



FACTORS AFFECTING THE IMPLEMENTATION OF GREEN PROCUREMENT PRACTICES IN NAIROBI CITY WATER AND SEWERAGE COMPANY LIMITED

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Abstract: Buying products which are environmentally responsible can be a dicey occupation. Labeling and certification requirements vary, so a green procurement officer may think that he or she is doing the right thing by purchasing a product which bears a “green” label and later learn that the product is not more environmentally responsible than that of a competitor, even though it's more expensive. Good procurement officers investigate their sources with care, taking the time to confirm that the claims made by a company are accurate and comparing data from different sources to see which vendor is the best. This research study was motivated to investigate the factors affecting the implementation of green procurement practices in NCWSC. The study also sought to establish the effects of trading partners, organizations management and purchase price on the implementation of green procurement practices in NCWSC. Descriptive research design was used in this research study. The population for this study was all the employees of NCWSC. There are 220 employees working in 14 departments of NCWSC. The target population of this study was therefore 220 employees. The researcher in this study used purposive sampling to select the employees working in the supply chain department of NCWSC. The sample size of this study was therefore 18 respondents. The main instrument in data collection was self-administered questionnaires. The research was quantitative in nature. Descriptive statistics generated percentages, mean scores and proportions which were presented in tables and figures. This research study found that trading partners influence the implementation of green procurement practices in NCWSC to a great extent. The study also established that a green supply chain can improve environmental performance (reducing waste and emissions as well as increasing environmental commitment). It was also revealed that purchase price affects implementation of procurement practices to a great extent. This study also found that organizational management influences implementation of green procurement practices at NCSWC to a great extent. In relation to trading partners, the study established that suppliers were highly influencing the implementation of green procurement practices. This study therefore recommends that screening of suppliers for environmental performance should be key deciding factor in the procurement processes.

Key Words: Green Procurement, Trading Partners, Organizations Management, Purchase Price

Introduction

With increasing awareness of environmental protection worldwide, the green trend towards conserving the Earth's resources and protecting the environment is overwhelming, exerting pressure on corporations in Thailand. The pressure accompanying globalization has prompted enterprises to improve their environmental performance (Zhu & Sarkis, 2006). Consequently, corporations have shown growing concern for the environment. Increasing environmental

concern has gradually become part of the overall institutional culture and, in turn, has helped to re-focus the strategies of corporations. Global warming, reductions in air quality, pollution of waterways and widespread loss of biodiversity are but a few examples of the types of environmental impact that can be attributed to the coordinated activity of organizations in a supply chain. Much of this arises from manufacturing organizations that continue to produce large amounts of unnecessary waste or emissions rather than investing in better technologies or practices to prevent its generation at the source. The “green” component to supply chain management involves addressing the influence of supply chain management on the natural environment. Motivated by an environmentally-conscious mindset, it can also stem from a competitive motive within organizations (Hervani, Helms & Sarkis 2005).

Purchasers can improve the environmental performance of products and services by expressing environmental preferences through so called “green procurement”. Environmental purchasing is defined as activities that include the reduction, reuse and recycling of materials in the process of purchasing. Procurement or purchasing decisions will have an impact on the green supply chain through the purchase of materials that are either recyclable or reusable, or have already been recycled (Sarkis, 2003). Green procurement is a solution for environmentally concerned and economically conservative business. It is the concept of acquiring a selection of products and services that minimizes environmental impact. It requires a company or organization to carry out an assessment of the environmental consequences of a product at all the various stages of its lifecycle. This means considering the costs of securing raw materials, and manufacturing, transporting, storing, handling, using and disposing of the product. “Green” products reduce waste, improve energy efficiency, limit toxic byproducts, contain recycled content or are reusable.

Practicing green procurement demonstrates an organization’s commitment to considering and minimizing the environmental consequences of its activities. Green supply is the buying organization’s intent to improve the environmental performance of purchased input and/or of the suppliers that provide them. As such, green supply includes a wide variety of activities including cooperation between organizations to minimize the logistical impact of the material flows or information gathering regarding the purchased products’ characteristics. Others have proposed definitions more focused on the purchasing function, suggesting that green supply activities consist of the involvement of the purchasing function in facilitating internally-driven environmental activities such as recycling, reuse and source reduction. Adoption of Green Procurement can have a positive effect on a corporation’s purchasing costs. This can cut the cost of materials purchasing and energy consumption, reduce the cost of waste treatment and discharge, and avoid fines in the case of environmental accidents (Zhu & Sarkis, 2004). A sustainable approach can lead to internal cost saving, open new markets and find beneficial uses for waste (Tsoulfas & Pappis, 2006). Financial performance is defined here as cost reduction, market share growth and profit increase. Environmental engagement has a positive effect on financial performance (for example, growth in profits, sales and market share) (Fuentes-Fuentes, *et al.*, 2004).

There is a consensus in the literature that internal environmental management is a key to improving the performance of an enterprise. It is well known that senior managers’ support is necessary and often a key driver for successful adoption and implementation of most

innovations, technology, programmes and activities. To ensure environmental excellence, top management must be totally committed (Rao & Holt, 2007). A recent study reported that support from mid-level managers is also a key to successful implementation of EMS practices. A recent study used middle managers to find a positive relationship between middle managers' perceptions of corporate environmental pro-activity and environmental management.

Green procurement is one of the most important factors of our environment. Based on this belief, Kenya formed as early as 2007, promoted various environmental strategies, in all areas of corporate activity. These are guided by its corporate philosophy along with the Kenya issued Global Green Procurement Standard. By instituting NEMA, the government of Kenya created a culture that supports waste reduction and green procurement, takes waste reduction as the primary objective, strikes a balance among environment, cost and performance, acquires and comparing environmental performance information, adopts, green product criteria, influences market availability and develops green product specifications. The Kenyan procurement policy needs to be revised to take into account environmental considerations when procuring goods and service – Procurement and asset disposal act. Kenyans need to avoid single use disposable items and purchase products with improved recyclability, higher recycled content, reduced packaging, greater durability, and greater energy efficiency, that utilize clean technology and/or clean fuels, that result in reduced water consumption, that emit fewer irritating or toxic substances during installation or use and that result in reduced production of toxic substances upon disposal.

Statement of the problem

Buying products which are environmentally responsible can be a dicey occupation. Labeling and certification requirements vary, so a green procurement officer may think that he or she is doing the right thing by purchasing a product which bears a “green” label and later learn that the product is not more environmentally responsible than that of a competitor, even though it's more expensive. Good procurement officers will investigate their sources with care, taking the time to confirm that the claims made by a company are accurate and comparing data from different sources to see which vendor is the best. Companies which engage in green procurement processes may be eligible for environmental certification, formal recognition from the government, and other perks. Projecting a sustainable image can also be a valuable marketing tool which a company may use to get an edge on the competition. Environmental advocates also point out that as more and more companies demand green procurement, the market for environmentally sustainable products expands, making them cheaper and easier to obtain. These advocates hope to see green procurement becoming the norm, rather than an unusual event.

Several studies have been conducted on green procurement but no study has concentrated on factors affecting green procurement practices. Makori (2008) conducted a study on factors Affecting Implementation of Green Procurement in the Petroleum Sector in Kenya: A Case of National Oil Corporation of Kenya. Ondieki (2009) on the other hand did a study on green Procurement Awareness in Kenya State Corporations. With an ever changing business environment, procurement managers are faced with new challenges. The need to lower costs against inflationary trends and the pressure to acquire quality goods and services to meet consumer needs amid climate change due to environmental degradation are some but a few of the new set of challenges. This study therefore came in to bridge this gap in knowledge by

investigating the factors affecting the implementation of green procurement practices by focusing on NCWSC.

The specific objectives of this study were:

- i. To establish the effects of trading partners on the implementation of green procurement practices in NCWSC.
- ii. To verify the effects of organizations management on the implementation of green procurement practices in NCWSC.
- iii. To determine the effects of purchase price on the implementation of green procurement practices in NCWSC.

Research questions

This study sought to answer the following questions;

- i. What are the effects of trading partners on the implementation of green procurement practices in NCWSC?
- ii. What is the role of organizations management in the implementation of green procurement practices in NCWSC?
- iii. What are the effects of purchase price on the implementation of green procurement practices in NCWSC?

Theoretical Framework

This section focused on two theories that are related to green supply chain and green procurement. Both theories are based on procedures for selecting suppliers.

Multi-Attribute Utility Theory

The complexity stems from a multitude of quantitative and qualitative factors influencing supplier choices as well as the intrinsic difficulty of making numerous trade-offs among these factors. One analytical approach often suggested for solving such complex problems is MAUT (Ellram, 1990). MAUT enables the decision maker to structure a complex problem in the form of a simple hierarchy and to subjectively evaluate a large number of quantitative and qualitative factors in the presence of risk and uncertainty. The major strength of MAUT is its ability to deal with both deterministic and stochastic decision environments. In particular, MAUT has three distinctive advantages over MOP in handling multiple and conflicting criteria. These are: MAUT requires less “front-end” analysis than MOP as MAUT has no constraints to consider explicitly, MAUT requires data than MOP as MAUT does not necessitate parameters for constraints and MAUT poses less computational difficulty than does MOP as MAUT is not burdened with additional constraints. The application of MAUT to the complex problem usually involves identification the objectives or goals of the decision and define the problem scope, define a finite set of relevant attributes affecting the decision outcome and structure them into a hierarchical form called a “value tree”. Elicit preference information concerning the attributes from the

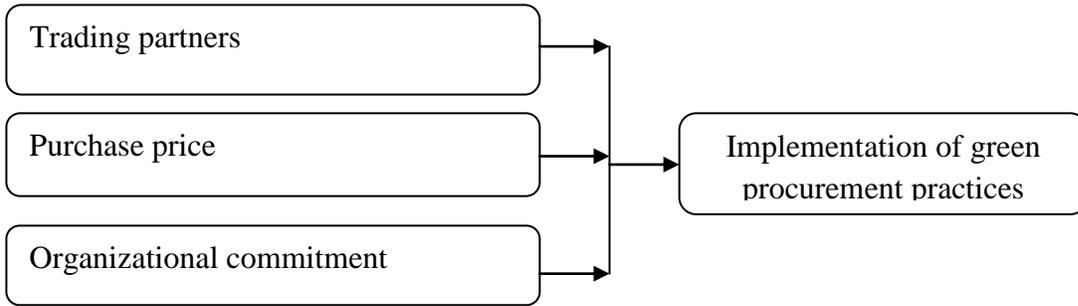
decision maker(s) and determine the relative importance of the attributes. Develop the decision maker's utility function by establishing functional relationships between the attributes and the utility scores. If this relationship is uncertain, the expected utility score for each attribute will be determined by using the appropriate type of probability distributions. Compute the aggregate (overall) utility score for each decision alternative and rank alternatives in terms of aggregate utility scores. The systematic nature of MAUT in tackling complex problems under conflicting multiple criteria makes MAUT especially suitable for selecting the most appropriate foreign supplier.

Price Premium theory

Considerable work has posited that some social and environmental attributes of products may serve as a differentiation strategy for the firm (Lamming & Hampson (2015). This type of strategy implies that the firm is able to charge a price premium in comparison to competitors. This price premium has been defined as "a percentage over the willingness to pay for the base commodity". Thus, in the case of certification, if certified wood commands a price premium, then some consumers are willing to pay some percentage over and above what they are willing to pay for the base commodity without certification. The willingness to pay a price premium usually has been explained by both psychological variables as well as demographic variables. Our focus here is on developing theory with respect to the variables regarding psychological attitudes toward the environment. The price premium is related to consumer preferences. From a psychological point of view, the price premium that consumers are willing to pay for public goods is a behavioral intention. However, little research has actually tried to investigate the nature of environmental attitudes and the price premium that an environmentally friendly product is able to command.

Conceptual Framework

The purpose of this study is to investigate the factors affecting the implementation of green procurement practices in NCWSC. There is a range of factors that affect the implementation of green procurement practices but this study will concentrate on the factors that have been discussed in the literature; trading partners, organizations management and purchase price. This study will therefore seek to establish the relationship between the independent variables (trading partners, organizations management and purchase price) and the dependent variable which is implementation of green procurement practices.



Independent variable

Dependent variable

Figure 1: Conceptual framework

Trading Partners

Trading partners affecting GSCM include customers, suppliers, the community, regulators and nongovernmental organizations (Hervani, *et al.*, 2005). According to Hervani, *et al.* (2005), Henriques and Sadorsky (1996) and Hall (2000), as well as other experts, major external stakeholders of GSCM practices are considered to include suppliers, customers and community stakeholders. Suppliers contribute to the overall performance of a supply chain, and poor supplier performance affects the performance of the whole chain (Sarkar & Mohapatra, 2006). Supplier–manufacturer relationships are considered important in developing a sustainable competitive advantage for the manufacturer. Screening of suppliers for environmental performance has now become a key deciding factor in many organizations. Customer demands have now become the most important type of external. To obtain more sustainable solutions, the environmental properties of products and services must meet customer requirements. In the U.S.A., an estimated 75% of consumers claim that their purchasing decisions are influenced by a company's environmental reputation, and 80% would be willing to pay more for environmentally friendly goods (Lamming & Hampson, 1996). Consequently, the influence of the natural environment organizational decisions not only affects the organization that makes the decision, but also its customers and suppliers (Sarkis, 2003).

Purchase Price

Environmentally preferable products and services can potentially be more expensive, less expensive, or similarly priced in comparison to conventional products. Products and services should have the same "utility" as products currently used (Sarkis & Tamarkin, 2005). That means that the products should work effectively and not cost significantly more than their traditional replacements. Nothing contained in a green purchasing and contracting policy should require the procurement of goods, fleets, or services that do not perform adequately for their intended use, exclude adequate competition or are not available at a reasonable price in a reasonable amount of time. "Green" products or services utilize fewer resources, are designed to last longer and minimize their impact on the environment from cradle to grave. In addition, "green" products and services have less of an impact on human health and may have higher safety standards (Sarkis, 2005). Whilst some "green" products or services may have a greater

upfront expense, they save money over the life of the product or service. Before a green procurement program can be implemented, current purchasing practices and policies must be reviewed and assessed. A life cycle assessment of the environmental impacts of products or services is required and a set of environmental criteria against which purchase and contract decisions are made has to be developed. The outcome is a regularly reviewed green purchasing policy that is integrated into other organizational plans, programs, policies. A green purchasing policy includes date-stamped priorities and targets, the assignment of responsibilities and accountability and a communication and promotion plan.

Organizational Management

In addition to monetary and legal barriers, poor organizational design, institutional inertia, and poor procurement processes can prevent successful green procurement practice. Scattered and complex procurement functions cause unnecessary work as different departments or organizations work to meet identical needs. This leads to teams being under-resourced and over-worked (Williams et al., 2007). Organizations should centralize procurement and have one team that creates the procedure, manages contracts, and acts as a liaison with other departments. The EU Guide to Greener Purchasing outlines the sustainable development task team in Pori, Finland as an example of a centralized procurement team (Plas & Erdmenger, 2000). Pori's team includes a head liaison, the eco-consultant; two meeting leaders, the heads of the environmental protection and the procurement departments; and six procurement officers from different sectors of the organization (Plas & Erdmenger, 2000). This centralized team works against the effects of institutional inertia, in which organizations resist change. Institutional inertia can be a barrier to green procurement because it prevents procurement policies from evolving to meet environmental sustainability requirements. Procurement practices must also include proper data collection (Williams et al., 2007). This includes quality data on contracts and prices that is readily available within the organization. Organizations should be sure that departments are not pressured to spend their entire budget for fear of reduction in coming years, as this leads to frivolous and unnecessary spending.

Research Methodology

Descriptive research design was used in this research study. The study also integrated both qualitative and quantitative methods of data collection. The population for this study was all the employees of NCWSC. There are 220 employees working in 14 departments of NCWSC. The target population of this study was therefore 220 employees.

Table 1: Target population

Department	Target population
Corporate Affairs	9
Finance	8
ICT	15
Customer Relations	23
Admin & Logistics	11
Production	8
Engineering	7
Supply Chain	18
Human -Resource	14
Quality Assurance	12
Environment & Compliance	34
Informal Settlements	22
Commercial/Billing	21
Operations & Maintenance	18

The researcher in this study used purposive sampling to select the employees working in the supply chain department of NCWSC. The researcher believed that the staff working in the supply chain department of NCWSC had the required information on procurement in their organizations. The sample size of this study was therefore 18 respondents. According to Mugenda and Mugenda (2003) a sample size of between 10 to 30% is a good representation of the target population.

The main instrument in data collection was a self-administered questionnaire. Questionnaires were used to collect information relating to factors affecting the implementation of green procurement practices in NCWSC. A pre-testing of the research instrument was conducted to examine the validity and reliability of the research instrument. The research was quantitative in nature. This implies that descriptive statistics was employed. Once the data is collected it will be checked for completeness ready for analysis. The data from the field was first coded according to the themes researched on the study. Analysis was done with an aid of the statistical package for social sciences (SPSS) package. Descriptive statistics generated percentages, mean scores and proportions which were presented in tables and figures.

Results and Discussions

The researcher targeted a sample of 18 supply chain department staffs of NCWSC out of which 17 responses were obtained. This represented a 94.44% response rate. According to Babbie (2002) any response of 50% and above is adequate for analysis thus 94.44% is even better. The study sought to determine whether NCWSC was considering green procurement when making its purchases. According to the findings as shown by figure 4.5 above, 70.59% of the respondents indicated that NCWSC was not considering green procurement when making its purchases. On the other hand, 29.41% of the respondents indicated that NCWSC was considering green

procurement when making its purchases. These findings show that NCWSC was not considering green procurement when making its purchases.

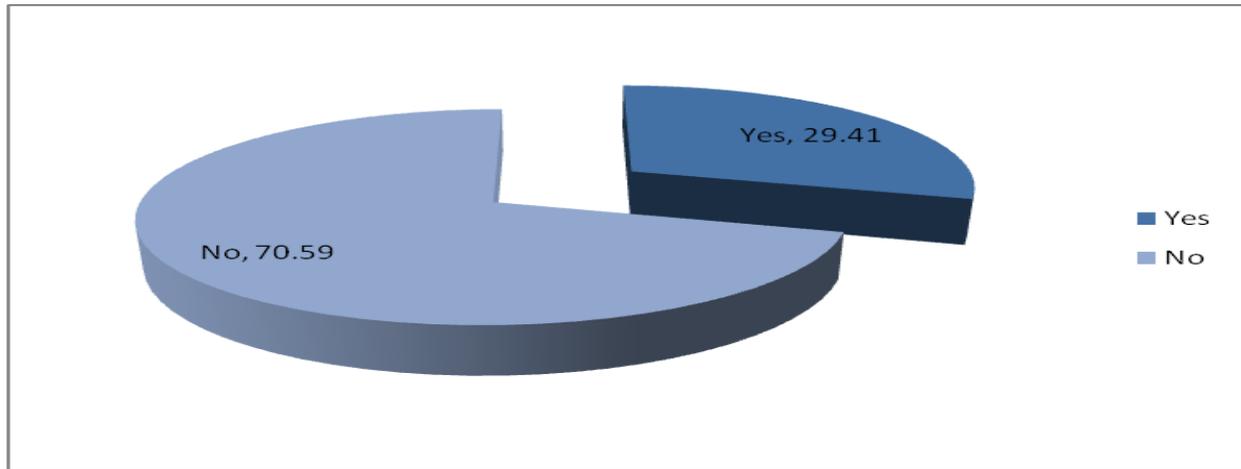


Figure 1: Green procurement consideration

Table 2 above shows the extent to which NCWSC was complying with green procurement policies in procuring products. From the findings, the respondents agreed to a great extent that NCWSC was complying with procurement policies in procuring construction materials (M=4.24, SD=0.651). This was followed cleaning materials (M=4.21, SD=0.573), stationary and paper (M=4.18, SD=0.574), energy, Water and food (M=3.98, SD=0.945), IT equipment and electrical appliances (M=3.85, SD=0.934) and office furniture (M=3.84, SD=0.925).

Table 1: Complying with green procurement policies

	Mean	Std deviation
Cleaning Materials	4.21	0.573
Construction Materials	4.24	0.651
Energy, Water and food	3.98	0.945
IT Equipment and Electrical Appliances	3.85	0.934
Office Furniture	3.84	0.925
Stationary and Paper	4.18	0.574

Table 3 above shows the extent to which the respondents agreed NCWSC was facing the stated obstacles in its implementation of green procurement practices. The respondent agreed to a great extent that there was lack of readily available environmental friendly products in NCWSC (M=4.31, SD=0.982). It was also established that there was lack of organizational support (M=4.21, SD=0.911), inaccurate studies (M=4.02, SD=0.921) and expensive or zero environmental alternatives (M=3.99, SD=0.718) in NCWSC. The respondents further revealed that NCWSC was facing a challenge of inaccurate or unsupported environmental claims by manufacturers and suppliers (M=3.81, SD=0.725) and legislation and organizational policies (M=3.67, SD=0.823). These findings correlate with Lamming and Hampson, (1996) argument that obstacles to implementing a green procurement program include: lack of readily available environmental friendly products; expensive or zero environmental alternatives; inaccurate

studies; lack of organizational support; and inaccurate or unsupported environmental claims by manufacturers and suppliers. Legislation, organizational policies, directives, environmental management systems or multi-lateral agreements often require organizations to implement a green procurement program.

Table 2: Obstacles in implementing green procurement practices

	Mean	Std deviation
lack of readily available environmental friendly products	4.31	0.982
expensive or zero environmental alternatives	3.99	0.718
inaccurate studies	4.02	0.921
lack of organizational support	4.21	0.911
inaccurate or unsupported environmental claims by manufacturers and suppliers	3.81	0.725
Legislation and organizational policies	3.67	0.823

Trading partners

Table 4 above shows the extent to which the respondents agreed with the statements in relation to the implementation of green procurement practices. From the findings, the respondents agreed to a great extent that a green supply chain can improve environmental performance (reducing waste and emissions as well as increasing environmental commitment) (M=4.11, SD=0.821). It was also established that green procurement affects the economy by creating new marketing opportunities and increasing product price, profit margin, market share and sale volume (M=4.11, SD=0.723). Further, the study found that today, environmental properties of products and services must meet customer requirements (M=4.01, SD=0.728), a green procurement increases competitiveness (M=3.67, SD=0.721). The study also found that a green procurement improves product quality (M=3.59, SD=0.918). In addition, the study revealed that green procurement increases efficiency and productivity (M=3.92, SD=0.927).

Table 5: Green procurement

	Mean	Std deviation
Today, environmental properties of products and services must meet customer requirements	4.01	0.728
A green supply chain can improve environmental performance (reducing waste and emissions as well as increasing environmental commitment)	4.11	0.821
A green procurement increases competitiveness	3.67	0.721
A green procurement improves product quality	3.59	0.918
Green procurement increases efficiency and productivity	3.92	0.927

Table 5 above shows the extent to which trading partners influence the implementation of green procurement practices in NCWSC. According to the findings, nongovernmental organizations were influencing implementation of green procurement practices most (M=4.01, SD=0.856).

This was followed by suppliers (M=3.94, SD=0.945), the community (M=3.89, SD=0.912), customers (M=3.87, SD=0.923) and regulators (M=3.71, SD=0.827). These findings agree with Rizza, (2008) argument that governments, decision makers, suppliers, purchasers and industry are the main stakeholders of a green procurement program. In addition Hervani, *et al.*, (2005) argue that trading partners affecting GSCM include customers, suppliers, the community, regulators and nongovernmental organizations.

Table 4. 3: Trading partners and implementation of green procurement practices

	Mean	Std deviation
Customers	3.87	0.923
The community	3.89	0.912
Regulators	3.71	0.827
Nongovernmental organizations	4.01	0.856
suppliers	3.94	0.945

Purchase price

Table 6 above shows the extent to which the respondents agreed with the statements in relation to implementation of green procurement practices. According to the findings, green products or services utilize fewer resources, are designed to last longer and minimize their impact on the environment (M=4.11, SD=0.876). It was also established that green procurement policies and programs can reduce expenditure and waste; increase resource efficiency; and influence production, markets, prices, available services and organizational behavior (M=4.08, SD=0.781). These findings are in line with Lamming and Hampson, (1996) argument that green procurement policies and programs can reduce expenditure and waste; increase resource efficiency; and influence production, markets, prices, available services and organizational behavior. They can also assist countries in meeting multi-lateral requirements such as the Kyoto Protocol and Rotterdam Convention. International Standards Organization and other bodies have established guidelines for green procurement programs. In addition, green products and services have less of an impact on human health and may have higher safety standards (M=4.01, SD=0.945). Lastly, the study found that environment preferable products should work effectively and not cost significantly more than their traditional replacements (M=3.98, SD=0.956).

Table 4: Purchase price and implementation of green procurement practices

	Mean	Std deviation
Environment preferable products should work effectively and not cost significantly more than their traditional replacements	3.98	0.956
Green products or services utilize fewer resources, are designed to last longer and minimize their impact on the environment	4.11	0.876
Green products and services have less of an impact on human health and may have higher safety standards	4.01	0.945
Green procurement policies and programs can reduce expenditure and waste; increase resource efficiency; and influence production, markets, prices, available services and organizational behavior	4.08	0.781

Organizational management

Table 7 above shows that extent to which the stated factors related to organizational management were affecting the implementation of green procurement practices NCWSC. From the findings, the respondents agreed to a great extent that poor organizational design was affecting implementation of green procurement practices (M=4.22, SD=0.782). This was followed by monetary and legal barriers (M=4.03, SD=0.872), institutional inertia (M=4.08, SD=0.823) and poor procurement processes (M=3.97, SD=0.962). These findings are in line with Williams et al. (2007) argument that in addition to monetary and legal barriers, poor organizational design, institutional inertia, and poor procurement processes can prevent successful green procurement practice.

Table 5: Organizational management factors and implementation of green procurement policies

	Mean	Std deviation
Monetary and legal barriers	4.03	0.872
Poor organizational design	4.22	0.782
Institutional inertia	4.08	0.823
Poor procurement processes	3.97	0.962

Conclusion

This research study concludes that trading partners influence the implementation of green procurement practices in NCWSC to a great extent. The study also established that a green supply chain can improve environmental performance (reducing waste and emissions as well as increasing environmental commitment) and it affects the economy by creating new marketing opportunities and increasing product price, profit margin, market share and sale volume. In addition, environmental properties of products and services today must meet customer requirements, increase competitiveness, improve product quality and increase efficiency and productivity. The study also concludes that nongovernmental organizations, suppliers, the community, customers and regulators were influencing implementation of green procurement

practices in NCWSC.

The study also concludes that purchase price affects implementation of procurement practices to a great extent. Green products or services utilize fewer resources, are designed to last longer and minimize their impact on the environment. Green procurement policies and programs can reduce expenditure and waste; increase resource efficiency; and influence production, markets, prices, available services and organizational behavior. Green products and services have less of an impact on human health and may have higher safety standards. Environment preferable products should work effectively and not cost significantly more than their traditional replacements.

This study concludes that organizational management influences implementation of green procurement practices at NCSWC to a great extent. The study also established that poor organizational design, monetary and legal barriers, institutional inertia and poor procurement processes were affecting implementation of green procurement practices in NCWSC.

Recommendation

This study established NCWSC was not considering green procurement when making its purchases. The study also revealed that environment considerate products were cheaper than the other products. This study therefore recommends that NCWSC should fully implement green procurement practices.

In relation to trading partners, the study established that suppliers were highly influencing the implementation of green procurement practices. This study therefore recommends that screening of suppliers for environmental performance should be a key deciding factor in the procurement processes.

This research study revealed that lack of organizational support was one of the obstacles to the implementation of green procurement practices in NCWSC. This study therefore recommends that the top management of NCWSC should support the use of green products and services. In addition, the middle level and low level management should also be involved in the formulation and the implementation of green procurement practices.

The study further established that organizational commitment was highly influencing the implementation of green procurement practices. Organizations should have at least one green procurement champion; someone who pushes for the implementation of environmental criteria into procurement contracts.

Areas for further studies

From the study and related conclusions, the researcher recommends further research in the area of the obstacles to the implementation of green procurement in Kenya. This study focused on the factors affecting green procurement in Kenya and hence there is still a gap in research to be filled in relation to obstacles to the implementation of green procurement in Kenya. The study also suggests further studies on the influence of organization's stakeholders on the implementation of green procurement practices in Kenya.

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