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The Effects of Top Management in Adoption of Sustainable Procurement Practices in Kenya

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Abstract:

Globally, organizations are reviewing their procurement operations and processes to be in line with sustainable development goals. Sustainable procurement is about socially and ethically responsible purchasing, minimizing environmental impacts through supply chain, delivering economically sound solutions and business practice. Research has shown that sustainable procurement comes with many benefits such as reduced costs among others. Despite these benefits, most public organizations especially in developing countries like Kenya are yet to adopt sustainability into their procurement processes. This study assessed the involvement of top managers in adopting sustainable procurement practices in Kenya. Specifically, the study: established the extent of top management commitment towards adoption of sustainable procurement management practices in the government of Kenya. The study was grounded on stakeholder and institutional organizational theories. Descriptive and correlation research designs were adopted. Data were collected from 143 respondents who received the questionnaires using structured questionnaires and analyzed using descriptive and inferential statistics. In the value of 1-5, 1 stood for strongly disagree, 2 stood for disagree, 3 stood for neutral, 4 stood for agree while 5 stood for strongly agree. Validity was tested using experts' opinions while Cronbach's alpha ($\alpha = 0.736$) indicated that the questionnaire was reliable. Findings indicate that most procurement departments have adopted sustainability in procurement and that there was positive correlation between top management commitment (mean = 4.05; $r = 0.490$), and adoption of sustainable procurement practices in the country of study. The study concluded that organizations should come up with policies on sustainable procurement and continuously monitor their supply chains to ensure that only materials that meet acceptable minimum sustainability criteria are accepted.

Keywords: Top management, adoption, sustainable, and procurement practices

1. Introduction

Public procurement plays an important role in sustainable development because of its enormous procurement volume (McCrudden, 2004), its role as a policy tool (Lundberg & Marklund, 2013), and its natural affinity with sustainable development objectives in the long term (Walker *et al.*, 2012). In response to the Sustainable Development World Summit (World Summit on Sustainable Development, WSSD, 2002), sustainable procurement (SP) has become an important agenda for governments seeking to demonstrate sustainable development (McMurray, Islam, Siwar & Fien, 2014). Studies demonstrate that sustainable procurement practices can transform markets, save money, enhance financial viability, increase the competitiveness of eco-industries, protect natural resources, and foster job creation, which will in turn contribute to sustainable development (Islam, Turki, Murad & Karim, 2017). In line with the growing interest in sustainable procurement during the recent decade, the research on sustainability is comparatively well-developed for the private sector and developed countries. However, there is a need to advance the research on this topic for the public sector and developing countries (Walker *et al.*, 2012).

The strategic role of purchasing and supplying as a device for sustainable development has been strengthened recently. At the same time, environmental and social issues are increasingly becoming important in managing any business due to the increasing awareness of society and political leaders. These trends have contributed to SP practices, which are now considered an important aspect of corporate management that can empower organizations to advance their stated goals. Sustainable procurement also referred to Green procurement or environmentally friendly procurement is more than just being 'green'. It is about socially and ethically responsible purchasing, minimizing environmental impact through supply chain, delivering economically sound solutions and good business practice (CIPS, 2014). Green procurement is a

series of activities with positive environmental concerns and resource (Carter & Carter, 1998; Min & Galle, 2001; Zsidisin&Siferd, 2001), sustainability in procurement ensures sustainable development by integrating environmental, social and economic needs of the society. According to Ellaram et al. (1989), in procurement, customer service outcome exists in two domains: the supplier activity domain and the end-user response domain. Thus, the study identifies two customers to the procurement function: internal and external i.e. the end users and the suppliers respectively. In a procurement process therefore, efforts must be dedicated to ensuring the complete satisfaction of not only the end-user or customer of a product and/or service, but, also the satisfaction of the suppliers whose products or service are incorporated into the end- user /customer order and whose performance impacts the end user satisfaction (Gordon, 2009).

According to Walker and Wendy (2006), the academia and practitioners today have become increasingly interested in how organisations and their supply chains impact on the environment, society and the economy. The effect of environmental problems on the living conditions of the world's population has become more apparent and emphasis on the environmental awareness has become more prominent. The general public has started to pay more attention to the potential consequences of this global environmental problem. Some of the most pressing environmental issues include ozone layer depletion, global warming and hazardous wastes. For example, in Kenya, the national government has been on the forefront in reducing environmental degradation through implementation of sustainable policies such as ban on plastic bags, evacuation of persons living in water towers among others.

Studies have indicated that in an ideal environment, adoption of sustainable procurement practices is directly linked with positive organizational performance such as reduced costs, enhanced productivity and reduced wages. In practical business environment and procurement operations, many organisations especially in the developed countries and the private sector adopt sustainable procurement as a strategic approach to attain sustainability by incorporating environmental, economic and social demands into their procurement processes. Organisations are paying more and close attention to their environment due to the complexity and rapid changes thus formulating and implementing policies and strategies that will enhance their survival and growth. While it is true that sustainable procurement comes with reduced costs, many public procurement organizations in developing countries like Kenya, are yet to adopt sustainability into their procurement systems. Therefore this study was to investigate the involvement of top managers in adopting sustainable procurement practices in Kenya,

2. Literature Review

2.1. Theories Underpinning the Study

2.1.1. Stakeholder Theory

Freeman (1984) defines a stakeholder as any individual, organization or institution that is associated with a firm and is affected by the firm in some way or affects the firm's action and goals. Stakeholder theory posits that an organization is not only responsible for its shareholders' interests, but additionally for the interests of customers, employees and the local community (Piacentinet *al.*, 2000). This includes social, economic and moral responsibilities and goes beyond the purely economic and legal responsibilities once believed to be an organization's only responsibilities. As is obvious from these descriptions, stakeholder theory is a theory that follows the same principles as sustainable development concept and indeed covers the same aspects of business responsibilities – economic, social and environmental. Stakeholder theory describes the purpose and strategic direction of the firm through the concept that managers need to simultaneously incorporate the legitimate interests of all appropriate stakeholders when making business decisions.

2.1.2. Institutional Theory

Institutional theory has been applied ever since 1930 (Bansal &Clelland, 2004; Hoffman, 1999; Jennings &Zandbergen, 1995) in understanding the response of the firm to increasing pressures for management of the environment. Due to increased public awareness of organizational failure and environmental demands, institutional theory recommends that companies can only gain legitimacy through reduction of their environmental impact and being socially responsible (Bansal, 2005; Bansal &Clelland, 2004).

Institutional pressure has led firms to adopt sustainable procurement practices. They can be; conformance to environmental strategies that complies with regulations and adopting industry standards, or reducing the environmental impact of operations beyond regulatory requirements (Sharma &Erramilli, 2004). Firms can create good relationships with regulators by participating in government-sponsored voluntary program which develops a voluntary agreement between government agencies and firms hence encourage technological innovation and reduction in pollution (Delmas&Toffel, 2008). Companies can also work with their customers as well as their suppliers to improve their environmental performance through exchange of ideas/information, suggestions and correction (Nelson & Winter, 2002). Meyer and Rowan (2006) on Institutional Theory argue that the institutional environment strongly influences the development of formal structures in an organization more than market pressures. To improve efficiency in organizations, innovative structures are legitimized. Consequently, the institutional theory enables this study to understand how public institutions interact with their stakeholders to create a relationship that would enable sustainable development through procurement activities.

2.1.3. The New Resource-Based View (NRBV)

RBV has become a critical theoretical foundation used to link supply chain management and organizational performance (Vachon and Klassen, 2008). RBV explains how firms can derive competitive advantage from pursuing environmental initiatives. The key proposition of RBV is that firms will develop a competitive advantage by accumulating resources that are rare, valuable, non-substitutable, and difficult to imitate (Barney, 1991; Rumelt, 1997; Wernerfelt, 1984). The value of RBV lies in addressing which capabilities help firms apply the bundles of resources to achieve and sustain competitive advantage (Sirmon et al., 2007; Vanpoucke et al., 2014). Thus, it is critical to distinguish different kinds of resources that embody advantage-bearing capabilities (Teece et al., 1997; Luzzini et al., 2015). However, RBV is internally focused on the organization's resources and capabilities and systematically ignores constraints imposed by the natural environment (Hart, 1995). Hart (1995) first inserts the natural environment into RBV to develop a NRBV of the firm. NRBV could be considered as an adaptation of RBV. It is a theory focusing on capabilities that facilitate environmentally sustainable activity for competitive advantage based on the firm's relationship to the natural environment (Hart, 1995; Jackson et al., 2016). This implies that a firm can achieve superior performance if it has the capability to exploit and preserve natural resources in its operating environment (Wong et al., 2012). With recent development of NRBV, Hart and Dowell (2011) begin to consider how NRBV can benefit from recent work in dynamic capabilities. As RBV does not address how firms can renew their sources of competitiveness, Teece et al. (1997) emphasize the need for firms to 'integrate, build, and reconfigure internal and external competences to address rapidly changing environments'. Hart and Dowell (2011) suggest that NRBV shall be extended and supplemented to create a more thorough understanding of the process by which firms undertake sustainable development strategies. If firms are open to access to critical resources from their engaging stakeholders, they would be more likely to create dynamic capabilities (Hart & Dowell, 2011). According to NRBV, sustainable procurement is a kind of capability of addressing the relationship between organization, natural environment and the society. The capability to exploit and preserve natural resources could bring in superior performance to the firm. Hart (1995) argues that such capability is either casually ambiguous or socially complex. As a key process of green supply chain, product-based green procurement puts environment-friendly materials or products into supply chain operations according to certain environmental standards or behaviours (Webb, 1994). The purpose is to guarantee that the materials purchased meet the environment-friendly, low-energy and recyclable standards. In other words, product-based green procurement emphasizes external and explicit management and aims at physical activities. Accordingly, relying on the passive responses to the external environment is necessary for the company to obtain sustainable competitive advantages.

2.2. Empirical Literature

Empirical literature section addresses the past studies done on the study phenomenon in line with the study objectives. The variables of the objectives were top managers, involvement and adoption of sustainable procurement practices.

2.2.1. Top Management Involvement and Adoption of Sustainable Procurement Management Practices

Top management commitment cannot only indicate an organizational mandate to strive for environmental superiority, but can also facilitate 'issue legitimation', whereby the organizational identity is positively altered towards green practices (Sharma *et al.*, 1999). Such an attitudinal change could eventually facilitate a complete makeover of organization-wide green policies, activities, routines, structures, as well as goals (Coddington, 1993; Hart, 1995; Mengucet *al.*, 2010). From the strategic perspective of legitimacy, top management commitment could also be envisioned to play a critical role in enabling supply-side green initiatives given their ability to provide access to resources, competencies, and knowledge, ultimately creating new norms of legitimacy. Accordingly, the strategic perspective of legitimacy provides convincing support to the implementation of sustainable procurement.

A study by Steurer and Konrad (2007) examined the state of development of national action plans regarding green or sustainable public procurement in the EU member states. Of the 27 EU member states analysed, only a third of governments had adopted an action plan concerning sustainable public procurement, with a further 5 countries had a draft policy on sustainable public procurement that hadn't yet been adopted. The emphasis of much of the policy implemented in the EU was environmental rather than social in character. For instance, in Italy there is a mandate that 30% of goods purchased by public administration comply with ecological criteria. Denmark, France, Netherlands and the United Kingdom had public procurement policies specifically for wood and paper products, while in Belgium there is an initiative to ensure that 50% of government vehicles comply with specific environmental criteria (Steurer & Konrad, 2007). While this study provides useful insights of top management's (government's) commitment for sustainable procurement through policy development, it did not provide the level of adoption of the same by the governments under investigation.

Walker and Brammer (2009) investigated sustainable procurement in the United Kingdom public sector. The survey was administered across the UK public sector, and 106 responses were received from procurement officers. The analysis of quantitative and qualitative survey data showed a significant variation across public sector agencies in the nature of sustainable procurement practice. Local authorities had particularly strong emphasis on buying from local and small suppliers relative to other sectors; health looked generally lower in many categories and education appeared to have something of an emphasis on environmental aspects of sustainable procurement. Cost was found to be the leading barrier to sustainable procurement, and top management support the leading facilitator. The study by Walker and Brammer (2009) indicates a likelihood of selection bias in the sample, with those practitioners engaging in the sustainability agenda being more likely to have responded to the questionnaire. The study however, provided the first survey of sustainable

procurement practices across the UK public sector and also a conceptual framework of influences upon the propensity to engage in sustainable procurement practice. However, this study did not indicate the level of implementation or adoption of sustainable procurement in the UK public sector.

In Sweden, Bergstrom *et al.* (2005) identified practices in using environmental information when making decisions on what food to procure and purchase. Using a phenomenographic approach, professional purchasing managers at food production companies and wholesalers in public and commercial food services as well as retailing was interviewed with the aim of identifying practices when using environmental information in decisions on what food to procure for purchasing. The findings showed that purchasers were dependent on corporate policy when it came to environmental considerations related to food. Purchasers were mainly guided by business parameters with respect to price, quality and service. These factors were given priority over co-operation along the food supply chain. Such co-operation had been shown to have the potential to encourage environmentally friendly purchasing decisions. The study places the issue of the use of and need for environmental information in the food supply chain on the national agenda in Sweden. Thus, the study contributes to increasing the awareness of the importance of professional food purchasers as actors for change towards more environmentally friendly food consumption, but lacks any insights on the level of implementation of sustainable procurement.

Preuss (2009) explored the ways in which local government authorities in England use their procurement function to foster sustainable development. The study used an exploratory approach. Based on a review of the existing literature, qualitative research into leading local government authorities was undertaken to draw out the multiple ways in which public procurement can support sustainable development. The study found that at an aggregate level, local government procurers had adopted a wide range of initiatives to address all three aspects of sustainability: encouraging first-tier suppliers to make use of small local businesses as their subcontractors on the economic side, contracting with voluntary organisation on the social side or replacing hazardous materials in products and services on the environmental side. In Africa, Otanez and Glantz (2011) in their study on social responsibility in tobacco production in Tanzania and Malawi noted that the tobacco industry uses green supply chains to make tobacco farming in developing countries appear sustainable while continuing to purchase leaf produced with child labour and high rates of deforestation. The study noted that strategies to counter green supply chain schemes include securing implementing protocols for the World Health Organization (WHO) Framework Convention on Tobacco Control to regulate the companies' practices at the farm level. The methodology used included an analysis of tobacco industry documents, industry websites and interviews with tobacco farmers in Tanzania and tobacco farm workers, farm authorities, trade unionists, government officials and corporate executives from global tobacco leaf companies in Malawi. In Kenya, a number of studies have been done on procurement in general with a few related to sustainable procurement. For instance, in a study by Mwirigi (2007) on drivers of adoption of green supply chain strategy by manufacturing firms, found out that internal stakeholders were significant while corporate social responsibility was insignificant to green procurement adoption. The study seems to be contrary in the findings since corporate social responsibility is a reflection on the top management decisions who form part of the internal stakeholders. Study findings by Khatra (2012) and Korir (2014) on green supply chain management practices and firm performance show indications of positive relationships. However, these studies did not indicate the level of adoption and use of the green supply chain practices.

2.3. Summary of Gaps

This section examined the literature and research issues related to adoption of sustainable procurement. While a number of studies on procurement processes and organizational performance have been conducted in both developed and developing countries, literature on sustainable procurement in the later is very limited. From the empirical literature reviewed, it is evident that sustainable procurement has not attracted much scholarly work in many developing countries including Kenya. Where such attempts have been made, it is on environmental sustainability or on green procurement and supply chain management with limited attention to other aspects of sustainability. This gives an indication of the need to address sustainable procurement to achieve sustainability in Kenya and rest of Africa as envisaged in the Millennium Development Goals (MDGs). Such a perspective would enrich both the empirical literature and development of theories on sustainability through procurement practices.

3. Research Methodology

3.1. Research Designs

This study adopted two research designs: descriptive research design and correlation research design. A descriptive study deals with: who, what, when, why, when and where of a phenomenon (Grimes & Schulz, 2002; Donald & Pamela, 2006) which was the study's concern. Descriptive research describes the characteristics of relevant groups to estimate the percentages of units in a specified population exhibiting certain behaviour, to determine the perception of product characteristics, to determine the relationship between variables and to make some specific predictions (Ritchie, 2003). The design enabled the researcher to acquire factual, accurate and systematic data to account for the problem as it exist on the ground.

3.2. Study Area

This study focused on the level of adoption of sustainable procurement practices in Homa Bay County Government. Homa Bay County is located in Kenya, along the Southern shores of Lake Victoria. It borders Kisumu County to the North, Kisii County to the West and Migori County to the South.

3.3. Data Sources and Collection Methods

This study used primary data. Primary data were collected through the use self-administrative questionnaires. A self-administered questionnaire is desirable because of low cost, adequacy of time for respondents to give responses; it is free from researcher's bias and is capable of reaching a large number of respondents (Kothari, 2004). The questionnaires contained structured and non-structured questions for employees. Data collected from management was to help clarify research hypotheses. The researcher sought permission from the relevant authorities including the university to conduct the study. The researcher then issued the questionnaires to the respondents to fill at their convenience but within a period of one month from the date of issue.

3.4. Data Analysis

Data analysis is the ordering and organizing of raw data to extract useful information from it (Saunders, Lewis, & Thornhill, 2009). Data analysis was done using Statistical Package for Social Sciences computer software (SPSS) and Excel. Descriptive statistics such as mean, standard deviation were used to present various characteristics for data sets. Quantitative data were edited to eliminate incompleteness, inconsistencies, summarized and coded for easy classification in order to facilitate tabulation and interpretation.

4. Results and Discussion

4.1. Descriptive Analysis Results

Descriptive statistics enables the researcher to meaningfully describe a distribution of scores or measurements using indices or statistics. The type of statistics or indices used depends on the types of variables in the study and the scale of measurements. The mean as a measure of central tendency was used to determine the expected score or measure from a group of scores in the study. Measures of central tendency give expected summary statistics of variables under study.

4.2. Top Management Commitment towards Adoption of Sustainable Procurement

The study sought to establish the extent to which top management is committed towards adopting sustainable procurement processes. The respondents' opinions were gauged using statements rated on a Likert scale of range 1 - 5 where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

Eleven constructs of management's commitments were used for the study. Generally, from the Likert scale used, the bigger the mean, the greater the extent of agreement while the smaller the standard deviation, the smaller the variation in the responses. The study established that respondents were in agreement that management is committed towards adoption of sustainable procurement within the county with a mean of 4.6 (Table 1).

Item	N	Min	Max	Mean	Std. Dev
There is a formal environmental policy in place for the organization	131	3.00	5.00	4.6718	.50296
Presence of Environmental Management System certified by external authorized certification body such as ISO14001, NEMA	143	3.00	5.00	4.7133	.49820
Organization monitors the compliance of sub-suppliers with corporate environmental policies (greenhouse gas emissions, waste water, hazardous chemicals, etc.)	142	3.00	5.00	4.5775	.52354
Availability of operational procedure for managing or treating solid and water waste, including hazardous and non-hazardous waste	142	3.00	5.00	4.5211	.51527
There is availability of solid and water waste reduction targets or techniques	142	3.00	5.00	4.4718	.54178
Availability of health and safety statement or policy	143	3.00	5.00	4.5315	.51463
There is freedom of association and collective bargaining for employees	143	4.00	5.00	4.5804	.49522
Investment in community development activities in the markets you source from and/or operate within	143	3.00	5.00	4.6294	.52646
Encouraging suppliers to communicate to local communities, employment opportunities arising from procurement activities.	143	3.00	5.00	4.5944	.53389
Not knowingly working with suppliers who breach International Labour Organization conventions	143	3.00	5.00	4.6643	.48852
Dividing contracts into small lots to encourage the active participation of local businesses including SMEs and MSEs in the procurement process.	143	4.00	5.00	4.6993	.46017
Valid N (Listwise)	129				
Overall Mean				4.6050	

Table 1: Top Management Commitment towards Adoption of Sustainable Procurement

Note: Survey Data, 2020

4.3. Top Management Commitment and Adoption of Sustainable Procurement

Regarding this objective, empirical results indicate the importance of top management commitment towards sustainability (mean = 4.61 and $r = 0.490$). The top management's would enable formulation of sustainable procurement policies and provide necessary funding for successful implementation of sustainability in the procurement processes. As argued by Griffin, *et al.* (2004), top managerial activities can directly affect the nature of an organization's environmental practices, through support, guidance and leadership. Besides, top management commitment and support by providing training, incentives and rewards are essential to encourage the successful implementation of the green purchasing practices. Hence, top management commitment and support are essential to achieving the successful environmental management activities in the organizations, which is important to sustainability. From the findings, it is clear that there is a relationship between top management commitment and successful adoption of sustainable procurement practices within an organization. The null hypothesis is thus rejected. This study findings support those by Kaping'ei (2017). The findings also support those by Shaharudin *et al.*, (2020).

5. Conclusion and Recommendations

The study concludes that top management must show commitment by providing policies for on sustainability practices within the organization. They must provide support, guidance and leadership to the junior staff on sustainability programs. In addition, top management must provide the necessary training to its employees to enable them acquire appropriate skills and knowledge on sustainability issues. If necessary, the top management should also provide rewards and incentives to the employees to ensure successful adoption of sustainable procurement practices.

The study recommends that top management should continuously update themselves with the benefits of sustainable practices by organizing and attending summits for the same. They should then support the middle and lower management to acquire sustainability practices by supporting them through training and guidance.

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