantitative techniques such as mean, percentages, standard deviation and variance, the research used statistical package for sciences (SPSS 19) for analysis. Data was then presented in form of tables for ease of interpretation, final reports was compiled after subjecting data thorough analysis. The study revealed that the organizational structure, organizational resource capacity, legal and regulatory framework and cost of sustained products affected effective implementation of sustainable procurement practices. The study recommends that the government needs to enact environmental legislations and policies that promote sustainable procurement and those that already have such policies need to be reviewed and revised to integrate sustainable procurement issues and other sustainability issues. Findings of the study intends to assist procuring entities to ensure successful implementation of sustainable procurement practices, also used by Public Procurement Oversight Authority and the Kenyan government in initiating regulatory framework that will be instrumental in the implementation of public procurement policies

Key Words: Sustainable Procurement, Parastatals

Background of the Study

Government expenditure is now historically at high levels of 40% of gross domestic product in OECD countries (Hall, 2010), 49.1% of GDP in 27 European countries (Eurostat, 2012) and rising in developing countries. Government is therefore increasingly playing a role of being an active participant in the market itself, purchasing public works, supplies and services. Due to the importance of public sector expenditures, initiatives on sustainable public procurement have flourished from the beginning of the 20th century (Islam and Siwar, 2013). Public procurement is a significant activity in the developing world with a study of 106 developing countries findings that purchases of their governments accounted for approximately 5.1 percent of their combined national outputs (Evenett and Hoekman, 2005).

According to Thurbon (2006) the role of government in public procurement is to stimulate sustainable development that is consistent with the principles of sustainable development such as ensuring a strong, healthy and just society, living within environmental limits and promoting good governance. Sustainable procurement places government in two roles by participating in the market as a purchaser and at the same time regulating the use of its purchasing power to advance social justices (McCrudden, 2004).

Procurement as defined by Public Procurement and Disposal Act (2005) is the acquisition by purchase, rental, lease, hire purchase, license, tenancy, franchise, or by any other contractual means of any type of works, assets, services, or goods including livestock or any combination. According to World Bank (2005) public procurement is the acquisition of goods and services and works by a procuring entity using public funds. Sustainable procurement is a process whereby organizations meet their needs for goods, services and capital projects, in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organization, but also to the society, the economy and the natural environment (QGCP, 2006).

Sustainable procurement is thus the application of sustainable development principles in the procurement function. Sustainable procurement

isn't simply about being "green". Sustainable procurement draws its roots from the broad concept of sustainable development but the focus of sustainable procurement is far broader than just the development, it aims at meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity (CIPS, 2014).

Sustainable procurement in government parastatals is dependent on incorporating an appreciation of the wider goals of society into procurement. By using sustainable procurement to promote the goals of sustainability, social, environment and economic in government parastatals, the government shall have played role in fostering a better society, composed of sustainable communities, more able to respond to the global economic market. This research aimed at improving sustainable procurement practices in the government parastatals and explored barriers to effective implementation of sustainable procurement practices and methodologies to overcome them.

Statement of the Problem

Karjalainen et al (2009) contend that very little research has so far been conducted on organizational misbehaviors and non-compliance in purchasing and supply management. This is surprising given that public procurement has been employed as a vital instrument for achieving economic, social and other objectives (Arrowsmith, 2013). According to IEA (2013) the most salient matter in the state corporations and parastatals in Kenya is the number of institution and enormity of their budgets as is in the case of NGEN. These institutions cover a full breadth of the economy and social sectors and are regrettably an area vulnerable to mismanagement and corruption (OECD, 2007).

All public entities must use the Procurement Manual 2009. It provides a way for the user to apply the Public Procurement and Disposal Act, 2005 and the Public Procurement and Disposal Regulations 2006 and facilitates the standardization of procurement practice across all Procuring Entities across Kenya (PPOA, 2009). The Public Procurement and Disposal Act, 2005 and subsequent regulations 2006 and 2009, which are

the core points of reference on public procurement in Kenya were reviewed and makes only a very weak reference to sustainable procurement (Nasiche, 2014). There are also cases reported at the PPOA with regard to procurement malpractices and lack of adherence to laid out guidelines, the effect of which result to misappropriation of funds and an increase in expenditure (PPOA, 2015).

The Institute of economic affairs (IEA, 2014) reports that: there has been a 15% increase on the governments' spending of which does not reflect directly on development. Out of a total expenditure outlay of KSh. 1.77 trillion in 2014/15, the national government budget is estimated at KSh. 1.54 trillion. However on annual bases, the government losses close to KSh. 121 billion about 17 per cent of the national budget due to inflated procurement quotations (KISM, 2010). According to Public Procurement Oversight Authority (PPOA, 2009) most of the tendered products/services in many government parastatals have a mark-up of 60 per cent on then market prices. According to Victor (2012) procurement expenditure could be minimized through proper implementation of procurement practices. This study therefore evaluated factors affecting effective implementation of sustainable procurement practices in government case study of National Gender and Equity Commission.

Objectives of the Study

The study was guided by both general objectives and specific objectives as follows:

The general objective of the study was to determine factors affecting effective implementation of sustainable procurement practices in government parastatals. Specific objectives were:

1. To establish how organizational structure affects effective implementation of sustainable procurement practices in government parastatals in Kenya.
2. To determine how organizational resource capacity affects effective implementation of sustainable procurement practices in government parastatals in Kenya.
3. To determine the extent to which legal and regulatory framework affects effective

implementation of sustainable procurement practices in government parastatals in Kenya.

4. To explore how cost of sustainably produced goods and services affect effective implementation of sustainable procurement practices in government parastatals in Kenya.

Research Questions

1. How does organizational structure affect effective implementation of sustainable procurement practices in government parastatals in Kenya?
2. How does organizational resource capacity affect effective implementation of sustainable procurement practices in government parastatals in Kenya?
3. How does legal and regulatory framework affect effective implementation of sustainable procurement practices in government parastatals in Kenya?
4. How does cost of sustainably produced goods and services affect effective implementation of sustainable procurement practices in government in Kenya?

Significance of the Study

Sustainable procurement can be seen as having social, environmental and economic elements, this research paper findings shall serve to be applied in government parastatals not only in Nairobi City County but across the country as well as in all public entities both in the country and across the continent to identify which elements have greater emphasis internationally as well as identify gaps in the effective implementation of sustainable procurement practices and subsequently in successfully implementing sustainable procurement policies in the public sector.

Particularly, its findings will be applied by the Public Procurement Oversight Authority with regards to initiating regulations framework and policies that will aid in operations of the public procurement system in the country in focus of sustainable procurement, a new aspect of procurement that is shaping the trends in the procurement system. This study will make several contributions to the field. For policy makers, practitioners, scholars and researchers interested in sustainable procurement, too may use the findings as a source of reference as well as to measure and report on sustainability performance.

Scope of the Study

The study sought to determine factors affecting effective implementation of sustainable procurement practices with respect to Government parastatals a case study of National Gender and Equity Commission. The focus of the study was on factors such organizational structure, organizational resource capacity, legal and regulatory framework and cost of sustainable products, and the researcher intended to show the percentage to which each factor contributed to the implementation of sustainable procurement practices. Government parastatals was chosen on the basic role of Sustainable Procurement that of to promote the goals of sustainability, social, environment and economic. The research covered the organization's headquarters which is located at Solutions Tech Place, Longonot Road in Upper Hill, Nairobi, it operates other offices in Kenya but the headquarters is the covered area for my study. This study was carried out within a period of three months.

Limitations of the Study

The research involved seeking appointments with the senior management who were not available due to busy schedules; some respondents were unwilling to divulge some information considering it sensitive. The researcher solved this particular limitation by providing a comprehensive explanation of the benefit of the study to the respondent, all the respondents were assured that the research was not malicious and gave them assurance of the enormity. Some respondents took long periods to complete and return questionnaires, the researcher solved this by sending reminders by email and also visiting those who took longer to respond.

LITERATURE REVIEW

It was based on several research papers and contributions of various authors, past research papers, and theories done by various people and other policy documents in sustainable procurement practices. The review gave special considerations to the barriers to effective implementation of sustainable procurement practices. It also has empirical review of studies that have done on sustainable procurement and a

conceptual framework has been included to summarize the literature review.

Theoretical Review

A theoretical framework refers to how the researcher develops thoughts on what the possible answers could be, these thought and theories are then clustered into themes that frame the subject (Telewa, 2014). This research mainly focused factors affecting effective implementation of sustainable procurement practices in government parastatals. The underpinning theories include: Systems theory, Resource based view, transaction cost theory and institutional theory.

Resource Based Theory

The concept of resources includes all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness. The resource-based view of the firm emphasizes that valuable, rare, imperfectly imitable, and non-substitutable firm's resources result in competitive advantage (Miles, 2010). The theoretical mainstays are that resources that are entirely controlled or owned by the focal organization should be cultivated in order to enhance their contribution to the organization's competitive advantage in its industrial context (Hoffman and Sandelands, 2005).

The NRBV extends the resource-based view by stating that the environment might be a constraining factor impacting sustainable competitive advantage and accordingly suggest that firms, which manage the environmental link better than others, might generate more sustainable competitive advantage (Li and Geiser, 2009). This theory links the research objective on how organizational resources capacity affects implementation of green procurement.

Institutional Theory

According to Glover (2014) Institutional Theory provides a theoretical lens through which researchers can identify and examine influences that promote survival and legitimacy of organizational practices, including factors such as culture, social environment, regulation (including

the legal environment), tradition and history, as well as economic incentives, whilst acknowledging that resources are also important (Baumol et al., 2009), (Brunton et al., 2010) (Hirsch, 1975), (Lai et al., 2006). Legitimacy here refers to the adoption of sustainable practices seen by stakeholders as being proper and appropriate. Institutional Theory is traditionally concerned with how groups and organizations better secure their positions and legitimacy by conforming to the rules (such as regulatory structures, governmental agencies, laws, courts, professions, and scripts and other societal and cultural practices that exert conformance pressures) and norms of the institutional environment (Scott, 2007).

Institutional Theory can be used to explain how changes in social values, technological advancements, and regulations affect decisions regarding 'green' sustainable activities (A. Ball, 2010), and Rivera, 2004) and environmental management, (T.J. Brown, 2006), (S.J. Fowler, 2007) and (Tate et al., 2010). Institutional Theory to examine how different organizational strategies lead to the adoption of environmental management practices. Key drivers in instigating green changes in rules include a core company within a supply chain (Hall J. , 2001) and government regulation (Rivera, 2004).

Therefore, institutions can define what is appropriate or legitimate (i.e., what is acceptable behavior, Scott, 2007), and thus render other actions unacceptable or even beyond consideration (P.J. DiMaggio, 1991). This will then affect how organizations make decisions. It is this that can provide insights into the role of different actors in the development of sustainable supply chains and their role in the achieving conformity. The institutional perspective allows for the focus on the role of conformity, regulatory and social pressures in driving organizational actions (Westphal et al., 1997).

Systems Theory

Systems theory views organization as complex set of dynamically intertwined and interconnected elements, including its inputs, process, outputs, feedback loops and the environment which it operates. According to (Brammer and Walker, 2007) organization act as systems interacting with their environment, any equilibrium is constantly

changing as the organization adapts to its changing environment. Systems theory describes the interrelatedness of all parts of an organization and how one change in one area can affect multiple other parts (Li and Geiser, 2009).

Organizations are viewed as open systems, continually interacting with their environment. They are in a state of dynamic equilibrium as they adapt to environmental changes. The foundation of systems theory is that all the components of an organization are interrelated, and that changing one variable might impact many others (Maignan, 2012). According to Lozano and Valles (2013) system theory views organizational structure as the established pattern of relationships among the parts of the organization, of particular importance are the patterns in relationships and duties. These include themes; of integration (the way activities are coordinated), differentiation (the way tasks are divided), the structure of the hierarchical relationships (authority systems), and the formalized policies, procedures, and controls that guide the organization (administrative systems) (Maignan, 2012).

The relationship between an organization and its environment is characterized by a two-way flow of information and energy (Marron, 2013). Most organizations attempt to influence their environment. While Stafford and Harthman, (2010) were among the first to explain the adoption of practices within the environmental context, several scholars have subsequently investigated the positive impact of these institutional pressures on green procurement (Zhu, 2009). According to Menon (2013) the relationship between the environment and organizational structure is especially important. Organizations are open systems and depend on their environment for support. Klassen and Linton (2013) states that senior management support plays a pivotal role in the institutionalization of responsible behavior, this theory therefore tries to explain the role of changes in organizational structure in the implementation of sustainable procurement practices.

Transaction Cost Economics Theory

Transaction cost economics theory identifies and explains the conditions suitable for a firm to

manage an economic exchange internally, and the conditions under which it should manage an economic exchange externally (Williamson, 2008). In transaction cost economics (TCE) the focus of the firm is to minimize the sum of transaction costs and production costs (Williamson, 2008) It addresses questions about why firms exist in the first place (i.e., to minimize transaction costs). how firms define their boundaries, and how they ought to govern operations (Daddi et al., 2010). Brammer and Walker, (2007) already addressed the importance of transaction costs in organizations when analyzing bidding process. Parties have to bid for the right quality of goods and services and the award has to go to the bidder offering the lowest price

Brammer and Walker, (2007) argues that the problems associated with contracting solutions in the types of environments encountered in manufacturing sector transactions are likely to be difficult to tackle. Competitive bidding can indeed be an effective way of determining the lowest cost supplier in supply of green products. Uncertainty about cost, prices and demand conditions of green products leave long-term and short term contracts for manufacturing of green products and services in pharmaceutical industry inevitably incomplete (Srivastava, 2013). It has also been argued that the larger the costs associated with environmental collaboration, such as more performance metrics and performance monitoring costs, the less likely the environmental practices will occur (Tate, al., 2011). This theory is therefore tries to explain the effects of cost of green procurement on the effective implementation of sustainable procurement practices.

Conceptual Framework

According to Bogdan and Biklen (2003) a conceptual Framework is a basic structure that consists of certain abstract blocks which represent the observational, the experiential and the analytical/synthetically aspects of a process or system being conceived. It is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. The interconnection of these blocks completes the framework for certain expected outcomes. A variable is a measurable

characteristic that assumes different values among subjects. The independent variables of the study will be organizational structure, organizational resource capacity, legal and regulatory framework and cost and availability of sustainable products. While the dependent variable which is the factors affecting the effective implementation of sustainable procurement practices responds to the independent variable.

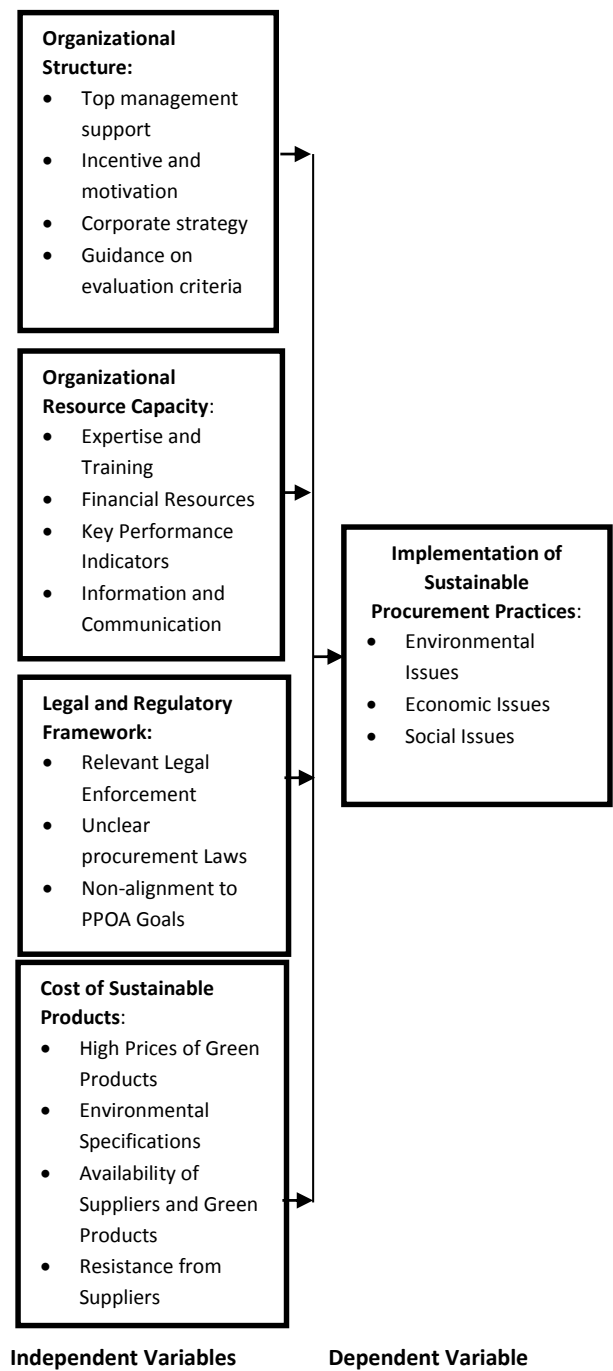


Figure 2.1 Conceptual Framework

Organizational Structure

Mensah and Ameyaw (2012) identify absence of internal management structures as a barrier towards sustainable procurement. Without proper structures, organizations will face complications in making its business more sustainable, since sustainability demands elaborate and updated structural systems within the supply chain like quality control systems. Ashenbaum (2008) show that in most cases, sustainable procurement is not seen as legitimate or necessary initiatives for upper management or administration to address as the necessary measures are often seen as an added cost with little immediate benefit to the organization. Bouwer et al. (2006) further showed training and competence in environmental matters was key to successful adoption of green procurement in the public sector. Bjorklund (2011) further found that environmental awareness is an important driver in the environmental purchasing. According to Kent et al (2011) the extent to which an organization implements Sustainable specific sustainability practices will be strongly driven by the importance it places on various sustainability issues perceived as vital to its identity and success.

Bansal (2003) found that both organizational values about environmental responses and top management support were associated with predicting sustainability-based actions. A study by Berns and his colleagues (2009) singled out executive support and strategic centrality as keys to executing sustainability strategies. A longitudinal case study by Olsen and Boxenbaum (2009) examining the barriers that precluded implementation of a sustainability strategy reported that conflicting values and seemingly ambivalent management support greatly impaired implementation of a major sustainability project. Siegel (2009) emphasized the important role that transformational leadership plays in formulating and implementing sustainability initiatives.

Compliance study by Bouwer et al. (2006) found that operational and/or information tools were key in establishing environmental criteria in public procurement while Brammer and Walker (2007) found that the main problems limiting adoption of green public procurement was lack of information

about the real environmental impacts of the products, difficulty in the preparation of call for tenders and purchasing, and lack of guidelines. Lack of clear definition and evaluation criteria for Green procurement has also been identified as a barrier to Green Procurement (Gattiker et al., 2008; Ashenbaum, 2008).

According to Belfit, Sexton, Schweber, and Handcock (2011) organizational structure can have significant impacts on the ability and motivation of a company to implement sustainable procurement practice. An extensive literature on organization change (e.g., Burke, 2002) shows the power of inhibiting forces to impede even those initiatives with considerable forces driving them (e.g., Lewin, 1951). In government procurement for example, one department may incur extra cost that could reduce costs for another department, resulting in an overall cost reduction. If a similar principle were applied to a business, one department may be dissuaded from choosing a more sustainable procurement option, despite the overall benefits to the company, in order to keep within departmental budgets. The impact of this will be very much dependent on the organizational structure of the company in question. Resistance from employees could work to undermine efforts of the company at a higher level. This resistance could come as a result; for example, of staff feeling that they are being given extra work or having extra pressures put on them. In this case, they may be reluctant to change their practices if they do not see significant reward for their effort (Belfit, Sexton, Schweber, and Handcock, 2011).

Organizational Resource Capacity

Zhu et al., (2009) noted the importance of dedicating (physical) resources to successful implementation of green procurement. Resource allocation decisions to support specific actions derive from a process of setting strategic priorities that shape an organization's action agenda (Weick, 1995; Porter, 1998). Carlsson and Waara study the Swedish local government procurement agencies. They also identified several limitations and their impact on the implementation of green procurement practices. The first one is the lack of administrative resources (including environmental know-how)

Cao F (2012) Chinese government has not provided sufficient human resources and financial resources for public green procurement. The government does not have trained green procurement professionals. Those who are involved in green procurement are from the finance department or are management personnel. Due to the insufficient budget appropriated to green public procurement, public procurement agencies often adopt the least-cost bidding selection method. (Telewa, 2014) identified that procurement professionals occasionally face many challenges in the implementation of sustainable procurement practices which include; lack of budget for internal or external support, lack of internal expertise on sustainability topics, contradictory objectives and lack of information on suppliers corporate social responsibilities practices.

Wirtenberg et al (2007) and several of the other studies discussed above also noted additional key barriers to implementing sustainability practices. These included an incomplete awareness of sustainability trends and their potential organizational impacts, a lack of ideas for practices that could be implemented, a weak business case being offered for the payoffs of such sustainability investments, and insufficient metrics to track progress and create accountability.

Mensah (2012) identified the root cause of difficulties facing organizations pursuing sustainability as being a lack of the right information upon which to base decision, companies struggle to define business case for sustainability and flawed execution of sustainability by companies who deliver sustainable projects (Bernset *al.*, 2009). (Cao F, 2012) noted lack of communication and coordination among public procurement agencies, communication involves the exchange of information among public procurement personnel regarding green procurement policies, method, and procedures. Little attention is paid to information about green procurement, and little understanding is present among procurement personnel.

Legal and Regulatory Framework

Cao, F (2012) documented the challenges facing the implementation of sustainable procurement in China as follows; the compulsory procurement system has too strong an effect of exclusion and has a problem of legitimacy under the Chinese laws on government procurement and accreditation. The parallel legal framework for the Chinese public procurement may present some problems for wider application of the green procurement policy; and the means to implement sustainable procurement being limited to that of the Energy Conservation Products List for Government Procurement and Environment-labeled Products List for Government Procurement only and the implementing effect of the systems themselves is doubtful.

According to Nasiche F. and Ngugi (2014) to many practitioners, the procurement laws are not explicitly clear and in many case their interpretation is subjective. Therefore, familiarity with the rules by both purchasers and suppliers can influence the chance that public agents will comply with the rules. This leads to the notion that there exist a relationship between familiarity with the green procurement rules and its compliance study by Bouwer et al. (2006).

According to Lisa (2010) culture plays a central role in the compliance process and associated outcomes. Due to regulatory reforms and changing community expectations, the role of culture in organizational compliance has gained momentum (Lisa, 2010). Basing on the competing values model(hierarchical culture), which involves enforcement of rules, conformity and attention to technical matters, individual conformity and compliance are achieved through enforcement of formerly stated rules and procedures (Zammuto and Krakower, 2005) as cited in Parker and Bradley (2006).

Concerning the importance of organizational culture, earlier studies have suggested that public sector organizations, can exhibit cultures that are highly resistant to change (Cox, et al., 2005). Parker and Bradley (2005) further indicated that awareness of the nature of public organizational culture is vital in explaining and assessing the appropriateness and outcome of the current reform process. This applies to developing

countries where waves of procurement reforms have resulted into enactment of procurement rules and regulations. This suggests that these cultures, where they exist, may have adverse consequences for the implementation of Sustainable Procurement.

Cost of Sustainable Products

Given that some of the goods and services procured by the public sector are highly specialist, it is possible that identifying sustainable sources of supply may be very challenging in some contexts (Lysons and Farrington, 2012). The supply-side of the procurement transaction plays a crucial role in availability of sustainably-produced goods and services. Brammer and Walker (2007) indicated that the main problems limiting adoption of green public procurement was difficulty in engaging suppliers. Some green procurement practices initiatives were found to be hampered by unwillingness of suppliers to cooperate (Lysons and Farrington, 2012). This unwillingness could be due to a number of reasons including concerns over sensitive information, poor supplier practices, and resource constraints

(Belfit, Sexton, Schweber, and Handcock, 2011) argues that Sustainable Procurement practices could be challenged by the fact that sometimes the returns of adopting sustainable procurement decisions may not be received by those that experience the additional cost. For instance, while the end user may benefit from lower energy demand or the final owner may benefit from the design of a construction, the client or the person who constructed may not even benefit from any of this. In case of any adjustments on the cost to the higher side, the organization would not have the requisite motivation to adopt a new approach as opposed to the traditional capital cost based one.

Faith-Ell et al., (2010) conducted a study on Green Purchasing Strategies: Trends and Implications. The findings of the study were; the biggest challenge to the effective implementation of green purchasing is the cost and income, and the environment friendly packaging is the key to the success of the project. Brammer and Walker (2007) noted that the role of financial aspects of sustainable procurement. In particular,

perceptions of the financial viability of implementing sustainable procurement are expected to play a crucial role in shaping the degree to which sustainable procurement policies are acted upon since green/socially responsible production methods are often perceived of as being inherently more expensive than other methods.

Sustainable Procurement Practices

Public procurement is increasingly recognized as an instrument of government policy and a lever for wider economic, social and environmental change (OECD, 2007). The concept of sustainable procurement, which was originally floated at the UN World Summit on Sustainable Development in Johannesburg in 2002, is conceptualized by (Borland, 2009) to include planetary, environmental, financial and social/cultural considerations. It involves looking beyond the traditional economic parameters and making decision based on life-cycle costs, associated with environmental and social risks and benefits as well as broader social and environmental implications (Mensah, 2012). Sustainable public procurement can be used as a technique for tackling social disadvantage and inclusion as well as balance economic development and environmental protection against business needs. This should give buyers a lot of control over what is manufactured and how it is manufactured.

Traditional procurement has focused on value for money considerations only whilst sustainable procurement involves achieving value for money on a whole life basis by considering the economic, environmental and social issues associated with the goods and services bought, with the goal of reducing possible adverse effects. The public procurement system in Kenya has reformed to an orderly and legally regulated system governed by the Public Procurement and Disposal Act of 2005. The commendable step has been advanced since the enactment of the Public Procurement and disposal Act of 2005 which became operational on 1st January 2007. All these reforms were geared towards enhancement of accountability and transparency with the aim of achieving value for money. These reforms have ensured fairness and competition among suppliers thereby restoring confidence of Kenyans in the public procurement

process while ensuring that the government achieves value for money.

Sustainability has moved speedily to becoming an essential market force that is being driven by customers, shareholders and stakeholders increasingly changing demands as a result of being informed more than before. In today's society, a business that is purely driven by maximizing profits without due consideration for its environmental impact stands little chances of surviving sustainability. Corporate leaders continue to face the challenge of running competitive and profitable organizations while meeting broad social and ethical responsibilities (Morimoto et al., 2005).

Many individuals and organizations have diverse opinions on what sustainability is all about; this has been shaped through their respective unique values and needs which shapes their different definitions of Sustainability (Telewa, 2014). Much more emphasis has been put on sustainability issues related to the environment and thus UNEP's contribution in relation to sustainability cannot be ignored. For the purpose of this study however, sustainability shall be developed in the business context of sustainable procurement and thus sustainability application in the purchasing and supply management environment.

For the purposes of this research, we adopted the definition of sustainable procurement used by the (SPTF), a task force that was established by the UK secretary of state for the environment and the chief secretary to the treasury with the objective of developing a national action plan for UK in sustainable procurement in an effort to making UK a leader in sustainable procurement in the European Union by 2009 (DEFRA, 2005). SPTF defined sustainable procurement; " as a process whereby organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst minimizing damage to the environment"

Public service agencies aim at making the best use of 'value for money' for the members of the public this involves client satisfaction, public interest, fair play, honesty, justice and equity

(Korosec and Bartle, 2003). Recent studies have also pointed out the significance of moral and ethical behavior in addition to technical and professional competencies (Schlosser, 2003).

Empirical Review

Various studies have been advanced on green procurement practices and its effects on the performance of an organization. The section reviewed studies that have been done on organizational structures, organizational resource capacity, legal and regulatory framework and cost of sustained products and its effects on implementation of sustainable procurement practices. An organizational structure is supportive and conducive towards sustainable solutions, as well as senior management support are considered key in sustainable procurement.

Organizational structure

According to Gatari (2014) in challenges facing implementation of green procurement in Manufacturing Sector in Kenya suggested that organizational structure had a positive effect on implementation of green procurement. This poses a challenge in implementation of green procurement in manufacturing sector. To overcome this challenge there is need for reconfiguring the structure of the organization and its services to enable different kinds of skill sharing and professional relationships to emerge, engaging staff in new ways. Reviewing the organization's procurement structure and identifying a programme of structural and organizational change will ensure normal working practices are aligned with sustainable procurement policy.

The Sustainable Procurement Task Force (Defra, 2006) reiterated that there was a lack of clear direction from top management to make delivering sustainable development objectives through procurement a priority. (Nasiche and Ngugi, 2014) also found out that top management support in terms of training, communication and financial for GPP implementation stands at about 50%. Study participants indicated that the organizations top echelons are yet to fully integrate green procurement in the overall organization strategy. The findings from the statistics confirmed that internal organization incentives and pressures are critical determinants

to the adoption GPP in line with earlier empirical findings by Bjorklund (2011) who found out that top/middle management was an important drivers in the environmental purchase

Procurement is the process in which public or private organizations buy supplies or services to fulfill various functions such as shelter, transport and need for infrastructures, among many others (Talluri, 2008). Through procurement the organization facilitates the achievement of its own policy goals such as sustainable development (Elliot, 2007). Procurement is every activity associated with the acquisition and supply of goods, works and services from inception of an idea requiring and leading to a “buy” decision to the disposal of the goods or the conclusion of the service (Charles, 2007).

Effective procurement practices are strategies followed when making organization purchasing decisions. These practices include building supplier relationships, team based approaches to procurement and proper use of technology or e-procurement. Implementing effective procurement practices significantly improve the effectiveness of purchasing decisions (Sobczak, 2008). In government parastatal, effective procurement practices entail processes where institutions meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst minimizing damage to the environment (Thomson, 2007)

Organizational Resource Capacity

Scholars also suggest that financial resource of firms can increase their visibility among external stakeholders. Additionally, financial resource is also considered as a source of organizational slack, in the form of excess resources (Sharma, 2005; Bowen, 2009). Accordingly, superior financial resource could lead to visibility, thereby leading to more pressure from external constituents. External stakeholders could also perceive firms with financial resources to be in a position to use the excess discretionary slack resources to overcome the risk and unpredictability in adopting the proper supply-side environmental practices (Menguc et al., 2010).

Accordingly, following organizational scholars espousing the institutional view of legitimacy (Sharma, 2005), superior financial performance will promote basic supply side environmental initiatives such as green procurement (Shittu and Bake, 2010). Additionally, investments in development initiatives are far more uncertain than basic green procurement investments. Therefore, firms would exercise scepticism when allocating their limited resources to such advanced initiatives, and rather invest in basic green procurement initiatives that would sufficiently satisfy the needs of their external stakeholders

Zhu *et al.*, (2009) also noted the importance of dedicating (physical) resources successful implementation of green procurement. Telewa (2014) found that procurement professionals occasionally face many challenges in the implementation of sustainable procurement practices which include; lack of budget for internal or external support, lack of metrics (KPI) to measure and monitor progress, in the local market, lack of support from the top management, resistance from suppliers, lack of internal expertise on sustainability topics, he also noted that minimal progress has been realized in the managing and minimizing these implementation challenges in public organizations. These studies also collaborated with findings by Arthur (2009) that many procurement managers in Kenyan State corporations’ lacks competitive knowledge and skills on how to formulate and embrace effective procurement policies in many public institutions in Kenya

Legal and Regulatory Framework

Gatari (2014) in challenges facing implementation of green procurement in manufacturing sector in Kenya found out that legal and regulatory framework has a positive effect on implementation of green procurement. This indicated that there is a notable absence of regulation to mandate government and business green purchasing activities. These findings reinforce the well-known theory of compliance capture by Stigler (1971) that public institutions are likely to default on regulatory requirements that seek to achieve wider public good and rather

extend their vested interests especially when compliance enforcement was weak.

A supportive legal and regulatory framework on environment management enhances effective implementation of green procurement. Tanzi (2009) noted that application of poor procurement policies and lack of top management support hinders are key impediments towards implementation of effective procurement practice in many government institutions in East Africa. Procurement policies entail a set of rules and regulations put in place to govern the process of acquiring goods and services needed by an organization to function efficiently (Wisegeek, 2013). Both small and large companies as well as non-profit organizations regularly design and apply procurement policies to guide on procurement matters. Procurement policies are thus a set of rules and regulations that are designed by organizations to govern on application of various procurement procedures (Bartik, 2009).

Nasiche and Ngugi (2014) suggested that government should enhance the supervisory and regulatory capacity of Public Procurement Oversight Authority: This will enable PPOA to come up and enforce green procurement regulations. The institution also needed to come up with clear and elaborate GPP implementation guidelines for the entire public sector. Nasiche and Ngugi (2014) also noted that supporting instruments for GPP implementation including product guidance based on the principles of life cycle thinking as well as eco-labeling, eco design and re-manufacturing tools and techniques should be developed by PPOA as a matter of priority. PPOA should also develop a national action plan for GPP.

Many governments, both overseas and domestic, have now implemented policies promoting sustainable procurement principles. Implementation of sustainable public procurement rules and regulations aims to reduce the adverse environmental, social and economic impacts of purchased products and services throughout their life. These include inputs of natural resources, energy and water in the manufacture, use and disposal of goods; pollution produced from the manufacture, use and disposal

of goods; costs of operation and maintenance over the life of the goods; labour conditions in the manufacture, use and disposal of goods or delivery of services and loss of flora and fauna resulting from the removal or alteration of natural resources.

Cost of Sustained Products

Nasiche and Ngugi (2014) on the determinants of adoption of green procurement in the public sector found that survey respondents were of the contrary opinion as to whether green products, services and works cost more than non-green ones. The principal underpinning this result is because the marginal economic and sustainability benefits of GPP are far much higher than the marginal costs especially so in the long-run as observed by Chen (1991). The results also showed that cost is not a major factor limiting the adoption of GPP. However the findings are in contradiction to the earlier study by Bouwer et al. (2006); Brammer and Walker (2007) which found that increased cost of green products as a barrier to adoption. On the other hand the findings are supported by United Nations (2008) which found that green products, services and works do not cost more in the long term.

Critique of the Existing Literature

According to Sustainable Procurement Task Force (2006) a key criticism is that sustainable procurement products cost more. But one has to look at the lifecycle costs, a sustainable product may cost more initially, but a longer lifespan and lower maintenance cost means the total cost of ownership is lower than that of a non-sustainable product. Recycled materials and products have long been recognized as making an important contribution to sustainability by reducing landfill (and therefore methane emissions) and conserving non-renewable resources show that over their full life cycle they also have an important part to play in reducing carbon dioxide emissions. And while greener products might be more expensive initially, government procurement can drive economics of scale demand increased and industry invested in facilities, which will bring down prices.

The aim and challenge of sustainable procurement is to integrate environmental and social considerations into the procurement

process, with the goal of reducing adverse impacts upon health, social conditions and the environment, thereby saving valuable costs for public sector organizations and the community at large. While, most public and private sector organizations are pushing for effective sustainable procurement practices so as to achieve desirable outcomes, Sustainable procurement, however, is not exempt from criticism. If not correctly and transparently applied, sustainable procurement could unfairly exclude some good suppliers from participating bids and, as such, be perceived as a disguised barrier to international trade. In addition, the trade-offs between environmental, social and economic considerations are not always easy to understand.

Research Gaps

When it comes to the study of sustainable procurement practices in the public sector specifically limited research exists that addresses issues that challenge or acts as barriers to their implementation. For example, researcher (Chien and Shih, 2007; Ninlawan et al., 2010; Kumar et al., 2012) works on the implementation of green procurement practices in electronics industry, and on how sustainability can be encouraged when the public sector buys from suppliers in specific industries (Hall and Purchase, 2006; Matthews and Axelrod, 2004; Sonnino, 2009). Others have conducted in private sector manufacturing contexts (Hall and Purchase, 2006; Matthews and Axelrod, 2004; Sonnino, 2009; Gatari, 2014). Other studies have investigated the prevalence of sustainable procurement practice across the UK public sector (Preuss, 2009; Preuss and Walker, 2011; Walker and Brammer, 2009a), and also in the context of the UK health and local government sectors buying from small businesses (Walker and Preuss, 2008). Some studies have focused on green procurement practice in China (Geng and Doberstein, 2008), and across Asian countries (Ho et al., 2010)

However, there is limited research in the area of challenges facing implementation of sustainable procurement practices in particular with respect to the public sector specifically governmental parastatals in Kenya, Gatari (2014) conducted a research on challenges facing implementation of green procurement practices in manufacturing organizations in Kenya, Telewa (2014) did a study on sustainable procurement practices in the

public sector, Nasiche and Ngugi (2014) conducted a research on the determinants of adoption of green procurement in the public sector which strived to identify indicators that ensure successful implementation of green procurement practices in public sector. This study therefore sought to establish the challenges facing effective implementation of sustainable procurement practices with specific interest in the government parastatals in Nairobi County.

Summary

This literature puts into focus that number of factors may influence the implementation of sustainable procurement but, the need to focus on the procurement aspects of any public sector if it is to be effective and efficient. The literature was guided by systems theory, resource based view, transaction cost theory and institutional theory. Empirical literature identifies several factors that influence sustainable procurement practices within the government parastatals. It point out the importance of organizational structure, organizational resource capacity, legal and regulatory framework and cost of sustainable products which can serve as barriers to implementation of sustainable procurement practices.

RESEARCH METHODOLOGY

Research Design

The study adopted a descriptive research design enabled the researcher to focus on various variables and describe them accordingly besides explaining how each variable influenced effective implementation of sustainable procurement practices. According to Mugenda and Mugenda (2003) a descriptive research is a method which enables the researcher to summaries and organizes data in an effective and meaningful way. Hence, the research design is considered applicable in the study because it allowed the researcher to study phenomena of sustainable procurement without manipulation of variables. Besides the above, descriptive research design enabled the researcher to combine relevance to the research purpose and objectives. Cooper and Schindler (2011) stated that research design constitutes the blueprint for the collection, measurement and analysis of data. Research design aided the researcher in the allocation of

limited resources by posing crucial choices in methodology. It was the plan and structure of investigation so as to obtain answers to research questions.

Target Population

Target population refers to the larger population to which the researcher ultimately would like to generalize the results of the study (Mugenda and Mugenda, 2003). It is thus the entire group of individuals, events or objects having common observable characteristics. Kothari (2008) states that a target population refers to all items in any field of inquiry, Ewing (2011) describes a population as a set of sampling units or cases that the researcher is interested in. The target population for the study therefore, comprised of all 81 employees of National Gender and Equity Commission.

Sample and Sampling Techniques

A sample is portion or part of the population of interest. The purpose of sampling is to gain an understanding about some features or attributes of the whole population based on the characteristics of the sample. The study uses stratified random sampling technique where subjects are selected in such a way that the existing subgroups in the population are more or less reproduced in the sample (Mugenda and Mugenda, 2003). This section describes how the sample size was determined and the sampling technique used.

Sampling Frame

A sampling frame is a list of cases from which a sample can be selected from (Mugenda and Mugenda, 2009) and according to Kothari (2004) a representative sample is one which is at least 10%

of the population. The selected samples were representative of the target population. It was selected as a proportion of the target population. The sample size of the population was selected by use of Slovin's formula:

$$n = \frac{N}{(1 + Ne^2)}$$

Where;

n = sample size

N = total population i.e. 81 employees

e = Error tolerance. The study confidence level was 90% which gave a margin error of 0.1

Therefore;

$$n = \frac{81}{(1 + 81 * 0.1^2)}$$

$$n = \frac{81}{1.81}$$

$$n = 44.751$$

The Sample size was 45 employees which represented a percentage of 55.56% of the target population. According to Mugenda and Mugenda (2003) a sample size of between 10 and 30 % is a good representation of the target population and hence the 30% is adequate for analysis. To determine the sample size of each category of employees in NGEC, proportionate stratified sampling was used. The sample size was selected to represent the various strata as shown in Table 3.1.

Table 3.1: Sampling Frame Matrix

Strata	Study Population (N)	Sample size 10% (n)
Top and Middle Management	20	11
Procurement Department	10	6
Finance and Accounting	12	7
Communication	12	7
ICT	8	4
Human Resource	9	5
Legal Department	10	6
Total	81	45

Sampling Techniques

The sampling units were selected using stratified sampling technique which produces estimates of overall population with greater precision and ensures that a more representative sample is derived from a relatively homogeneous population (Ngechu, 2011). The selected samples were a representative of the target population. The researcher determined the sample size of each category of employees using, proportionate stratified sampling.

Data Collection Instruments

The type of data to be collected was from primary and secondary data. Primary and secondary data provided a comprehensive picture of the study. Primary data is the first hand information gained from the field when conducting research, while secondary data was collected through comprehensive literature review study. The researcher collected primary data using Questionnaires from respondents. The main instrument of data collection was structured questionnaire as provided in Appendix II. The questions used were closed questions because closed questions made it easier for the researcher to analyze responses. The questionnaires were self-administered to enable respondents to respond promptly.

Data Collection Procedures

A letter from the Jomo Kenyatta University of Agriculture and Technology was used for introduction which was presented to the management of NGEK. The intention to drop questionnaires was explained to the human resources manager and the respondents. The questionnaires were delivered to the respondents and they were given one week to fill. The questionnaires were self-administered where the respondents filled themselves. The researcher then collected the filled questionnaire after one week.

Pilot Testing

After the questionnaire had been designed, the questionnaires were first administered to 8 respondents who are part of the target population but not sample size as part of the pilot study. The questionnaires were pretested to

ensure clarity and validity of the instrument. Mugenda and Mugenda (2003) defines validity as the accuracy and meaningfulness of inferences which are based on the results.

Validity of Test

Validity is the degree to which the measurement process measured the variable it claims to measure. Mugenda and Mugenda (2003) define validity as the accuracy and meaningfulness of inferences, which were based on the research results. The researcher determined the content of validity of the collection instrument by discussing the research instrument with research experts in the university. The valuable comments, corrections, suggestions given by the research experts assisted in the validation of the instrument. Research experts and the procurement department staff were expected to tick the items in the questionnaires if they helped to determine the factors influencing the implementation of sustainable procurement practices in public sector organizations in Kenya or not. The content of the responses given by the respondents was checked against the study objectives. Evidence of content relevance, representativeness and relevance to the research variables indicates that the research instruments are valid (Joppe, 2000).

Reliability Test

According to Mugenda and Mugenda (2003) reliability is the consistency of a measure of the degree to which a research instrument yields consistent results or data after repeated trials. The instruments were analyzed for reliability using the Cronbach's Coefficient Alpha to determine the extent of reliability. A Cronbach's Coefficient Alpha of 0.7 according to 1.0 (Orodho, 2008) was adequate for the instruments to be reliable.

Data Analysis and Presentation

Data analysis and presentation is the process of bringing order, structure and meaning to the mass of information collected. It involves examining what has been collected and making deductions and inferences (Kombo and Tromp, 2006). This section describes the method used for data analysis and how the analyzed data was presented

Data Analysis

The data collected was analyzed both qualitatively using brief explanations and descriptive statistics method was applied to analyze quantitative data where data was scored by calculating the percentages, mean, standard deviation and Variance. This was done using Statistical Package for Social Sciences (SPSS) computer software. SPSS was considered appropriate since it allowed the researcher to follow clear set of quantitative data analysis procedures that lead to increased data validity and reliability and demonstrated the relationship between the research variables. SPSS also assisted in producing frequency tables for descriptive analysis. Inferential statistics was applied through correlation analysis and the use of multiple regression analysis.

Correlation analysis was used to establish statistical significance and the nature of the existing relationship between the dependent variable and the independent variables. Regression analysis was used to determine statistical significance and the influence or effect that the independent variables had on the dependent variable.

Multiple regression model was employed in an attempt to find out whether there was any relationship between organizational structure, organizational resource capacity, legal and regulatory framework, costs of sustainable products and implementation of sustainable procurement practices. Relationship between variables was determined as conceptualized as shown below:

$$y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \beta_3 x_{i3} + \beta_4 x_{i4} + \varepsilon_i$$

Where:

y_i = Implementation of sustainable procurement practices

β_0 = Constant

x_{i1} = Organizational structure

x_{i2} = Organizational resource capacity

x_{i3} = Legal and regulatory framework

x_{i4} = Costs of sustainable products

ε_i = Error Term.

Data Presentation

Quantitative data was represented in the form of diagrammatic representation such as pie charts, line charts and bar graphs. Reporting of data was done using descriptive statistics including frequency tables, percentages, means, simple graphs, tables and charts. Qualitative responses were discussed and content analysis done whereby various responses were organized into content form.

RESEARCH FINDINGS AND DISCUSSION

Introduction

The study sought to assess factors affecting effective implementation of sustainable procurement practices in government parastatals case of NGEN. The data was collected through questionnaires, analyzed and presented showing: number of responses, mean, mode, median, standard deviation and sum in form of tables, charts, graphs and percentages. The information arising from the analyzed data was presented according to the sequence of the objectives of the study.

Pilot Testing Results

Before the research, tools were finally administered to participants, pre-testing was carried out to ensure that the questions were relevant, clearly understood and made sense. The pre-testing aimed at determining the reliability of the research tools including the wording, structure and sequence of the questions. This pre-testing involved 8 respondents from the organization. An alpha coefficient of 0.70 or higher indicated that the gathered data are reliable as they have a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population (Zinbarg, 2005). All the study variables were found to have a Cronbach Alpha coefficient greater than 0.70, as shown in Table 4.1, thus they were all retained for further analysis.

Table 4.1: Pilot Testing Results.

Variable	No of items	Reliability
Organizational structure	8	0.762
Organizational resource capacity	8	0.725
Legal and regulatory framework	8	0.774
Costs of sustained products	8	0.753

Response Rate

The study targeted 45 employees of NGEN, and out of 45 questionnaires distributed, only 40 were returned representing 88.89%. This was in line with Orodho (2009) that a response rate above 50% contributes towards gathering of sufficient data that could be generalized to represent the opinions of respondents about the study problem in the target population. Also according to Babbie (2010) a response rate of 50% is believed to be adequate for analysis and reporting, whereas 60% is considered good while above 70% is deemed very good. The high response rate of 88.89% facilitated gathering of sufficient data that could be generalized to determine factors affecting the effective implementation of sustainable

Table 4.2: Gender of Respondents

Gender	Frequency	Percentage
Male	23	57.5%
Female	17	42.5%
Total	40	100%

Educational background

The findings revealed that 7.5% of the respondents had their educational background to secondary level while 25% of the respondents had diplomas respectively. Further 67.5% of the respondents indicated that they had degree and above qualification as shown in Table 4.3. These findings implied that most of the respondents were qualified to understand the nature of the study problem. This concurs with Joppe (2000) that during research process, respondents with

Table 4.3: Educational Background

Academic Qualification	Frequency	Percentage
Secondary Level	3	7.5
Diploma	10	25
Degree and above	27	67.5
Total	40	100%

procurement practices in government parastatals in Kenya.

Demographic Information

In order to capture the general information of the respondent, issues such as gender, higher education level, position in the organization, years of association with the organization under study were captured in the first section of the questionnaire.

Gender of the Respondents

The information was collected to determine the gender representation of respondents from NGEN. The results show that majority of members were male (57.5%) and females (42.5%) as shown in Table 4.2.

technical knowledge on the study problem assist in gathering reliable and accurate data on the problem under investigation. This demonstrated that most of the organization employees were qualified professionals with technical knowledge and skills on the study problem and thus provided the study with reliable information on factors affecting the effective implementation of procurement practices in government parastatals in Kenya.

Work Experience of the Respondents

The study determined the working experience held by the respondents in order to ascertain the extent to which their responses could be relied upon to make conclusions on the study problem using their working experience. From the findings in table 4.4, 50% of the respondents indicated to have a working experience of 6-10 years, 20% of the respondents had a working experience of less than 5 years, 15 % of the respondents had a working experience of 11-15 years and 15% of the respondents had a working experience of 16 years

Table 4.4: Work Experience of the Respondents

Experience (in Years)	Frequency	Percentage
0 – 5	8	20
6 – 10	20	50
11 – 15	6	15
16 years and above	6	15
Total	40	100%

Organizational Structure

The study sought to find out the effects of organizational structure on the implementation of sustainable procurement practices, the questions asked on organizational structure were: whether NGEC had incorporated sustainable procurement practices in its corporate strategy, existence of top management support for implementation of sustainable procurement practices, and the availability of incentives and motivation for incorporation of sustainable procurement

Table 4.5: Organizational Structure

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total n=40	Mean	Median	Mode	std
1.NGEC has not incorporated sustainable procurement practices in the overall corporate strategy	0.0	1.5	8.0	33.8	56.8	100	4.46	5	5	.707
2.There is less support from the top management for sustainable procurement practices implementation	1.4	2.7	10.8	47.3	37.8	100	4.18	4	4	.824
3.No incentives and motivation to incorporate sustainable procurement practices	0.0	0.0	4.0	59.6	36.5	100	4.32	4	4	.551
4.Lack of clear definition and evaluation criteria for green procurement affect the implementation of sustainable procurement practices in your organization	2.8	0.0	4.0	48.6	44.6	100	4.32	4	4	.798

and above. These findings were in line with Braxton (2008) that respondents with a high working experience assist in providing reliable data on the study problem since they have technical experience on the problem being investigated by the study. This indicates that 50% of the respondents had worked in the training institutions for a long time and thus understood technical issues on factors affecting the effective implementation of procurement practices in government parastatals in Kenya.

practice. Respondents were also asked if lack of clear definition and evaluate criteria for green procurement affected implementation of sustainable procurement practices.

Respondents were asked to rank the frequency of occurrence of the above factors in NGEC. They were required to rank these dimensions on a five point Likert scale where scale points 5,4,3,2, and 1 represented 'strongly agree 'agree 'neutral', 'disagree' and 'strongly disagree respectively. The results of the responses are shown in table 4.5

According to the findings, 56.8% of the respondents strongly agreed that NGENC has not incorporated sustainable procurement practices in the overall corporate strategy with a mode and median of 5. In addition, 48.6% of the respondents agreed that lack of clear definition and evaluation criteria for green procurement affect the implementation of sustainable procurement practices in your organization with a mode and median of 4. 59.5% of the respondents agreed there was no incentives and motivation to incorporate sustainable procurement practices with a mode and median of 4. 47.3 % of the respondents agreed that there is less support from the top management for sustainable procurement, with a mode and median of 4.

The findings from the statistics confirmed that internal organization incentives and pressures are critical determinants to the adoption GPP in line with earlier empirical findings by Bjorklund (2011) who found out that top/middle management support was an important drivers in the environmental purchase.

Organizational Resource Capacity.

The study sought to identify how organizational structure affected the effective implementation of sustainable procurement practices. The findings are shown in Table 4.6.

Table 4.6: Organizational Resource capacity

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total n=40	Mean	Median	Mode	std
1.Lack of budget for internal or external support	1.2	0.0	9.8	54.8	34.2	100	4.22	4.00	4	.726
2.Lack of internal expertise, training and communication on Sustainability topics	0.0	9.4	16.4	61.7	12.4	100	3.77	4.00	4	.790
3.Lack of metrics (KPI) to measure and monitor progress	2.9	7.6	7.2	49.3	32.9	100	4.13	4.00	4	.970
4.Lack of information and knowledge about the environmental impact of the company and on suppliers CSR practices	1.6	8.0	12.3	57.5	20.5	100	3.89	4.00	4	.881

The critical factors that the study considered as sub variables of organizational resource capacity include; budget for internal or external support, internal expertise, training and communication on sustainability topics, KPI to measure and monitor progress and information and knowledge about the environmental impact of the company and on suppliers CSR practices. Respondents were required to rank how these organizational resource capacity sub variables influenced affected the effective implementation of sustainable procurement practices in their organization, using a five point Likert scale where scale point 5,4,3,2, and 1 represented, strongly agree ‘agree ‘neutral’, ‘disagree’ and ‘strongly disagree respectively.

On whether lack of budget for internal or external support was a challenge to effective implementation of sustainable procurement practices, 54.8% of the respondents agreed, 34.2% of the respondents strongly agreed and only 1.4% of the respondents disagreed. Majority of the respondents (61.6%) agreed that lack of internal expertise, training and communication on sustainability topics was also a challenge in effective implementation of sustainable procurement practices, 9.6% of the respondents disagreed while 12.3% of the respondents strongly agreed. On the other hand, 49.3% of the respondents agreed that lack of metrics (KPI) to measure and monitor progress also challenged the effective implementation of sustainable

procurement practices in their organization and on whether lack of information and knowledge about the environmental impact of the company and on suppliers CSR practices challenged effective implementation of sustainable procurement practices in NGEK 57.5% of the respondents agreed, 1.4% of the respondents strongly disagreed, 8.2% of the respondents disagreed, 20.5% of the respondents strongly agreed and 12.3% of the respondents were neutral.

Overall regarding the aspect of organizational resource capacity in NGEK, the mode and median were 4 for all the four organizational resource capacity indicators considered critical in affecting effective implementation of sustainable procurement practices in government parastatals in Kenya. This implies that majority of the members agreed that the following factors lacked when it came to implementation of sustainable procurement practice, budget for internal or external support, internal expertise, training and communication on sustainability topics, KPI to measure and monitor progress and information

and knowledge about the environmental impact of the company and on suppliers CSR practices.

The findings reiterated with findings by Telewa, (2014) identifies that procurement professionals occasionally face many challenges in the implementation of sustainable procurement practices which include; lack of budget for internal or external support, lack of internal expertise on sustainability topics, contradictory objectives and lack of information on suppliers corporate social responsibilities practice. Arthur (2009) also noted that many procurement managers in Kenyan state corporations lack competitive knowledge, skills and internal expertise on how to formulate and embrace effective procurement policies in many public institutions in Kenya.

Legal and Regulatory Framework.

This section of the study sought to establish the extent to which legal and regulatory framework affects effective implementation of sustainable procurement practices in government parastatals. The results are illustrated in table 4.7.

Table 4.7: Legal and Regulatory Framework

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total n=40	Mean	Median	Mode	Std
1.Procurement laws are not explicitly clear and in many cases their interpretation is subjective	1.5	0.0	4.0	47.3	47.3	100	4.23	4.00	4	.737
2.Procurement in your organization align with or support the Public Procurement Oversight authority's strategic and sustainable business goals	1.5	1.3	5.4	55.4	36.5	100	3.90	4.00	4	.725
3. Lack of relevant legislation and legal enforcement influence negatively on the implementation of sustainable procurement practices.	0.0	2.7	23.0	55.4	18.9	100	3.70	4.00	4	.902
4. NGEK has no policies concerning sustainable procurement practice	2.7	4.2	31.0	44.6	17.6	100	3.99	4.00	4	.929

Respondents were required to rank implementation challenges with regards to legal

and regulatory sub variables. They were to do the ranking using a five point Likert scale where the

scale points 5,4,3,2 and 1 represented 'strongly agree', 'agree', 'neutral', 'disagree' and 'strongly disagree' respectively. The findings show majority of the respondents strongly agreed (47.3%) that procurement laws are not explicitly clear and in many cases their interpretation is subjective while 55.4% of the respondents agreed that lack of relevant legislation and legal enforcement influence negatively on the implementation of sustainable procurement practices. Also 55.4% of the respondents agree that procurement in their organization align with or support the Public Procurement Oversight authority's strategic and sustainable business goals. On whether NGEC has no policies concerning sustainable procurement practice 6% of the respondents agreed, 31.1% of the respondents neutral and 4.1% disagreed of the respondents.

Overall, it is clearly seen that the median and mode were 4 for the other three factors considered to affect the effective implementation of sustainable procurement practices in government parastatals in Kenya this means it is true that procurement laws are not explicitly clear and in many cases their interpretation is subjective, which reiterated with the findings by

Table 4.8: Cost of Sustainable Products

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total n=40	Mean	Median	Mode	std
1. High prices of green products	0.0	0.0	1.4	63.6	35.0	100	4.34	4.00	4	.503
2. Unavailability of green products in the local market	0.0	0.0	5.4	60.8	33.8	100	4.28	4.00	4	.563
3. Resistance from suppliers	1.5	2.6	33.8	43.2	18.9	100	3.77	4.00	4	.840
4. Lack of environmental specifications on products offered	0.0	10.8	14.9	40.5	33.8	100	3.96	4.00	4	.966

The respondents were asked to state the extent which cost of sustainable products sub variables influence negatively on the implementation of sustainable procurement practices using a five point Likert scale where scale points 5, 4,3,2 and 1 represented "strongly agree", "agree", "neutral", "disagree" and "strongly disagree" respectively. The data received were analyzed and the mean, mode and median are illustrated in Table 4.8.

Nasiche F. and Ngugi (2014) that to many practitioners, the procurement laws are not explicitly clear and in many case their interpretation is subjective. This study also identified that there is also lack of relevant legislation and legal enforcement.

However the study revealed that NGEC had policies concerning sustainable procurement and that procurement at the organization aligns with or support the PPOA's strategic and sustainable business goals. These findings do not agree with findings by Simpson and Power (2007) that low level of procurement regulations compliance in many public institutions in developing nations hampers effective execution of procurement functions and implementation of institutional development projects.

Cost of Sustained Products

This section sought to find out the effects of cost of sustained products on the effective implementation of sustainable procurement practices in government parastatals. The findings are shown in Table 4.8

According to the findings, 63.5% of the respondents agreed that high prices of green products influenced positively on the implementation of sustainable procurement practices in government parastatals, 60.8% of the respondents agreed there was unavailability of green products in the local market thus influencing negatively on implementation of sustainable procurement practices and, 40.5% of the respondents agreed that lack of environmental specifications on products offered

33.8% of the respondents strongly agreed and 10.8% of the respondents disagreed. In summary, the median and mode for all the sub variables for cost of sustained products considered to influence negatively effective implementation of sustainable procurement practices were 4.

The findings of this study agreed with the findings of Faith-Ell et al., (2010) that the biggest challenge to the effective implementation of green purchasing is the cost and income, and the environment friendly packaging is the key to the success of the project. Walker and Brammer (2009) indicated that the main problems limiting adoption of green public procurement was difficulty in engaging suppliers. Some green procurement practices initiatives were found to be hampered by unwillingness of suppliers to

cooperate (Lysons and Farrington, 2012). This unwillingness could be due to a number of reasons including concerns over sensitive information, poor supplier practices, and resource constraints.

Implementation of Sustainable Procurement Practices

The research further sought to establish sustainable procurement practices that were implemented in the public sector. The respondents were asked to rank their sustainable procurement practices implemented to a scale of 1-5, where 1- not considering it, 2- planning to consider it, 3- considering it currently, 4- initiating implementation and 5- implementing successfully. The data received were analyzed and the mean, mode and median are illustrated in table 4.9

Table 4.9: Implementation of Sustainable Procurement Practices

	Not considering	Planning to consider	Considering it currently	Initiating implementation	Implementing successfully	Total n=40	Mean	Median	Mode	Std
1. Supporting the inclusion of sustainability aspects into future contracts	0.0	0.0	14.9	44.6	40.5	100	4.25	4.00	4	.704
2. Environmental Audit for suppliers	0.0	2.7	6.8	54.1	36.5	100	4.23	4.00	4	.699
3. The need for cost-effective requirements taking account of whole life costs including purchase, installation, running costs including energy costs and disposal costs	0.0	5.4	17.6	54.0	23.1	100	3.96	4.00	4	.792
4. Giving preference to Youth, Women and People with Disabilities access public procurement	0.0	0.0	6.8	56.9	36.6	100	4.31	4.00	4	.591
5. Measure performance against sustainable procurement criteria in the Best Practice Indicators and the Procurement Capability Assessment model	0.0	0.0	1.5	63.5	35.0	100	4.33	4.00	4	.503

According to the findings, 44.6% of the respondents were confident that the organization was initiating implementation of supporting the inclusion of sustainability aspects into future contracts. Further 54.1% of the respondents agreed that the organization was also initiating the implementation of environmental audit for suppliers and the need for cost-effective requirements taking account of whole life costs including purchase, installation, running costs including energy costs and disposal costs. 56.8% of the respondents agreed that the organization was too initiating implementation of giving preference to youth, women and people with disabilities to access public procurement. Regarding measuring performance against sustainable procurement criteria in the best practice indicators and the procurement capability assessment model 63.5% of the respondents agreed that the organization was initiating implementation of the same. Generally on all the five aspects of implementation of sustainable procurement practices, the median and mode were 4 meaning that there was a general appreciation of SP practices being implemented evidenced by the consistent mode and median

Regression Analysis

The general objective of the study was to assess the factors affecting effective implementation of

sustainable procurement practices in government parastatals in Kenya. The dependent and independent variables were measured in a Likert scale of 5,4,3,2 and 1 representing; strongly agree 'agree 'neutral', 'disagree' and 'strongly disagree' respectively. The responses to these variables were converted to numeric scores where 5 representing the highest score and 1 lowest score. ANOVA was used which involved the use of stepwise multiple regression procedure to examine the relationship between the independent variables and dependent variable.

The results are shown in table 4.10. The sum of squares, mean square, F statistic and p-value was 0.73, 0.18, 3.33 and 0.015 respectively. An f-value of $p < 0.015$ was established. This implies that the regression model has less than 0.015 probability of giving wrong prediction. Therefore when the four independent variables (organizational structure, organizational resource capacity, legal and regulatory framework and cost of sustainable products.) are combined together and tested against the dependent variable (implementation of sustainable procurement practices), the independent variables significantly influence the implementation of sustainable procurement practices at 0.05 significance level, the p-value is 0.015 as shown in table 4.10.

Table 4.10: Anova.

Model	Sum of Squares	Df	Mean Square	F	p-value
Regression	.074	4	.018	3.331	.015 ^b
Residual	.371	68	.005		
Total	.445	72			

*Dependent Variable: implementation of sustainable procurement practices

*Predictors: (Constant), organizational structure, organizational resource capacity, legal and regulatory framework and cost of sustainable products.

With regards to the extent to which each of the four independent variables contributed to the prediction, the value of the T-ratio associated with respective variables as shown in table 4.11. The results indicate that legal and regulatory

framework contributed significantly to implementation of sustainable procurement practices in government parastatals compared to other variables.

Table 4.11: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	Beta	Std. Error	Beta		
(Constant)	.575	.107		5.397	.000
Organizational Structure	.016	.146	.016	.107	.915
Organizational Resource Capacity	.173	.101	.215	1.702	.093
Legal and Regulatory Framework	.205	.101	.292	2.042	.045
Cost of Sustained Products	.052	.117	.056	.440	.661

*Dependent variable: Implementation of sustainable procurement practices

*Legal and Regulatory Framework significant at 0.05 significance level (t-ratio **2.042**, p-value **0.045**)

Multiple regression analysis was applied in order to determine the relationships between independent variable and dependent variable. The regression equation was estimated as; $y_i = constant + \beta_1x_{i1} + \beta_2x_{i2} + \beta_3x_{i3} + \beta_4x_{i4} + \varepsilon_i$

The constant and regression coefficients $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \varepsilon_i$ were (0.575, 0.016, 0.215, 0.292, and 0.056) respectively as shown in table 4.11. The regression equation was estimated as; $y_i = constant + \beta_1x_{i1} + \beta_2x_{i2} + \beta_3x_{i3} + \beta_4x_{i4} + \varepsilon_i$, that is, $y = 0.575 + 0.016x_1 + 0.215x_2 + 0.292x_3 + 0.056x_4 + 0.074$ where y_i = Financial Performance, x_{i1} = Credit risk policies, x_{i2} = Credit risk appraisal, x_{i3} = Credit risk controls, x_{i4} = Credit risk monitoring, ε_i = Error Term.

The model illustrates that when all the variables are held constant, the value of implementation of sustainable procurement practices would be 0.575. However, holding other factors constant, a unit increase in organizational structure would lead to 0.016 increases in implementation of sustainable procurement practice, a unit increase in organizational resource capacity would lead to 0.215 increases in implementation of sustainable procurement practice. On the other hand, legal and regulatory framework would lead to 0.292 increases in implementation of sustainable

procurement practices while a unit increase in cost of sustainable products would lead to 0.056 increases in implementation of sustainable procurement practices.

Model Summary

Multiple regression analysis yielded R (0.4050), R-square (0.164), adjusted R² (0.115), standard error (0.074) as shown in table 4.12.

Adjusted R² is called the coefficient of determination and tells us how different factors have affect effective implementation of sustainable procurement practices in Kenya varying with organizational structure, organizational resource capacity, legal and regulatory framework and cost of sustainable products. From table 4.12 the value of adjusted R² is 0.115. This implies that, there was a variation of 11.5% between the dependent and the independent variables. This with challenges associated with organizational structure, organizational resource capacity, legal and regulatory framework and cost of sustainable products, implementation of sustainable procurement practices would be achieved at 11.5%.

Table 4.12: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.405 ^a	.164	.115	1.0

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter summarizes the findings of the study, presents conclusions and recommendations on the factors affecting effective implementation of sustainable procurement practices in government parastatals in Kenya. Suggestions for further research are included in this chapter.

Summary of Major Findings

The general objective of the study was to determine factors affecting effective implementation of sustainable procurement practices in government parastatals in Kenya. The study specifically determine the effect of organizational structure, organizational resource capacity, legal and regulatory framework and cost of sustained products on effective implementation of procurement practices in government parastatals in Kenya. The reviewed literature showed that effective implementation of procurement practices plays an important role in minimization of overall organization's procurement expenditure and facilities delivery of quality goods and service. Further, it was revealed that the organizational structure, organizational resource capacity, legal and regulatory framework and cost of sustained products affected effective implementation of sustainable procurement practices.

Organizational Structure

According to the findings, majority of the respondents strongly agreed that NGEC has not incorporated sustainable procurement practices in the overall corporate strategy. In addition, majority of the respondents agreed that lack of clear definition and evaluation criteria for Green procurement affect the implementation of sustainable procurement practices in their organization. Also most of the respondents agreed that there were no incentives and motivation to incorporate sustainable procurement practices and that there is less support from the top management for sustainable procurement. It is therefore, worth noting that all the sub variables of organizational structure, respondents agreed that the lacked within the organization thus organizational structure affects

the effective implementation of sustainable procurement practice.

Organizational Resource Capacity

The study sought to determine the effects of organizational resource capacity on effective implementation of sustainable procurement practices in government parastatals in Kenya. On whether lack of budget for internal or external support was a challenge to effective implementation of sustainable procurement practices, majority of the respondents agreed, while some of the respondents strongly agreed and only of very few respondents disagreed.

Majority of the respondents agreed that lack of internal expertise, training and communication on sustainability topics was also a challenge in effective implementation of sustainable procurement practices, very few respondents strongly agreed. On the other hand, majority of the respondents agreed that lack of metrics (KPI) to measure and monitor progress also challenged the effective implementation of sustainable procurement practices in their organization and on whether lack of information and knowledge about the environmental impact of the company and on suppliers CSR practices challenged effective implementation of sustainable procurement practices in NGEC majority of the respondents also agreed that it also had a positive effect on the implementation of sustainable procurement practices.

Overall regarding the aspect of organizational resource capacity in NGEC, it had negative effect on the effective implementation of sustainable procurement practices in government parastatals in Kenya. This implies that majority of the members agreed that the following factors lacked when it came to implementation of sustainable procurement practice, budget for internal or external support, internal expertise, training and communication on sustainability topics, KPI to measure and monitor progress and information and knowledge about the environmental impact of the company and on suppliers CSR practices.

Legal and Regulatory Framework

The findings shows that majority of the respondents strongly agreed that procurement laws are not explicitly clear and in many cases

their interpretation is subjective also majority of the respondents agreed that lack of relevant legislation and legal enforcement influenced negatively on the implementation of sustainable procurement practices. On whether procurement in their organization align with or support the Public Procurement Oversight authority's strategic and sustainable business goals majority of the respondents agreed that their organization was in alignment with PPOA sustainability goals. The study too identified that most respondents were neutral on whether NGEA had policies concerning sustainable procurement practices. This study also identified that there is also lack of relevant legislation and legal enforcement in the implementation of sustainable procurement practices in government parastatals in Kenya.

Cost of Sustained Products

According to the findings, majority of the respondents agreed that high prices of green products influenced negatively on the implementation of sustainable procurement practices in government parastatals, respondents also agreed that there was unavailability of green products in the local market thus influencing negatively on implementation of sustainable procurement practices and, some of the respondents agreed that lack of environmental specifications on products offered while a few of the respondents strongly agreed. In summary, all the sub variables for cost of sustained products were considered to influence negatively effective implementation of sustainable procurement practices. The findings of this study agreed that the biggest challenge to the effective implementation of green purchasing is the cost and income, and the environment friendly packaging is the key to the success of this project.

Conclusion

The broad objective of the study was to determine factors affecting effective implementation of sustainable procurement practices in government parastatals. The study showed that these factors significantly influenced implementation of sustainable procurement in government parastatals in Kenya when the four factors considered were put together, that is organizational structure, organizational resource capacity, legal and regulatory framework and cost of sustained products.

On the other hand, when these variables are applied separately, it is evident that legal and regulatory framework significantly influenced implementation of sustainable procurement practices in government parastatals. This shows that legal and regulatory framework factors such as, explicitly unclear procurement laws, application of poor procurement policies, non alignment to PPOA goal and lack of relevant legal enforcement affects effective implementation of sustainable procurement practices in government parastatals.

Organizational structure also has a significant influence on effective implementation of sustainable procurement practices. Organizational structure factors such as top management support, incentives and motivation, definition and evaluation criteria for green procurement and incorporation of sustainable procurement practices in the overall corporate strategy affects effective implementation of sustainable procurement practices in government parastatals in Kenya.

Organizational resource capacity is also vital in implementation of sustainable procurement practice this implies that organizational resource capacity factors such as budget allocation for internal or external support for sustainable procurement, internal expertise, training and communication on sustainability topics, metrics (KPI) to measure and monitor progress and availability information and knowledge about the environmental impact of the company and on suppliers CSR practices affected effective implementation of sustainable procurement practices in government parastatals in Kenya.

Cost of sustainable products was another important factor that affects effective implementation of sustainable procurement practices. According to the study factors such as high prices of green products, unavailability of green products in the local market, resistance from suppliers, lack of environmental specifications on products offered to a large extent affect effective implementation of sustainable procurement practices in government parastatals in Kenya.

Recommendations

On the basis of the findings, the following recommendations were made. These recommendations would help improve and ensure successful implementation of sustainable procurement practices in the public sector.

Organizational Structure

The government and other stakeholders ensure that there is structural and organizational change to support implementation of green procurement, organizations should also improve on relationships between management and stakeholders so as to ensure top level management support. Policy and practice for sustainable procurement should be carefully evaluated and the results of that evaluation fed back into improved approaches. It is important that the evaluation considers the full range of costs and benefits. Public organization should incorporate sustainable procurement practices in the overall corporate strategy and should demonstrate top management support by offering incentives and motivation to other employees so that commitment to sustainability is realized in the entire organization.

Organizational Resource Capacity

The organization should have sufficient special techno-economic knowledge and openness to new, effective methods to ensure, internal expertise on sustainability topics when assessing tenders for sustainable procurement implementation through training and communication.

Also the organization should employ better methods of managing organization resources by dedicating financial resources or ensuring budget allocation for internal or external support for sustainable procurement. Government parastatals should also develop metrics (KPI) to measure and monitor progress and ensure availability of information and knowledge about the environmental impact of the company they and also on suppliers CSR practices that which incorporate sustainability issues.

Legal and Regulatory Framework

The study recommends that the government needs to enact environmental legislations and

policies that promote sustainable procurement and those that already have such policies need to be reviewed and revised to integrate sustainable procurement issues and other sustainability issues. The legislature also needs to enact laws to govern sustainable procurement and such laws be enforced to enhance compliance. The management of public organizations should improve on the level of compliance with procurement regulations compliance, design and apply better poor procurement policies, support and encourage other staff to execute procurement functions in accordance with the procurement regulations and procurement policies and should use effective procurement procedures.

Cost of Sustainable Products

This study recommends that while sustainable procurement products cost more government parastatals should focus on the lifecycle costs, a sustainable product may cost more initially, but a longer lifespan and lower maintenance cost means the total cost of ownership is lower than that of a non-sustainable product. Recycled materials and products have long been recognized as making an important contribution to sustainability. And while greener products might be more expensive initially, government procurement can drive economics of scale demand increased and industry invested in facilities, which will bring down prices.

Suggestion for Further Study

This research was intended to identify factors affecting effective implementation of procurement practice in government parastatals but data was collected from only one parastatal in Kenya, hence future research should focus on other parastatals within the country as well as inclusion of other factors that could affect effective implementation of sustainable procurement practices. Also more research is needed to analyze the effect of sustainable procurement practices on economic systems, if sustainable procurement practices is able to steer public institutions into promoting resource saving and green innovation.

REFERENCES

- A. Ball, R. C. (2010). *Using neo-institutionalism to advance social and environmental accounting*. Crit. Perspect. Account., 21 (4) 283–293.
- Arrowsmith. (2013). An overview of EC policy on public procurement. *European Journal of Operational Research* , 202, (1)16-24.
- Authority, P. P. (2013). *Objectives of PPOA*. Retrieved from www.ppoa.go.ke.
- Authority, P. P. (2009). *The Long Term Policy Framework For Public Procurement In Kenya, Draft Zero*. Nairobi, Kenya.
- Babbie, E. R. (2010). *Social Research Counts*. McGraw-Hill, publishers.
- Baumol et al., W. B. (2009). *Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity*. New Haven: Yale University Press.
- Belfit, R. J., Sexton, M., Schweber, L., and Handcock, B. (2011). Sustainable Procurement: Challenges for Construction Practice. *TSBE EngD Conference* (pp. 1-9). Whiteknights: University of Reading.
- Björklund, M. (2011). Influence from the business environment on environmental purchasing Drivers and hinders of purchasing green transportation services. *Journal of Purchasing and Supply Management* , 17, (1), 11-22.
- Borland, H. (2009). Conceptualising global strategic sustainability and corporate transformational change. *International Marketing Review*.
- Bouwer, M. J. (2006). *Green public procurement in Europe 2006—conclusions and recommendations*. 2011 AJ Haarlem, the Netherlands. Available form, http://ec.europa.eu/environment/gpp/pdf/take_5.pdf.
- Brammer, S., and Walker, H. (2007). Sustainable Procurement Practice in the Public Sector: *An International Comparative Study*. (pp. 1-39). Bath: University of Bath: School of Management.
- Brunton et al., B. D.-L. (2010). Institutional Theory and entrepreneurship:Where are we now and where do we need to move in the future? *Entrep.Theory Pract*.
- Cao F, Y. Y. (2012). *Towards Sustainable Public Procurement In China: Policy And Regulatory Framework, Current Developments And The Case For A Consolidated Green Public Procurement Code*. Law School of Central University of Finance and Economics, China. Retrieved from: <http://www.ippc4.org/IPPC4/Proceedings/07GreenProcurement/Paper7-7.pdf>.
- Chen, J. (1991). *Economic Impacts of Green Product Development*. MIT: Unpublished M.Sc. Thesis.
- Chien, M. K., and Shih, L. H. (2007). An Empirical Study of the Implementation of Green Supply Chain Management Practices in the Electrical and Electronic Industry and their Relation to Organizational Performance. *International Journal of Environmental Science and Technology* , 4 (3), 383-394.
- Connolly, P. (2002). *Excerpt from Building to Last: A Funder's Guide to Capacity Building*. Amherst H Wilder Foundation.
- Cox, A. C. (2005). Sub-Optimality in NHS Sourcing in the UK: Demand-Side Constraints on Supply-Side Improvement. *Public Administration* , 83(2), 367-392.
- DEFRA. (2005). *Securing the Future: Delivering UK Sustainable Development Strategy*.

- Elliot, R. (2007). What is the right inventory management approach for a purchased item?,". *Journal of purchasing Management* ,22(7) 148-153.
- Eurostat. (2012). *General Government Expenditure Statistics, reviewed 20 July 2012.*
- Evenett, S. a. (2005). "Government procurement: market access, transparency, and multilateral trade rules,". *European Journal of Political Economy* , 21(1), 163-183.
- Faith-Ell, C. B. (2010). The application of environmental requirements in Swedish road maintenance contracts. *Journal of Cleaner Production* , 14 (2), 163-71.
- Gatari, N. C. (2014). Challenges Facing Implementation of Green: A Case Study of Unga Limited Kenya. *European Journal of Business Management.*
- Hall, D. (2010). *Why We need Public Spending.* QPS.
- Hall, J. (2001). *Environmental supply-chain innovations.* Greener Manag. Int., 35,(1) 105–119
- Hall, M. a. (2006). building or Bodging? Attitudes of Sustainability in UK public sector housing construction developing. *Social Problems* , 49 (1), 11-34.
- Hartley, J. (2004). *Case study research: Essential Guide to Qualitative Methods in Organizational Research.* London: Sage Publications Ltd,.
- Hirsch, P. (1975). Organizational effectiveness and the institutional environment. *Adm.Sci.Q.*, 20(3), 327-344.
- Ho, L. D. (2010). Green procurement in the Asian public sector and the Hong Kong private sector. *Natural Resources Forum* , 34,(1) 24–38.
- Hoffman, A. J., and Sandelands, L. E. (2005). Getting Right with Nature-Anthropocentrism,. *Organisation and Environment.* 18,(1) 141-162.
- Islam, M. M., and Siwar, C. (2013). A Comparative Study of Public Sector Sustainable Procurement Practices, Opportunities and Barriers. *International Review of Business Research Papers* , 9 (3), 62-84.
- Joppe, G. (2000). Testing reliability and validity of research instruments. *Journal* , 4 (1/2), .49-54.
- Karjalainen, K. K. (2009). On-Compliant Work Behaviour in Purchasing: An Exploration of Reasons behind Maverick Buying. *Journal of Business Ethics* , 85,(1) 245–261.
- Kenya Institute of Economic Affairs. (2013). *KEA-Kenya's Memorandum To The Task Force On Parastatal Sector Reforms In Kenya.* Nairobi: Institute of Economic Affairs.
- Kenya, G. o. (2005). *The Public Procurement and Disposal Act.* Nairobi: Government Printers.
- KhannaParag. (2012). *The rise of hybrid of Governance.* Retrieved from http://www.mckinsey.com/insights/public_sector/the_rise_of_hybrid_governance.
- Klaus, H. G. (1979-06). *Parastatals in Kenya:analysis of their condition and methods for improvement of performance.* Nairobi: Institute of Development Studies, University of Nairobi.
- Kothari, C. R. (2008). *Research methodology. Methods and techniques.* New Delhi: New Age International Publishers.
- Kombo, D. K. and Tromp, D. L. A. (2006). *Proposal and Thesis Writing: An Introduction.* Paulines Publications' Africa, Nairobi.

- Kumar, S. C. (2012). Green supply chain management: A case study from Indian electrical and electronics industry,. *International Journal of Soft Computing and Engineering* , 1(6), 275-281.
- Lai et al., K. L. (2006). *Institutional Isomorphism and the adoption of information technology for supply chain management*. *Comput.Ind.*,57(1),93-98.
- Li, L., and Geiser, K. (2009). Environmentally responsible public procurement (ERPP) and its implications for integrated product policy. *Journal of Cleaner Production* , 13, 705-715.
- Lisa, I. (2010). Compliance culture. A conceptual framework. *Journal of management and organization* , 19(7), 702-714.
- Lozano, M. and. (2013). An analysis of the implementation of an environmental management system in a local public administration. *Journal of Environmental Management* , 82 (4): 495-511.
- Lysons, K. and. (2012). *Purchasing and Supply Chain Management*. London: 8th Ed, Pearsons:.
- M., N. (2004). *Understanding the Research Process and Methods: An Introduction to Research Methods*. Nairobi, Acts Press.
- Maignan, I. H. (2012). Managing socially-responsible buying: how to integrate noneconomic criteria into the purchasing process. *European Management Journal*, 20 (6), 641-8.
- Marron, D. (2013). Greener Public Purchasing as an Environmental Policy Instrument OECD. *Journal on Budgeting*, 3 (1), 71-105.
- McCrudden, C. (2008). Using public procurement to achieve social outcomes. *Journal of supply chain Management* , 55, (11), 133-134.
- Mensah, S. a. (2012). Sustainable Procurement: The Challenges of Practice in the Ghanaian Construction Industry. *Procs 4th West Africa Built Environment Research (WABER) Conference* (pp. 871-880). Abuja Nigeria: Laryea, S.,Agyepong, S.A., Leiringer, R.and Hughes, W.Eds.
- Miles, M. and. (2010). Environmental marketing: a source of reputational,. *Journal of Business Ethics*. 23,(14) 299-311.
- Ministry of Economic Planning and Community Affair. (1965). *Motion (on) Sessional Paper No. 10 of 1963/65, African Socialism and Its Application to Planning in Kenya*. Nairobi: Government Printer.
- Morimoto, R. A. (2005). Corporate Social Responsibility Audit: From Theory to Practice. *Journal of Business Ethics* , 62(4), 315-325.
- Mugenda, M. a. (2003). *Research methodology*. Nairobi: Acts Press.
- Nasiche, F., and Ngugi, G. K. (2014). Determinants of Adoption of Green Procurement in the Public Sector: A Case Study of Kenya Pipeline Company. *International Journal of Social Sciences and Entrepreneurship* , 1 (11), 351-372.
- Ninlawan C., S. P. (2009). The implementation of green supply chain management practices in electronics industry,. *Proceeding of International Multi Conference of Engineers and Computer Scientists*, (pp. Vol. III, March 17-19). Hong Kong.
- OECD. (2007). *Integrity in Public Procurement, Good Practice from A-Z*.
- OECD (2012), "Regulatory framework: Starting a business", in *Entrepreneurship at a Glance 2012*, OECD Publishing. http://dx.doi.org/10.1787/entrepreneur_aag-2012-24-en

- Orodho, C. (. (2009). *Elements of Education and Social Science Research*. New Delhi: Kanezja Publishers.
- P.J. DiMaggio, W. P. (1991). *The New Institutionalism in Organizational Analysis*,. University of Chicago Press, Chicago (1991), pp. 1–38.
- Parker, R. and. (2000). Organizational culture in the public sector. Evidence from six organizations. *International journal of public sector organizations* , 13(2) 125-141.
- Partnership, D. (2013). *Performance and MandE Toolkit for the National Gender and Equality Commission, Kenya* . Delta Partnership.
- Preuss, L. (2009). Addressing sustainable development through public procurement: the case of local government., *supply chain management* ,14 (3), p.213.
- Pugh, D. S. (1990). *Organization Theory: Selected Readings*. Harmondsworth: Penguin.
- QGCP. (June 2006). "Procuring for the Future". *Sustainable Procurement National Action Plan Recommendations from the Sustainable Procurement Tasks Force*.
- Rivera, J. (2004). *Institutional pressures and voluntary environmental behavior in developing countries: evidence from the Costa Rican hotel industry*. Soc. Nat. Resour., 17 (4), 779–797.
- Robert, J. (1987). *Encyclopedia of American Judicial Systems*. New york: Scribner.
- S.J. Fowler, C. H. (2007). Incorporating sustainable business practices into company strategy. *Bus. Strategy Environ.*, 16 (7), 26–38.
- Schindler, C. a. (2011). *Business Research Methods*. USA: Oxford University Press.
- Scott, W. (2007). *Institutions and Organizations: Ideas and Interests*. Thousands Oaks: Sage Publications.
- Sekaran, U. (2004). *Research Methods for Business, A skill Building approach*. 4th edition John Wiley and Sons.
- Srivastava, S. (2013). Green supply-chain management: a state-of-the-art literature review. *International Journal of Management Reviews*, 9 (1), 53-80.
- Stigler, G. (1971). The theory of economic regulation. *Bell J. Econ. Man. Sci* , 2(1),15-21.
- Supply., C. I. (2014). *Sustainable Procurement*. Retrieved from: http://www.cips.org/Documents/Products/Sustainable_Procurement_Review_%20new_logo.pdf.
- T.J. Brown, P. D. (2006). Identity, intended image, construed image, and reputation: an interdisciplinary framework and suggested terminology. *J. Acad. Mark. Sci.*, 34 (2) (6), 99–106.
- Tate et al., W. T. (2010). Corporate social responsibility reports: a thematic analysis related to supply chain management. *J. Supply Chain Manag.*, 46 (10), 19–44.
- Telewa, R. S. (2014). *Sustainable Procurement Practices in the Public Water Sector Institutions in Kenya*. Nairobi.
- Thomsons, J. a. (2007). Sustainable Procurement in Practice: lesson from local government. *Journal of Environmental Planning and Management* , 50 (3),421-44.
- Walker, H. and. (2008). Fostering sustainability through sourcing from small businesses: public sector perspectives. *Journal of Cleaner Production*, 16(15), 1600-1609.

- Walker, H. and. (2009). Sustainable Procurement in the UK Public Sector. *Supply Chain Management: An International Journal* , 14 (2), 128-37.
- Westphal et al. (1997). Customization or Conformity?An institutional and network perspective on the content and consequences of TQM. *Administrative Science Quarterly*, 42(2), 366-394.
- Williamson, O. (2008). Outsourcing: Transactional Cost and Supply Chain Management. *Journal of Supply Chain Management* 44 (2), 5-16.
- Zammuto, R. F. (1991). Quantitative and qualitative studies of organizational culture. *Research in organizational change and development* , 5,(1) 83-144.
- Zhu, Q. S. (2009). "Green supply chain management in China: pressures, practices and performance",. *International Journal of Operations and Production Management*, 25, (1) 449-68.
- Zinbarg, M. (2005). *Research methods*. New Jersey: Pearson.