

**EFFECTS OF SUSTAINABLE PROCUREMENT PRACTICES ON
ORGANIZATIONAL PERFORMANCE IN MANUFACTURING SECTOR IN KENYA:
A CASE OF UNILEVER KENYA LIMITED**

RAHMA IBRAHIM HUSSEIN

Masters Student Jomo Kenyatta University of Agriculture and Technology

Noor Ismail Shale, PhD

Jomo Kenyatta University of Agriculture and Technology

CITATION: Hussein, I. M. R & Shale, I. N. (2014). Effects of Sustainable Procurement Practices on Organizational Performance In Manufacturing Sector In Kenya: A Case of Unilever Kenya Limited. *European Journal of Business Management*, 1 (11), 417-438.

ABSTRACT

Environmental and social issues are becoming more important in managing any business. The rise in greenhouse emissions and pollution of the environments by firms has precipitated the need for organizations to realign their procurement operations with a view of conserving the scarce resources. Even though enforcement of the ban on the manufacture, importation and distribution of plastic carrier bags with gauges of less than 30 microns has done little to encourage the recycling, reuse or proper disposal of the thicker plastic bags that are permitted by the law or even the use of the more readily biodegradable paper bags or conventional bags which has expose the country to more environmental challenges. The objective of this study was to investigate the effects of sustainable procurement practices on organizational performance using Unilever Kenya Limited as a case study. This study adopted a descriptive research design, the target population of this study was the finance and procurement staff of the Unilever Kenya limited. The study found out that majority of the respondents agreed that Corporate Social Responsibility, product re-usability, supplier involvement and ethical practices contribute to green procurement in the firm. The study concludes that the firm product re-usability contributed greatly to green procurement in the organization. The study recommends that policy and practice for green procurement should be carefully evaluated and the results of that evaluation fed back into improved approaches. It is important that the evaluation considers the full range of costs and benefits. The organization should have sufficient special techno-economic knowledge and openness to new, effective methods when assessing tenders for green procurement implementation.

Keywords: *organizational performance, green procurement, firm product re-usability, Corporate Social Responsibility, supplier involvement, procurement and ethical practices.*

Introduction

In the midst of changes in the global manufacturing scene, the global manufacturing scene has experienced rapid changes over the last one or two decades. Environmental and social issues are becoming more important in managing any business. The phenomenon has resulted to Green procurement practices. Green procurement is an approach to improve performance of the process and products according to the requirements of the environmental regulations (Hsu & Hu, 2008). The rise in greenhouse emissions and pollution of the environments by firms has precipitated the need for organizations to realign their procurement operations with a view of conserving the scarce resources. The idea of green procurement is to eliminate or minimize waste (energy, emissions, and chemical/hazardous, solid wastes) along procurement (Hervani, Helms, and Sarkis, 2005).

In recent years, academics and practitioners have become increasingly interested in how organisations and their suppliers impact on the environment, society and the economy (Walton, Handfield and Melnyk, 2008). The strategic role of purchasing and supply as a lever for sustainable development is much more manifested now than before. Contemporary commercial practices show that business organizations and business partners are focusing their Procurement strategies on reducing the environmental ‘foot prints’ of their procurement and supply chain activities (Sarkis, 2005). The need to improve organizational efficiency, reduce waste, overcome supply chain risk, and achieve competitive position has made companies to start considering environmental issues from a competitive view point (Humphreys, 2003). Procuring organizations and other supply chain partners are more seriously involved in designing and implementing Sustainable Procurement Policies focusing on how environmental issues and issues relating to other aspects of the sustainable development pillars (Society and Economy) can be integrated in the procurement process activities (Hsu & Hu, 2008).. There are a number of drivers for this increasing prominence of sustainability including an increased understanding of the science relating to climate change, pressure from various stakeholders upon the organisations for the implications of their activities, and greater transparency concerning both environmental and the social actions of organization.

These issues are relevant to managers as their stakeholders customers, regulatory bodies, non-governmental organizations and even their own employees are increasingly demanding that organizations address and manage the environmental and social issues which are impacted by their organizations (Carter, 2011). Procurement managers are more relevantly positioned here as they can impact (positively or negatively) the environmental and social performance, through for example product or service specification, evaluation and supplier selection, and evaluating performance of the provider either by developing the performance evaluation criteria or using that criteria to evaluate the providers fulfillment of the contract for which the provider was contracted.

Statement of the Problem

According to Kenya National Cleaner Production center (KNCPC, 2012), Unilever manufactures a total of 192,836 tons per year of products from a raw material input of 239,602-tons/per year. Out of this manufactured total, 49,022 t/yr equivalents to 25% of the total manufacturing comprises of packaging using plastic carrier bags (KNCPC, 2012). Of the total plastic carrier bags used in packaging, approximately 50% are less than 15 microns in thickness, and are primarily used for carrying consumer products (KNCPC, 2012).

Despite the firm being the contributing 1% to the country's GDP, its activities have been associated with the increased use of plastic bags often used to package the manufactured goods. Not only are plastic bags a source of aesthetic pollution as these bags are dotted all over trees, parks and roadsides which negatively affects tourism they are also a threat to biodiversity. Livestock and wildlife, for instance, get entangled or mistakenly ingest plastic bags while empty plastic bags that fill with rainwater are breeding grounds for malaria-carrying mosquitoes (UNEP 2005).

Available statistics from Kenya Association of Manufactures indicate that there are over 1000 registered manufacturing industries in Kenya, Kenya Association of Manufactures,(KAM, 2013). Unilever registered a production turnover of 10.8 billion in 2012 which was 1.6 percent of the production turnover of the manufacturing sector (KAM, 2013). GOK economic survey reported that, Unilever remit to the government an average of Ksh 1.5 billion annually through direct and indirect taxes and rates and employ over 2,000 people directly with an average wage bill of approximately Ksh 2 billion annually and more than 10,000 people indirectly(GOK, 2012) thus contributing to Vision 2030 on the employment issue.

The firm faces major challenges including dependency on imported raw materials, high cost of electricity, environmental issues, excise duty on plastic shopping bags and threat of ban on the use of plastic in EAC region (KAM, 2013). This study presented a critical discussion of the effects of sustainable procurement on firm performance as both a concept and a practice to bring out its practical implications in the execution of procurement processes, and identifying potential gaps for future research.

LITERATURE REVIEW

Theoretical review

Theory of Altruism

Altruism is a subset of pro-social behavior, (Schwartz', 2007). Theory of altruism suggests that pro-environmental behavior becomes more probable when an individual is aware of harmful consequences to others and when that person takes the detrimental influence of individualism in this context, (Borden & Francis, 2008) hypothesized that: Person with strong selfish and competitive orientation are less likely to act ecologically. People who have satisfied their

personal needs are more likely to act ecologically because they have more resources (time, money and energy) to care about bigger, less personal social and pro-environmental issues. Relating back to Schwartz ' work, the study of Stern, (Dietz &. Kalof, 2003) examined the role that social altruism (concern of the welfare of others) and biospheric altruism (a concern for the non human elements of the environment) play in influencing green behavior. In the same vein, (Mostafa, 2009) found that altruism has a significant positive influence on the intention to buy green products.

Conceptual framework

According to Bogdan and Biklen (2003) a conceptual Framework is a basic structure that consists of certain abstract blocks which represent the observational, the experiential and the analytical/synthetically aspects of a process or system being conceived. It is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. The interconnection of these blocks completes the framework for certain expected outcomes. A variable is a measurable characteristic that assumes different values among subjects. The dependent variable responds to the independent variable. The independent variables of the study will be sustainable sourced products, costs of suppliers, environmental technical competencies and legislation and government policies



Figure 2.1 Conceptual framework

Corporate Social Responsibility

The plethora of issues that have arisen from the effects of globalization are receiving increased social, media, and therefore political, attention (Handfield, 2012). The CSR credentials of companies are being assessed by the media, regulators, the community, customers and shareholders, as well as by socially responsible investors considering their options. Business leaders are increasingly being expected to ensure that their companies behave as ‘good corporate citizens’, not only at home, but in their dealings internationally (Brammer 2011). However, this means that business leaders face tough decisions, including how to balance the interests of shareholders, and their expectations of high returns, with CSR practices (and their focus on the broader good of the community) (Hervani, Helms, and Sarkis, 2005). In the supply chain context, procurement professionals must take SRP into account, along with other corporate considerations, such as ‘value for money’ and low cost sourcing, as well as consumer expectations of low prices Sarkis, (2005).

Product re-usability

Product developers often describe usability as fuzzy and ungraspable Shang et al. (2010). In order to reach a goal, you have to know what the goal is. In order to improve usability, you need a shared understanding of it Walton et al. (2008). Product can be used by specified users to achieve specified goals, with effectiveness, efficiency and satisfaction, in a specified context of use.” Admittedly, due to its somewhat generic formulation this definition does need to be made more specific to be useful (Mudgal et al., 2009). Defining usability is one approach, but creating shared understanding might not require establishing a formal, explicit definition Wang (2005).

Achieving a common understanding of what usability is can also be done by storytelling, by examining examples. Analyzing the potential consequences of usability is essential, because anticipated consequences of usability play an important role in the prioritization of usability (Gilbert, 2001). The effects of usability can be communicated by means of a quantitative analysis, documenting for example product returns and customer satisfaction scores, but also through videos of user-product interaction or by having product developers and upper management experience their own products.

Supplier Involvement

As knowledge relating to environmental damage increases, the pressure to change the ways in which organizations behave has increased – particularly amongst the manufacturing, mining and resources sectors Johanna (2008). Companies need to monitor the environmental impact of suppliers, and develop an environmental purchasing policy that aims to reduce the environmental impact of their own and their suppliers ‘activities, goods and services (otherwise known as ‘green buying’) (Avery, 2005). As a concept ‘supplier diversity’ is often mistakenly taken to mean any initiative to broaden an organization’s supply base, for example by increasing the

number of suppliers with whom the organisation does business Barber (2010). However, supplier diversity actually refers to initiatives that aim to increase the number of diversely controlled (e.g. ethnic-minority owned or women-owned) businesses that supply goods and services to public and private sector organisations Disney, & Towill, (2003). It's about creating a level playing field, by offering under-represented businesses the same opportunities to compete for the supply of quality goods and services, as other qualified suppliers Mostafa, (2009).

Ethical Practices

Businesses are increasingly doing business in a 'borderless' world, which makes it even more essential to develop core principles of conduct, which can then be applied to employees and suppliers worldwide – morally if not legally Min, (2001). Businesses are increasingly doing business in a 'borderless' world, which makes it even more essential to develop core principles of conduct, which can then be applied to employees and suppliers worldwide – morally if not legally Ochoa and Erdmenger (2003). Biodiversity relates to protecting diversity concerning habitat, genetics and species and, as such, has an obvious impact on SRP – particularly offshore suppliers in developing nations Zsidisin and Sifered, 2001). Companies that engage and assist their communities become valuable members of those communities and more respected by their stakeholder Min, (2001). The approach an organisation takes to labour and supplier relations can determine whether or not they are seen as a 'good corporate citizen' or a 'good employer' Green K. Morton B New S., (2006).

Organizational Performance

The greening of procurement can yield higher profitability, which is an important reason why the topic has reached increased attention over the past decade (Theyel et al , 2001) &(Vachon & Klassen, 2006). For example, (Carter et al., 2000) shows that environmental purchasing can lead both to increased net income and lower costs, thus promoting improved firm performance. In previous researches into green procurement the main efforts have been directed towards private purchasing, as opposed to public procurement, (Walker et al.,2008). When in its cradle research on green procurement focused on product suppliers, where the interest has somewhat shifted to include services, (Bjorklund, 2011).

An investigation of the greening of purchasing can yield higher profitability, which is an important reason why the topic has reached increased attention over the past decade (Theyel et al 2001) and (Vachon & Klassen, 2006). For example, (Carter et al., 2000) shows that environmental purchasing can lead both to increased net income and lower costs, thus promoting improved firm performance. In previous researches into green procurement the main efforts have been directed towards private purchasing, as opposed to public purchasing (Walker et al. 2008).

Empirical review

Many researchers (Zhu et al., 2005, 2007; Ninlawan et al., 2010;) studied green procurement: pressures, practices and performance within the Chinese automobile industry and

Thailand electronics industry. They observed that increasing pressures from a variety of directions improve both their economic and environmental performance. Zhu et al., (2005, 2007) also focused on different dimensions of practices including green procurement, internal environmental management, eco design, customer cooperation, and investment recovery.

Hsu, and Hu (2008) studied the green supply chain management in the electronic industry in which they mentioned various approaches for implementing green procurement practices, nevertheless no investigation on reliability and validity of such approaches. Shang et al. (2010) and Walton et al. (2008) conducted a GSCM study based eco design, green manufacturing and packaging, environmental participation, green marketing, stock and suppliers. The results inferred that the firms which were focusing on green marketing had been successful competitors against the rivals. Hsu, and Hu (2008) used the fuzzy analytic hierarchy process method to prioritize the relative importance of dimensions. The findings indicate that enterprises would emphasize on supplier management performance in the crucial role of implementing green procurement management.

Lamming and Hampson (2006) explored the concepts of environmentally sound management and linked them to green procurement practices such as vendor assessment, collaborative supply strategies, establishing environmental procurement policy and working with suppliers to enable improvements. In another study, researcher (Chien and Shih, 2007; Ninlawan et al., 2010; Kumar et al., 2012) works on the implementation of green procurement practices in electronics industry and provide in-depth study about green procurement, green manufacturing, green distribution, and reverse logistics and investigate green procurement practices, measure green procurement performance, and explore green procurement pressure/driver.

The researcher (Mudgal et al., 2009, 2010; Sarode, and Bhaskarwar, 2011) has identified the various variables which help in greening the supply chain of Indian manufacturing sector. They merely focused on top management commitment, societal concern for protection of natural environment, regulations, supplier involvement, customer satisfaction, EMS, employee involvement/empowerment, green product development, green procurement practices, availability of clean technology, green disposal, green transportation, 3R- reduce/remanufacture/ recycle, lean manufacturing practices, economic interests, eco labelling of products, reverse logistics practices, competitiveness and corporate image. Many studies (Rao, 2002; Zhu and Sarkis, 2004; Zhu et al., 2005, 2007; Chien and Shih, 2007; Darnall et al, 2008; Holt and Ghobadian, 2009) mostly focusing on the same variables in manufacturing firms of China, Taiwan, and South-East Asia. Whilst Bowen et al. (2001) provide a useful summary on the benefits of sustainable procurement practices. The perceived benefits of environmental management are also identified by authors such as Holt (2008) and Rao (2002).

The 'porter hypothesis' (Porter & Van de Linde, 2005) proposes that the view that environmental regulation erodes competitiveness is eroded. The authors suggested properly design environmental standard can trigger innovation that lower the total cost of a product or improve its value. Example is given of the Dutch flower industry, which innovated and lowers environmental impact and costs and improved the product quality and global competitiveness.

RESEARCH METHODOLOGY

This study adopted a descriptive research design. The target population of this study was the finance and procurement staff of the Unilever Kenya limited which is 400.

Table 1: Sampling Frame

Level	Frequency	Percentage	Sample size
Top Level Management	15	10%	2
Middle Level Management	151	10%	15
Low Level Management	234	10%	23
Subordinate staff			
Total	400	10%	40

Summary of the Findings

Corporate Social Responsibility

The study found out that majority (83%) of the respondents agreed that Corporate Social Responsibility contribute to sustainable procurement in the firm through the advertisements and meetings of the stake holders while 17% of the respondents were not for the opinion that corporate social responsibility contribute to sustainable procurement in the firm. The found out the Corporate Social Responsibility contributed to sustainable procurement practices in the firm.

Product Re-Usability

The study found out that product re-usability contributed to sustainable procurement in your organization. According to the findings, 80% of the respondents indicated that product re-usability contribute to sustainable procurement in your organization while 20% of them indicated that product re-usability does not contribute to sustainable procurement in the organization. According to the findings, 40% of the respondents indicated that product re-usability contribute to sustainable procurement in the organization, 28% of the respondents indicated that product re-usability contribute to sustainable procurement in your organization, 21% of the respondents indicated that product re-usability contribute to sustainable procurement in the organization to a moderate extent, 4% of the respondents indicated that product re-usability contribute to sustainable procurement in the organization to a great extent while only 2% of the respondents indicated that product re-usability contribute to sustainable procurement in your organization at a great extent.

Supplier Involvement

The study found out that Sixty four percent (64%) of the respondents felt that Supplier Involvement contribute to sustainable procurement practices in the organization while 36% of them were of the opinion that Supplier Involvement does not affect contribute to sustainable procurement practices in the organization. The study also found out that Supplier Involvement contributes to sustainable procurement practices in the organization, 36% of the respondents indicated that Supplier Involvement contributes to sustainable procurement practices in the organization to a great extent, 27% to a very great extent, 24% to a moderate extent, 7% that it did not at all affect sustainable procurement practices, while only 6% indicated that Supplier Involvement contributes to sustainable procurement practices in the organization to a little extent.

The study found out that 35% of the respondents argued that supplier involvement factors influence sustainable procurement practices in the organization, 30% of the respondents indicated that supplier involvement factors influence sustainable procurement practices in the organization, 14% of the respondents indicated that supplier involvement factors influence sustainable procurement practices in the organization, 11% of the respondents indicated that supplier involvement factors influence sustainable procurement practices in the organization, while only 9% of the respondents indicated that supplier involvement factors influence sustainable procurement practices in the organization.

Ethical Practices

The study found out that organizational Ethical Practices contributed to sustainable procurement in your organization, 67% of the respondents indicated that the organizational Ethical Practices contributed to sustainable procurement in the organization while only 33% of the respondents indicated that the organizational Ethical Practices do not contribute to sustainable procurement in your organization. From the study findings, 31% of the respondents indicated that Ethical Practices contribute to sustainable procurement in the organization to a very great extent, 29% of the respondents indicated Ethical Practices contribute to sustainable procurement in the organization to a great extent, 26% of the respondents indicated that Ethical Practices contribute to sustainable procurement in the organization to a moderate extent, 12% of the respondents indicated that Ethical Practices contribute to sustainable procurement in the organization to a little extent while only 4% of the respondents indicated that Ethical Practices did not contribute to sustainable procurement in the organization at all.

The researcher conducted a linear multiple regression analysis so as to test the relationship among variables (independent) on the sustainable procurement practices. The researcher applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study.

Table 4. 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.896 ^a	.881	.132	.3295

Source: Research, 2014

The adjusted R^2 is the coefficient of determination. This value explains how sustainable procurement practices varied with corporate social responsibility, product re-usability, supplier involvement and ethical practices. The four independent variables that were studied, explain 89% of the sustainable procurement practices and organizational performance as represented by the R^2 . This therefore means that other factors not studied in this research contribute 11% of the sustainable procurement giving room for further research to investigate the other factors (11%) that affect sustainable procurement implementation.

Table 4. 2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.534	5	2.868	52.410	.0072
	Residual	186.555	27	2.139		
	Total	198.089	32			

According to Mugenda & Mugenda, 2003, ANOVA is a data analysis procedure that is used to determine whether there are significant differences between two or more groups or samples at a selected probability level. An independent variable is said to be a significant predictor of the dependent variable if the absolute t-value of the regression coefficient associated with that independent variable is greater than the absolute critical t-value. The regression analysis also yields an F-statistic where if the calculated F-value is greater than the critical or tabled F-value, the prediction will be rejected. In this study, the significance value is .0073 which is less than 0.05 thus the model is statistically significant in predicting corporate social responsibility, product re-usability, supplier involvement and ethical practices. The F critical at 5% level of significance was 3.23. Since F calculated is greater than the F critical (value = 52.400), this shows that the overall model was significant.

Table 4. 3: Coefficient of determination

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	3.757	1.033		0.787	0.255
corporate social responsibility	0.554	0.107	0.159	1.091	0.002
product re-usability	0.879	0.139	0.085	0.687	0.005
supplier involvement	0.568	0.097	0.145	0.97	0.013
ethical practices	0.685	0.069	0.210	0.349	0.032

Source: Research, 2014

The researcher conducted a multiple regression analysis so as to determine the relationship between sustainable procurement implementation and the four variables. As per the SPSS generated table above, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$) becomes:

As per the SPSS generated the established regression equation was:

$$Y = 3.757 + 0.554 X_1 + 0.879X_2 + 0.568 X_3 + 0.685X_4 + \varepsilon \text{ where:}$$

Y = sustainable procurement on organizational performance

X1 = corporate social responsibility

X2 = product re-usability

X3= supplier involvement

X4= ethical practices

ε = the error

According to the regression equation established, taking all factors into account (corporate social responsibility, product re-usability, supplier involvement and ethical practices) constant at zero, sustainable procurement on organizational performance will be 3.757. The data findings analyzed also show that taking all other independent variables at zero, a unit increase in corporate social responsibility will lead to a 0.754 increase in sustainable procurement implementation; a unit increase in product re-usability will lead to a 0.879 increase in Green procurement practices, a unit increase in supplier involvement will lead to a 0.568 increase in Green procurement on organizational performance and a unit increase in ethical practices will lead to a 0.685 increase in sustainable procurement on organizational performance. This infers that product re-usability contribute more to the sustainable procurement on organizational performance followed by the corporate social responsibility.

At 5% level of significance and 95% level of confidence, corporate social responsibility had a 0.002 level of significance; product re-usability showed a 0.005 level of significant, supplier involvement showed a 0.013 level of significant, ethical practices had a 0.032 level of significant, and hence the most significant factor is product re-usability.

Conclusions

The study concludes that majority of the respondents agreed that Corporate Social Responsibility contribute to sustainable procurement in the firm through the quality products and meeting of the recommended standards while some of the respondents were for the opinion that corporate social responsibility doesn't contribute to sustainable procurement in the firm.

The study concludes that the firm product re-usability contributed greatly to sustainable procurement in the organization. According to the findings, majority respondents indicated that product re-usability contribute to sustainable procurement in the organization at a great extent.

The study concludes that majority of the respondents felt that Supplier Involvement contribute to sustainable procurement practices in the organization. The study also concludes that Supplier Involvement contributes to sustainable procurement practices in the organization, since majority of the respondents indicated that Supplier Involvement contributes to sustainable procurement practices in the organization to a great extent. The study also concludes that majority of the respondents argued that supplier involvement factors influence sustainable procurement practices in the organization.

Finally the study concludes that organizational Ethical Practices contributed to sustainable procurement in your organization, majority of the respondents indicated that the organizational Ethical Practices contributed to sustainable procurement in the organization. From the study findings, majority of the respondents indicated that Ethical Practices contribute to sustainable procurement in the organization to a very great extent and only a few respondents thought Ethical Practices did not contribute to sustainable procurement in the organization at all.

Recommendations for policy and practice

Policy and practice for green procurement should be carefully evaluated and the results of that evaluation fed back into improved approaches. It is important that the evaluation considers the full range of costs and benefits. The organisation should have sufficient special techno-economic knowledge and openness to new, effective methods when assessing tenders for green procurement implementation. Staffs should be equipped with the specific skills and competencies needed to design and manage contracts (including the associated training, after-sales service and Employ human resources with specific training and equipment for performing functional and environmental tests in order to be able to accept the end product and verify contract performance.

Green procurement initiatives appear to be instrumental for improving supply chain performance, by harmonizing purchases, launching co-ordination initiatives, setting standards and building skills. As such, the management of the unilever Kenya Ltd should adopt green procurement initiatives. However, the main focus of green procurement is to produce cost savings. It targets “commodity” goods and services, and therefore does not stimulate the green implementation.

The firm should create supporting structures of expertise with the help of public authorities that have R&D-review as core business and Introduce clear incentives to procuring private authorities (the procuring entity) by stating that one percent of the total volume of procurements should be allocated to green implementation. In this manner, green procurement can become a strategic issue for the unilever Kenya Ltd.

On financing investment, the unilever Kenya Ltd should adopt new financing methods to save costs, to improve customer and supplier relationships, business processes and performance, and to open new business opportunities. It might also help the organisation to respond better to existing challenges and improve the anticipation of future developments in green procurement.

REFERENCES

- Andrews, K. (2001), *The Concept of Corporate Practices*, Burr Ridge, Dow-Jones, Irwin.
- Barney, J.B. (2001), "Firm resources and sustained procurement performance?" *Journal of Management*, Vol. 17 No.1, pp.99-120
- Carter, C. (2011). Purchasing and social responsibility: A replication and extension. *The Journal of Supply Chain Management*. Fall, 4-16.
- D'Alene, (2005) ; *Strategic Market Planning: The Pursuit of Procurement performance*. St. Paul, MN: West Publishing Company
- Das, J.K. (2002). Responding to green concerns: the role for government and business. *Vikalpa*, 27, 3–12.
- Davidson, S. (2001), Seizing the procurement performance, *Community Banker*, Vol. 10 No.8, pp.32-4.
- Drucker, P. (2001), "Will the corporation survive?", *The Economist*, No.1 November, *Management Journal*, Vol. 21 No.10/11, pp.1105-21.
- Ferrer, G. and Whybark, D.C. (2000). From garbage to goods: successful remanufacturing systems and skills. *Business Horizons*, 43, 55–64.
- Hitt et al. (2001) Next Source for Procurement performance." *Journal of the Academy of Marketing Science* 25 (2): 139-153
- Humphreys, P.K. (2003). Integrating environmental criteria into supplier selection process; *Journal of Materials processing technology* (138), 349-356.
- Mintzberg et al, 2000 *Supply Chain Network Economics: Dynamics of prices, Flows and Profits*. Published by Edward Elgar Publishing Co. ISBN 1-84542-916-8
- Price Water House (2010); Value of sustainable procurement practices: A quantitative analysis of value drivers associated with sustainable procurement practices.
- Rainbird, M. (2004), a framework for operations management: the Supply chain, *International Journal of Physical Distribution & Logistics Management*, Vol. 34, No. 3/4.