

Factors affecting implementation of green procurement in Kenya: A case study of Coca-Cola Bottling Limited Nairobi

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Abstract- The purpose of this study was to evaluate the factors affecting implementation of green procurement programs in the manufacturing industry in Kenya. The objectives of the study were: To find out the effects of organizational support on implementation of green procurement programs; To examine how availability of environmental friendly products affects implementation of green procurement programs; and assess the influence of Supplier Selection on implementation of green procurement in Coca-Cola Bottling Co of Nairobi Ltd. The study was guided by the systems theory. The research employed a case study research design. Data was collected from procurement officers, assistant procurement officers and stores personnel. These were the in the best position to answer questions on issues of green procurement. The study employed a census approach in which all the 48 personnel in the procurement department were targeted. Questionnaires were used for data collection. Prior to the actual data collection, a pilot study was conducted to ascertain the reliability and validity of the instruments. The study gathered both qualitative and quantitative data. Quantitative data was analyzed using descriptive statistics including frequencies and percentages. Qualitative data was discussed under themes consistent with the research objectives. The results of the findings revealed that organizational support was important in ensuring effective implementation of green procurement. This is supported by only 35% which means that if there is no support from top management, then implementation will not be effective. Further, the second objective established the effect of using environmentally friendly products on implementing green procurement programs. From the findings, it was thus established that there is a strong relationship between environmentally friendly products and green procurement programs at 40%. Finally, Majority of the respondents rated the supplier selection Coca-Cola Bottlers, Nairobi as low at 25%.

Index Terms- environmentally friendly products, green procurement supplier selection, and organizational support

I. INTRODUCTION

Swanson, (2005), asserts that green procurement stems from pollution prevention principles and activities. Also known as green or environmental purchasing, green procurement compares price, technology, quality and the environmental impact of the product, service or contract. Green procurement policies are applicable to all organizations, regardless of size. Green procurement programs may be as simple as purchasing

renewable energy or recycled office paper or more involved such as setting environmental requirements for suppliers and contractors. "Green" products or services utilize fewer resources, are designed to last longer and minimise 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. Whilst some "green" products or services may have a greater upfront expense, they save money over the life of the product or service.

The publication of the Brundtland commission report "Our common future" on sustainable development (WECD, 1987) brought forward issues that promote public policies that encourages development and diffusion of environmentally sound goods and services have provided impetus and the much need inspiration towards policy formulation and adoption (Thomson & Jackson, 2007). According to Thai (2006) green purchasing is the adding of environmental aspects to price and performance criteria when making purchasing decisions as opposed to the fixation with price as the only criteria.

Leading international agencies that have included environmental issues in their procurement guides include the International Bank for Reconstruction and Development (IBRD), African Development Bank (AfDB) and United Nations (UN). Specific countries that have mainstreamed environmental agenda in their procurement policies include the United States of America (Swanson, *et al* 2005); South Africa (Bolton, 2006; 2008) and Asia (Dickinson & Chan, 2010). In Europe, some directives have specific guidelines that require member countries to implement, thereby bringing about rapid environmental diffusion and visibility.

Green procurement policies and programs can reduce expenditure and waste; increase resource efficiency; and influence production, markets, prices, available services and organizational behaviour. They can also assist countries in meeting multi-lateral requirements such as the Kyoto Protocol and Rotterdam Convention. International Standards Organisation and other bodies have established guidelines for green procurement programs. The publication of the Brundtland commission report "Our common future" on sustainable development (WECD, 1987) brought forward issues that promote public policies that encourages development and diffusion of environmentally sound goods and services have provided impetus and the much need inspiration towards policy formulation and adoption (Thomson & Jackson, 2007).

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Studies done in GP such as Swanson, *et al* (2005); Bolton, (2008); Ho, Dickinson & Chan, (2010); Brammer & Walker, (2011); (Bolton, 2008), reveal that there is an empirical gap relating to green procurement especially in the manufacturing industries in Kenya. This research will therefore be a scholarship effort at contributing to, complementing other scholarly efforts, and filling the empirical gap on green procurement practices in manufacturing industries in Kenya.

1.1 Organizational Support

Bolton, (2008) argues that implementing a green procurement program means changing policies and procedures. For it to be successful, it is essential that management supports the initiative fully. In addition, those charged with making purchasing decisions must be involved in the implementation process. Their suggestions and support are critical. For an organization to implement a green procurement program, it must have commitment from all levels, including senior management and purchasing agents. A policy statement outlining the corporate commitment to green procurement can help. Gitari and Were, (2014) carried out study on challenges facing implementation of green procurement at Unga Limited Kenya proposed a conceptual framework that explains the implementation (or lack thereof) of green procurement. The propositions steamed from, firstly, a differentiated materialist viewpoint on organizational culture to understand the level of desire exhibited by the organization and by the procurement department Secondly, the study drew upon the resource-based view of the firm to explain how the procurement manager's capability to respond to a given level of desire moderates the degree to which that desire is realized in the organization's

procurement activity. The Commitment to Buy/Purchase Green encourages organizations to continuously improve the environmental sustainability of their purchasing decisions. Given its business and environmental benefits, Green Procurement has many benefits that it comes along with. For governments,

Green Procurement can help to: Reduce any negative and unintended impacts on the environment like pollution and deterioration of local air quality; Support companies that provide products and services that have fewer environmental impacts and stimulate "green," innovative product development and business development; Save the amount of money spent on cleaning up pollution, by preventing it in the first place; also this Sends a message to manufacturers and service providers that consumers will recognize their environmental efforts; Create a scale effect, thus reducing production costs by the sheer scale of demand for green products; and Fulfill OECD agreements to take greater account of environmental considerations in public procurement of products and services (OECD member countries are to demonstrate their progress, (Gunther, 2006). For private companies, Green Procurement helps the organization in making the sustainable purchasing choices; establish, implement and evaluate a formalized green procurement strategy; selecting suppliers; and environmental concerns for some key purchasing areas (Gunther, 2006).

II. RESEARCH METHOD

The research adopted a case study research design to come up with the relevant data for analysis. It emphasizes on quality in the collection and analysis of data and it is used when collecting data using open –ended questionnaires. This is in accordance to Mugenda and Mugenda (2005), who assert that a case study type of research design is considered the most appropriate because it describes in quantitative terms the degree to which variables are related. The base of the study was Coca-Cola Bottling, Nairobi Ltd.

The study targeted the personnel at the procurement department of Coca-Cola Bottling, Nairobi Ltd. These staff members include procurement officers, Assistant procurement officers and stores personnel totaling to 48 respondents. Population based survey was used , where all members of the population were involved in the study.

III. RESULTS

Table 1: Target population

Category	Population
Procurement Officers	9
Assistant Procurement Officers	21
Stores Personnel	18
TOTAL	48

Academic Qualification

The figure below shows the analysis of the qualifications of the respondents who contributed to data collection.

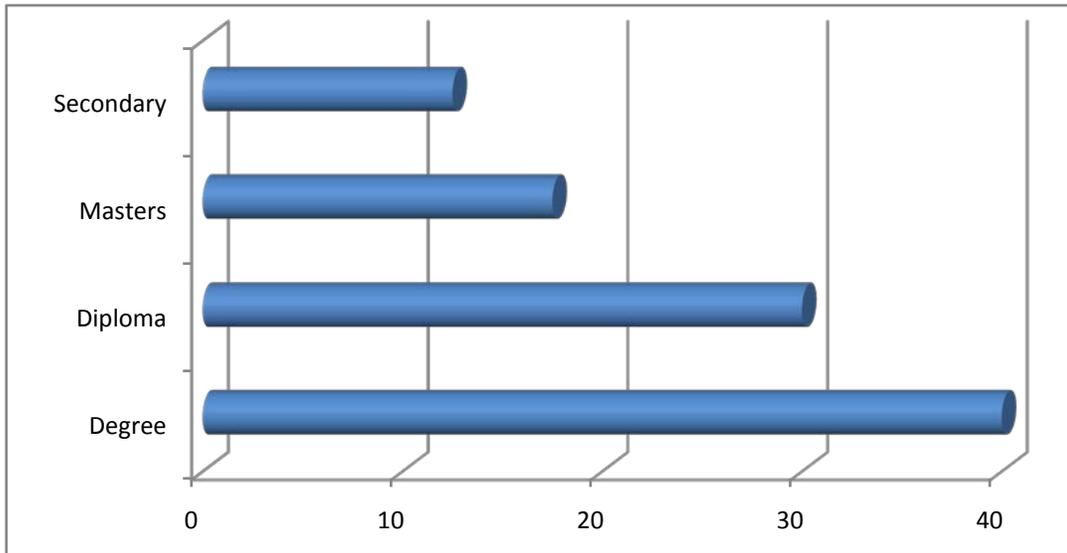


Figure 1. Academic qualifications of the respondents.

Duration of Services

The research sought to establish the duration of service of the respondents in Coca-Cola Bottling, Nairobi Ltd.

Table 2: Duration of service

	Frequency	Percent	Valid percent	Cumulative percent
Less than 5 years	10	25	25	25
5-10 years	15	37.5	37.5	62.5
11-15 years	9	22.5	22.5	85
Above 16 years	6	15	15	100
TOTAL	40	100.0	100.0	

Responses on organizational support

This question sought to establish how the respondents rated the management concern on Organizational Support at Coca-Cola Bottlers. The table below is an indicative of this information.

Table 3: Ratings of organizational support

Description	Total	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total (%)
The company allows for green Procurement programs	40	15%	20%	10%	25%	30%	100%
The company provides Sufficient resources for GP	40	14%	19%	23%	24%	20%	100%
Are employees trained on Matters of GP	40	30%	28%	20%	14%	8%	100%
Company sensitization on GP Company policy statement	40	30%	25%	20%	15%	10%	100%
Outlining corporate commitment To GP	40	40%	30%	20%	10%	-	100%

What do you think should be done before implementation of green programs in the company?

From the findings, majority of the respondents felt that staff training and sensitization should be carried out. Similarly, Supplier sensitization should also be enhanced and research in green procurement should be done extensively. All these suggestions rated very highly as majority of the respondents felt that there is need for implementation of GP but with a lot of managerial support in the issues suggested amongst others.

Is the Government doing enough to encourage firms to implement green procurement programs?

This question sought to know from the respondents whether the Kenyan government is doing enough to support green procurement. Majority of the respondents, especially those who hold masters and degrees qualifications answered by saying that the government of Kenya is not doing enough. This was mainly due to financial aspects that are attached to Green procurement, which may be expensive at the startup level. Secondly, organizational attitudes, especially in the private sector were an indication that the government may not be able to interfere much with their operations and thus implementation may be slow. The government does not have a policy or guidelines for implementation of GP.

IV. DISCUSSIONS

The results in table 3 show that the company allows for green procurement programs, though the findings indicate that to a great extent, the programs are minimal. 30% of the respondents strongly disagree while 25% disagree. 10% are neutral. 34% agree that the company is practicing green procurement to some extent. The study also sought to find out whether the company provided sufficient resources for green procurement. The resources in this case are financial in nature and managerial commitment towards the programs. 23% agreed that the

management provided resources while 23% were not sure. 44% disagreed that the company provided resources towards GP. On employee training on matters of green procurement, 58% agreed that they have been trained on issues to do with green procurement while 22% disagreed. 20% were neutral. The company provides information/sensitization on green procurement. This is evidenced by 55% of the respondents who agreed. 25% disagreed to the same while 20% were unsure. 70% further agree that the company has a policy statement outlining the corporate commitment to GP while 20% neither agreed nor disagreed. 10% disagreed that the company has a policy statement. Majority of the respondents asserted to the findings that implementing a green procurement program means changing policies and procedures. For it to be successful, it is essential that management supports the initiative fully. In addition, those charged with making purchasing decisions must be involved in the implementation process. Their suggestions and support are critical. For an organization to implement a green procurement program, it must have commitment from all levels, including senior management and purchasing agents. A policy statement outlining the corporate commitment to green procurement can help.

V. CONCLUSIONS

From the research findings, the study established that organizational support highly affects green procurement programs. A number of managerial and policy implications can be derived from this study. First, even though some progress has been made in Coca-Cola to streamline adoption, there remains much to be done to take implementation of GP to the next level. Indeed it has been recognized implementing GP is a slow and evolving process, even in the most advanced countries, GP is still work in progress and an evolving practice in Kenya. The research also points to the strong need for public institutions that intend to develop a GPP-oriented strategy to strongly rely on

awareness, competence and knowhow of its personnel involved in the procurement activities at different levels.

VI. RECOMMENDATIONS

The research recommends that the Coca-Cola Bottling, Nairobi Ltd stakeholders should give attention to the organizational support of the Coca-Cola Bottling, Nairobi Ltd. This is because the organizational support is one of the determinants of green procurement programs. The manufacturing industry should align both legal and fiscal policies to enhance faster GP uptake in the private sector: The regulatory mechanism should take the form of rules, laws, sanctions and incentives that when enforced will result in constraints and inducement to organizations to make necessary changes in their structures and processes. These actions may force organizations to behave in certain ways in order avoid penalties and encourage the use of recyclable materials, waste reduction and conservation of energy. The research further recommends that the company provide for ongoing skills development, continuous training and capacity building of staff on GP related issues. The study findings clearly emphasize the need for the organization to implement an effective capacity building and awareness-raising action on its human resources, both by means of spreading information on GP tools and opportunities and by intensively training the key-personnel on how to set up a tendering procedure, define the requirements, qualify the suppliers, and identify the best offer for “sustainable value for money. All staff involved in the procurement function should continuously upgrade their skills in order to be able to appreciate the latest innovations in green product design, to enable them design sustainable tenders documents. Part of this process should also involve easing access to capacity building tools and information resources through online information repositories.

REFERENCES

- [1] Bolton, C. (2008). The pyramid of corporate social responsibility: Toward the management of organizational stakeholders. *Business Horizons*, 34, 39-48.
- [2] Brammer, P., & Walker, M. (2011). *Our common future, world commission on environment and development*. New York, NY: Oxford University Press.
- [3] Kipkorir, R., and Wanyoike, N. (2015) Thesis on Green Procurement in Kenya. Unpublished.
- [4] Laroche, M., Bergeron, J., &Barbaro-Forleo, G. (2011). Targeting consumers who are willing to pay more for environmentally friendly products. *The Journal of Consumer Marketing*, 18(6), 503-520.
- [5] Lozano, M., &Vallés, J. (2013). An analysis of the implementation of an environmental management system in a local public administration. *Journal of Environmental Management*, 82 (4): 495-511.
- [6] Marron, D. (2013). Greener Public Purchasing as an Environmental Policy Instrument OECD. *Journal on Budgeting*, 3, 71-105
- [7] Nasiche, F. &Ngugi, G. K. (2014). Determinants of adoption of green procurement in the public sector: A case study of Kenya Pipeline Company.
- [8] Nocci, K. (2007). Energy and sustainable development at global environmental summits: An evolving agenda. *Environment, Development and Sustainability*, 5(1-2), 117-138.
- [9] Nocci, K. (2007). Energy and sustainable development at global environmental summits: An evolving agenda. *Environment, Development and Sustainability*, 5(1-2), 117-138.
- [10] Moore, P. (2008). *Importance of Theories in research*, New York, NY: Charles Scribner.
- [11] Murray, L., &Cupples, H. (2001). *Executive summary: Organic Trade Association's 2007 manufacturer survey*. Greenfield , MA. : Organic Trade Association. Retrieved from <http://www.ota.com/definition/quickoverview.html>

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