

ENVIRONMENTAL FACTORS AS A DETERMINANT FOR GREEN PROCUREMENT OPPORTUNITY EXPLOITATION BY SMALL AND MEDIUM ENTERPRISES IN NIGERIA



¹Rebecca Olufunke Olutoye & ²Prof. Romanus Odhiambo

¹*Department of Purchasing and Supply (CBMS)*

Kaduna Polytechnic

²*Jomo Kenyatta University of Agriculture and Technology, Kenya*

Abstract

Organizations worldwide are making efforts to manufacture and purchase products and services that are less harmful to the local and global environment. Many of these small and medium enterprises (SMEs) are working to improve the environment performance of their operations products and services; green procurement is therefore vital to the economic growth of every nation in the world and has been a logical extension of this work. The study presents how green procurement is used by them as a means towards improving their product and operations from environmental perspective to reduce risk, total cost of ownership and improve supply chain performance. The study intends to initiate a program to build the capacity of SMEs to manufacture products that can be termed eco-labeled products. SMEs must however first know what green procurement and green buying means and the business opportunities available in what is ignorantly neglected as waste. The study adopted an exploratory approach using a descriptive survey which was conducted in Kaduna state of Nigeria. The survey was stratified into sub-sectors that were sampled which are agro-based, chemical, construction and engineering. The target population was 1,279 who are registered with Federal Ministry of Commerce and Industry, Kaduna. All analysis was conducted to obtain final result of the study sample of 120 registered SMEs drawn from the target population in Kaduna state. Also, the target population was grouped into the manufacturing industry, trade and services. Statistical analyses were conducted with the help and data from Kaduna Chamber of Commerce and Industry (KADCCIMA) to calculate the descriptive statistics and inferential statistics.

Keywords: *Environment, Green procurement, supply chain, Small and Medium Enterprises.*

Background to the Study

Addressing the enormous environmental challenges that we face, green procurement which can also be seen as recycling or waste management has become a growing field that offers entrepreneurial opportunities, room for innovations and investment prospects. Today, more and more venture investors are looking into recycling and value reclamation (Lenchner 2011). Green procurement programs vary greatly from one area to another, and the effects on those waste streams also vary. For the past 20 years or so, so many firms have tried to take advantage of the opportunities provided by a heightened concern for our environment. Wide arrays of goods and services, marketed under the “green” label and ranging from recycled paper goods to environmentally friendly lawn care products, now compete for our money. The green market provides opportunities that small firms may be particularly well suited to address (Lambing and Kuehl, 2007). Waste is intimately related to our consumption patterns as well as the development, population growth and economy of every nation. It is part of the fabric of our life; its adequate disposal is crucial to sustaining the well-being of all living things in our world.

Environmental pollution is regarded as a worldwide problem and its potential to influence the health of human population is great (Fereidoun 2007). According to Philippe (2000), thousands of different types of chemicals pose serious risks to human and ecosystem's health Worldwide. In Nigeria like many other developing nations, the resultant environmental problems are legion (Etuonovbe 2009), this has been described by Olokesusi (2002) as a cog in the wheel of Nigeria's progress as money and other resources have been expended on non-perceptible programmes. In the recent past, the fight against environmental pollution has been a global issue as the acceleration of ecological disturbances having a global impact requires preventative, coherent forward-looking action and workable solutions (Portas 2008). Consequently, with the change of the social economic development level and market environment, enterprise competitive means have developed gradually from the quality competition, the service competition, the brand competition to the green competition (Zhang & Yang, 2012). Over the last decade, 'green' issues have become increasingly important to the business community (Holt, Stewart and Howard; Schaper 2002). This study however seeks to establish the influence of environmental factors on green procurement opportunity exploitation by SMEs.

Purpose of the Study

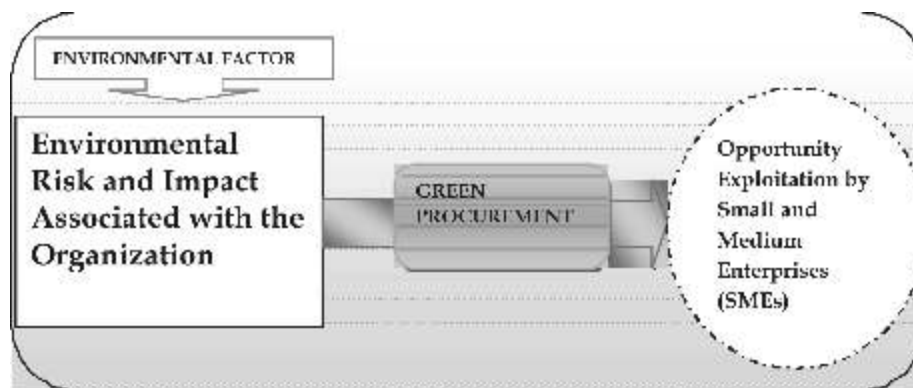
The purpose of this study is however focusing on environmental factors as a determinant of green procurement opportunity exploitation by small and medium enterprise in Nigeria with particular reference to recycling by the small and medium enterprise and how it can influence the development and application of Green Technology. The study will cover small and medium enterprises in Kaduna state. The findings can also be adopted and utilized in other parts of the world that wish to take advantage of the entrepreneurial growth in green procurement.

Literature Review and Conceptual Framework

A study by Kimani (2007) indicates that the public health impact attributed to pollution can be made by human activity and by natural forces as well (Fereidoun et al 2007). Thus environmental pollution is tangled with the unsustainable anthropogenic activities resulting in substantial public health problem (Khan 2004).

Therefore, following the tenets of the institutional view of legitimacy, , concurred with the findings stating it is proposed that superior market performance could serve as a significant “institutional” trigger for environmental responses within and across organizations. Green procurement programs vary greatly from one area to another, and the effects on those waste streams also vary. At the same time, we also contend that though such institutional pressures can lead to green procurement initiatives, they need not promote the need for deeper “environmentally-oriented” activities with suppliers. As corroborated by Shittu and Bake (2010), following the notion of “organizational skepticism,” it shows that superior market performance will only promote basic supply-side environmental initiatives such as green procurement.

In addition to its daily procurement activities, green procurement also entails a company's commitment to environmental responsibility . Though earlier studies express doubt that green measures could pay off from an economic perspective from the deduction of , more recent studies suggest that they could result in improved performance . For example, costs can be lowered as a result of decreased accidental environmental releases and reduced material waste. An environmentally-oriented procurement strategy not only minimises the environmental impact of products of the focal firm, but it could also help in identifying as well as exploiting green competencies available in the supply chain. The study supports this notion by clearly showing that truly internalised and environmentally-conscious procurement is highly beneficial for green supplier development (Porter and Kramer, 2006). Well-defined processes and knowledge on the reduction of waste and packaging materials, and the consideration of well-designed disposable products, could eventually transfer into developing practices that fall outside the core of procurement activities. Wahba argued among others, these green development initiatives could focus on jointly working with suppliers, supporting them, providing knowledge, regularly communicating with each other on environmental performance, but also acknowledging good environmental performance. Resources, knowledge, and insights that are exchanged during such cooperation could greatly improve suppliers' overall performance. More importantly, joint efforts that focus on improving suppliers' (Waddock and Graves 1997).



Environmental Risk and Impact Associated with the Organization

Environmental adoption of green procurement is a good way to reduce environmental and climatic from the purchased goods and services. It is also an effective way of reducing public costs and stimulating technical development. Green procurement can thus boost the economy also through increased competitiveness. Since environment-friendly products and production methods can be exported. Green procurement is the buying of eco-friendly products or purchasing from businesses that support green practices and use green materials. It is an effort to reduce the hidden human health, environmental and social costs of purchasing decisions by buying more environmentally and socially responsible products. It includes effort to convert waste in the process of recycling into reusable and buyable goods and services for profit. It involves buying of goods and services that reduce waste, create energy or water efficiencies, use recycled materials, reduce or eliminate hazardous materials or produce other related environmental or social benefits (Scot, 2010).

Methodology

A well structure questionnaire was used to collect data from SMEs. The study used random sampling technique and collected data from 120 SMEs. Regression analysis, correlation and coefficient calculations were done using statistical packages for social sciences (SPSS) obtaining the correlation between environmental factors and green procurement opportunity exploitation by SMEs in Nigeria. Results were discussed to aid SMEs ability to adopt the techniques and bring profitability.

Analysis

Descriptive statistics for all the variables were calculated and inferential analysis was also done. Pearson's correlation coefficient was calculated for all the variables to corroborate the relation between environmental factors and green procurement opportunity exploitation by SMEs.

Findings

The study sought to establish the influence of environmental risk as an environmental factor in green procurement opportunity exploitation by SMEs in Nigeria. These questions sought to obtain feedback on how overall environmental risk and its impartation on the respondents organization and how each organization have been managing environmental issues. Findings in Table 4.33 revealed that 62.5% of the respondents agreed that there are various degree of risk associated with their organization, while 37.5% of the respondents disagreed with that position. The findings revealed 53.3% of the respondents agreed that organization have a formal environmental policy and guideline for dealing with environmental issues, while 46.7% of the respondents do not have. The findings presented further revealed 26.7% of the respondents agreed that their organizational policy on green procurement is good, while 73.3% of the respondents disagreed with this notion.

Table 1: Statistical Results on Environmental Risk and Impact Associated with the Organization

Statement	Yes		No		Total
	f	%	f	%	
Risk Impact	75	62.5	45	37.5	100
Organization environment policy on green procurement	64	53.3	56	46.7	100
Organization's policy on green procurement is good	32	26.7	88	73.3	100
Average	57	47.3	63	53.7	100

Table 2 indicates that a coefficient of 1.463 for environmental risk and impact associated with the organization which shows that organizational environmental policy as environmental factors among SMEs do influence the operation of green procurement opportunity exploitation by SMEs in Nigeria, positively. In fact, for a unit change in the research for new ventures levels, there is a corresponding 1.463 unit change in the adoption of green procurement.

Using the summary presented in Table 2, a linear regression model of the form, $Y = a + X_i$ can be fitted as follows:

$$Y = 0.172 + 1.463X_2 \dots \text{Equation}$$

Table 2: Coefficients of Environmental Risk and Impact Associated with the Organization

	Unstandardized Coefficients		Standardized coefficients		
	B	Std. Error	Beta	T	Sig.
Environmental risk and impact associated with the organization	.172	.107	.147	1.609	.110
(Constant)	1.463	.210		6.969	.000

Conclusion

With joint effort by various SME organizations on improving production, supplies and consumptions, there will be less environmental risks and more profits derived from green procurement opportunity exploitation in Nigeria. Therefore, SMEs in Nigeria need to get organizational environmental policy as environmental factors towards green procurement, this will go a long way to grow and sustain a green procurement.

Recommendations

SMEs should begin taking initiative action on how best to improve their environment in terms of their production process and the output of their production which stands to be consumed by the consumers. SMEs should also begin to look keenly at their environment to site problems which are enterprising in nature and can be converted to business of maximum profit. Existing SMEs and intending SMEs should begin to think green because the environment in present times is given less attention to in the business sector and yet quality and sustainability can be derived from what has been ignored as bi-product and also improving the environment along the way. SMEs should endeavour to understand environmental factor as a determinant for green procurement for the successful exploitation of opportunities presented in green procurement.

SMEs should learn that the green market provides opportunities that small firms maybe particularly well suited to address. The study showed extensively that SMEs are more suited to green procurement opportunity exploitation since it is small in scale to initiate and it is big enough to grow into a big kind of business.

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