

**GREEN SUPPLY CHAIN MANAGEMENT PRACTICES  
AND PERFORMANCE OF HOTELS IN NAIROBI**

**BY:**

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## DECLARATION

This research project is my original work and has not been presented for the award of a degree in any other universities.

Signed-----date-----

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This research project has been produced with my approval as the university supervisor.

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## **DEDICATION**

This work is dedicated to my father who has always inspired me from a distance for the MBA program and this project. To my father Stanley Kinyanjui whose passion for education and sacrifices motivated me to continue with the program.

## ACKNOWLEDGEMENT

To the All Mighty God for his love, provision, protection and support through the whole journey of this program.

I would like to extend my sincere gratitude to my supervisor Mr. Onserio Nyamwange for his support encouragement and guidance on this research project; without his support it was very difficult to finalize it.

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To my friends thank you for your continued support.

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To the respondents of this research who gave me the information without delay.

## **ABSTRACT**

This research project investigates Green Supply Chain Management (GSCM) practices and performance of hotels in Nairobi County. The study focused on GSCM practices, the drivers of GSCM, and the effect of GSCM. The study has been done by considering forty nine hotels in Nairobi County these are hotels registered with Kenya Association of Hotelkeepers and Caterers. Descriptive research design was used since variables measured do not change much over a short period of time and the method is also less expensive. The empirical study involved administration of questionnaires to the respondents, a sample and statistical analysis was adapted to achieve the general and specific objective of the study. The researcher administered a questionnaire where a response rate of 91.8% was achieved. The research project finds that hotels in Nairobi County have taken up GSCM practices based on different drivers. GSCM drivers that have brought about adoption of GSCM practices include competition, government legislation, regulatory compliance, customer requirements, success of other firms and social responsibility. The study also identified different effects that result from hotels taking up GSCM main one being resource saving. From the study it is clear that organizations take up GSCM mainly due to the need of keeping up with the competition in the industry and this has good effect to the organization as it result in resource saving.

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## CHAPTER ONE: INTRODUCTION

### 1.1 Background

Organizations worldwide are continuously developing new and innovative ways to enhance their competitiveness. Environmentally sustainable green supply chain management (GSCM) has emerged as an important organizational philosophy to achieve corporate profit and market share objectives by reducing environmental risks and impacts while improving the ecological efficiency of these organizations and their partners (van Hock and Erasmus, 2000). Bacallan (2000) observed that some of the organizations enhance their competitiveness through improvements in their environmental performance to comply with mounting environmental regulations, to address the environmental concerns of their customers, and to mitigate the environmental impact of their production and service activities. Green or sustainable supply chain management is the strategic, transparent, integration and achievement of an organization's social, environmental, and economic objectives in the systemic coordination of key inter-organizational business processes for improving the long-term performance of the firm and its supply chain partners (John, Dunn and Horward, 2012). As such the companies will be interested in providing procedures to their partners in the supply chain in order to tame the effects of environmental degradation associated with their operations and boost their profitability.

Rajesh and Rituraj (2012) noted that greening the supply chains aims to balance marketing performance with environment issues; to meet the challenges such as energy conservation and pollution abatement. According to Ninlawan, Seksan, Tossapol & Pilada (2010) and Nimawat & Namdev (2012) the supply chains involve the coordination and management of complex network of activities involved in delivering of finished products to the consumers and post-consumer disposal of waste (waste management or water conservation).

In the hospitality (hotel) industry the production phase has a critical role in ensuring that products and services are environment protective in nature; prevention of pollution at source during the production process, adoption of clean production practices; closed loop manufacturing is incorporated to the fullest extent possible. The wastes generated are processed and recycled

back into the production phase; re-use and recycling of materials is maximized; material usage is reduced; the recyclable content of a product is increased; the production processes are optimized so that generation of waste, both hazardous and otherwise, are minimized; and products are redesigned so that the adverse environmental impacts of a particular product are minimized (Trowbridge ,2003; Pagell, Wu, & Murthy, 2007).

Melissen (2008) noted that environmental issues constitute continuous concern for governments, societies, and business organizations. Green supply chain emerged as a new approach that extends environmental responsibility of organizations throughout their entire supply chains. Simpson (2008) observed that much is still unknown, however, regarding the management efficacy and likely costs to the supply chain from altering its traditional focus of cost, quality, and service to include environmental performance. In a traditional supply chain, the flow of materials and information is linear and from one end to the other. There is limited collaboration and visibility. The extent of the supply chain's legitimate control over such environmentally focused activity is an area of active debate especially in developing countries. Kenya in particular earns 12.5 percent of Gross Domestic Product (GDP) from tourism a major contributor in hospitality industry (Aramba, 2013). He further noted green procurement practices require to be incorporated as part of firms' strategic plans, engineering of green designs, focus pollution prevention emanating from solid waste, and green energy and water management.

### **1.1.1 Green Supply Chain Management practices**

Zsidisin & Siferd (2001) define Green Supply Chain Management ( GSCM) as the set of supply chain management policies held, actions taken, and relationships formed in response to concerns related to the natural environment with regard to the environment the design, acquisition, production, distribution, use, reuse and disposal of the firm's goods and services. GSCM is an important approach through which organizations achieve profit, efficiency and market share objectives (van Hoek ,1999; Hu and Hsu ,2010).

According to Van Hock (2000) GSCM has become an important new innovation that helps organizations develop win-win strategies that make organizations achieve profit and market share objectives by lowering their environmental risks and impacts, while improving their

ecological efficiency. These are achievable because GSCM aims at eliminating or minimizing waste (energy, emissions, and hazardous, solid wastes) along supply chain (Hervani, Helms and Sarkis, 2005).

Environmental concerns being on the rise from all internal and external parties of supply chain management, GSCM is an approach that is aimed at improving performance of the processes and products according to the requirements of the environmental regulations (Hsu & Hu, 2008). The increase in pollution of the environment by firms has led to the need of organizations to realign their supply chain operations with the view of conserving the scarce resources.

Green or sustainable supply chain management is the strategic, transparent, integration and achievement of an organization's social, environmental, and economic objectives in the systemic coordination of key inter-organizational business processes for improving the long-term performance of the firm and its supply chain partners, (John, Dunn and Horward, 2012). Qinghua, Sarkis and Kee-hung (2008) observed that increasing pressures from a variety of directions have caused the Chinese automobile supply chain managers to consider and initiate implementation of GSCM practices to improve both their economic and environmental performance. As such the companies will be interested in providing procedures to their partners in the supply chain in order to tame the effects of environmental degradation associated with their operations and boost is profitability.

Melissen (2008) noted environmental issues constitute continuous concern for governments, societies, and business organizations. GSCM emerged as a new approach that extends environmental responsibility of organizations throughout their entire supply chains. GSCM improves performance of the processes and products according to the requirements of the environmental regulations (Hsu & Hu, 2008). According to Torres, Nones, Morques & Evgenio (2004) GSCM aims at confining the wastes within the industrial system in order to conserve energy and prevent the dissipation of dangerous materials into the environment.

### **1.1.2 Hotels in Nairobi**

Nairobi has the best selection of tourist hotels ranging from modest accommodations right up to five-star luxury. The lofty capital, Nairobi is the most sophisticated of Kenyan cities and offers the best shopping and dining, as well as being the starting point for safaris into the wilderness.

Hotels falls in hospitality industry which is a service giving sector, it evolved in line with the coming of transportation industry and start of trading, Kamau & Waudu (2012). Hotel is therefore a commercial establishment providing lodges, meals and guest services.

Hospitality industry in Kenya first evolved at the coast region. This was because of the coming of the Arab traders and railway line construction workers in the region. Their presence necessitated the building of the first catering establishment at the coast, which was known as the grand Hotel of Mombasa built at the present sit of Manor Hotel (Kamau & Waudu, 2012).

Hotels and restaurants in Kenya are regulated and standardized by Hotel and Restaurant Authority. New hotel, resort and lodge projects are required to be licensed first before commencing construction. This is aimed at ensuring quality and compliance with relevant laws and regulations and to promote excellence in the hospitality sector.

According to the Kenya Association of Hotelkeepers & Caterers (KAHC), there are forty nine Hotels in Nairobi registered with them. KAHC registers all hotels in all the star- rating. The Ministry of Tourism of Kenya is mandated to give this classification- rate. The five star Hotels are the most luxurious ones in the market of Hotel industry in Nairobi Kenya.

Hotels in Kenya operate either as a chain or a standalone venture. In this case supply chain management of hotels that operate as a chain with other centers elsewhere in the country is more sophisticated than that of a standalone hotel. Mainly in the case of a chain of hotels within the country they have a central store where all or some of the supplies are received after which they are distributed to the other centers. This is so especially for their imported supplies.

### **1.2 Hotel performance**

Green Supply Chain Management concept has been on increase all over the world due to consciousness and active role of the environmentalist from the 1980s and has gained momentum

in the 1990s. The 1992 Earth Summit in Rio for instance, recorded governments and international organizations commitment to protect environment as part of long term economic development (Mehmet, 2012). Qinghua, et al., (2008) observed increasing globalization and shifting focus to competition promote acquisition of GSCM practices. The governments, organizations and more people are aware of the world's environmental problems such as global warming, toxic substance usage, and decrease in non-renewable resources. GSCM entails involvement in activities that include reduction, recycling, reuse and the substitution of materials and management of solid waste.

Approaches towards green supply chain management (GSCM) practices have been identified by various researchers (Sung, 2010). Shang *et al.*, (2010) conducted a study based on six dimension of green supply chain management. The results inferred that the firms which were focusing on green marketing had been successful competitors against the rivals. Lamming and Hampson, (1996) explored the concepts of environmentally sound management and linked them to supply chain management practices such as vendor assessment, establishing environmental procurement policy, collaborative supply strategies and working with suppliers. Chien and Shih (2007) noted that the pressure on corporations and businesses to improve their environment performances come from globalization rather than localization.

Aramba (2013) established that firms in hospitality industry may derive unlimited benefits; efficiency, profitability and expansion of market share if they adopted GSCM practices. Zhu et al. 2004 in his research found that there are some main drivers behind applying GSCM in Chinese manufacturing industry, such as straightforward cost reduction to facilitate the development of co-operative relationships with suppliers and encouraging life-cycle.

Many progressive companies have capitalized on the opportunities of green supply chain management and are therefore very concerned with the environmental burden of their supply chain processes. Throughout the supply chain, customers and therefore firms designing and operating supply chains are particularly sensitive to reducing their carbon emissions (Hoffman, 2007). Operationally, this might involve carbon control of assets and infrastructure, the use of energy-efficient vehicles, waste reduction through process optimization, and recycling.

Hospitality industry in Kenya is a global business and therefore there is need for players in the industry to profile the service offering to conform to global green supply chain best practices in order to remain competitive in the market. It's important for the hospitality industry players to conserve their key raw materials which are energy and water to enable them to achieve sustainability in the supply chains. This is further curtailed by the ever increasing costs of energy and inputs, these have forced business to find new ways to reduce energy use in order to reduce cost.

### **1.3 Statement of the Problem**

Green Supply Chain Management concept has been on increase all over the world due to consciousness and active role of the environmentalist from the 1980s and has gained momentum in the 1990s. The 1992 Earth Summit in Rio for instance, recorded governments and international organizations commitment to protect environment as part of long term economic development (Mehmet, 2012). Qinghua, et al., (2008) observed increasing globalization and shifting focus to competition promote acquisition of GSCM practices. The governments, organizations and more people are aware of the world's environmental problems such as global warming, toxic substance usage, and decrease in non-renewable resources. GSCM entails involvement in activities that include reduction, recycling, reuse and the substitution of materials and management of solid waste.

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#### **1.4 Research Objectives**

The study investigated GSCM practices of hotels in Nairobi.

- i. To establish the GSCM practices of Nairobi county hotels.
- ii. To determine the organizational drivers of green supply chain management practices in Nairobi county hotels.
- iii. To determine the effects of green supply chain management practices on performance of hotels in Nairobi County.

### **1.5 Value of the study**

The study will contribute information for top management of Hotels to formulate operational policies that conform to green supply chain management practices. It will also contribute information for other economic sectors for the development of business relation policies. In particular the tourism industry is a critical ally to hotel industry and can get information regarding their facilities and their capability to give efficient services to customers.

The study will also contribute to the body of knowledge both in the academic and research area of green supply chain management practices in the country. It will help researchers who want to conduct research in future about Green Supply Chain Management in the hospitality industry in the country.

The findings of the study will also be important for Hotels' top management to get pertinent information on Green Supply Chain Management practices in the Hospitality sector. It will help management to revise their operating system through identification of all practices that conform to Green Supply Chain Management. Hotels in the industry can therefore use the findings and the recommendation of the study to allocate the benefits attributable to Green Supply Chain Management practices.



## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter gives an overview of literature and models that are related to the research problem. This introduces the concept of green supply chain and factors that lead to green supply chain as established by different authors. This chapter also includes interpretations of critical success factors. Moreover, some barriers to development of the concept of green supply chain management are also presented.

### **2.2 Green Supply Chain Management**

Greening supply chain involve ensuring environmental excellence in product development, process design, operations, logistics, marketing, regulatory compliance and waste management. Green supply-chain management (GSCM) has roots in addressing the influence and relationship between supply-chain and natural environment.

The creation of "green" supply chain integration is a process in which the environmental aspects are taking into account in every supply chain activities such as: decisions regarding sourcing of raw materials and creating long-term relationships with suppliers (Gilbert S., 2001). GSCM has emerged in the last few years and covers all phases of product's life cycle from design, production and distribution phases to the use of products by the end users and its disposal at the end of product's life cycle (Borade and Bansod, 2007).

Recent studies of GSCM can be separated into two ways: framework for GSCM, and performance measurement. Some frameworks propose how to improve the collaborative relationships between manufacturers and suppliers, to explore the gaps between the framework and the present state, to aid managerial decision making, or to develop general procedure towards achieving and maintaining the green supply chain (An, Amano, Utsumi, and Matsui, 2006; Sarkis, 2003; and Beamon, 1999).

### **2.3 Green Supply Chain Management practices**

Green supply chain management practices can be looked at through inbound function of supply chain, green production and outbound functions of supply chain. A large part of the inbound function essentially comprises of green purchasing strategies adopted by organizations in response to the increasing global concerns of environmental sustainability (green sourcing and procurement). Green purchasing can address issues such as reduction of waste produced, material substitution through environmental sourcing of raw materials, and waste minimization of hazardous materials. The involvement and support of suppliers is crucial to achieving such goals. Therefore, companies are increasingly focusing on managing their suppliers' environmental performance. This is to ensure that the materials and equipment's supplied adhere to environment protection in nature and are produced using environment conserving processes. In this view Pandya & Mavani (2012) contend that, organizational requirements will contribute to GSCM practices. Every enterprise will be interested in improving its efficiency in its operation, expand its market share and profit, (Aramba, 2013).

In the production phase of a green supply chain, there are a number of concepts that can be explored, such as cleaner production, design for environment, re-manufacturing and lean production. In the hospitality (hotel) industry the production phase has a critical role in ensuring that products and services are environment protective in nature; prevention of pollution at source during the production process, adoption of clean production practices; closed loop manufacturing is incorporated to the fullest extent possible. The wastes generated are processed and recycled back into the production phase; re-use and recycling of materials is maximized; material usage is reduced; the recyclable content of a product is increased; the production processes are optimized so that generation of waste, both hazardous or otherwise, is minimized; and products are redesigned so that the adverse environmental impacts of a particular product are minimized (Trowbridge, 2003; Pagell, Wu, & Murthy, 2007).

On the outbound perspective of the green supply chain, green marketing-involve among others minimum use of paper in advertisement. Further, environment conserving focused packaging and environment protecting distribution are all initiatives that might improve the environmental performance of an organization and its supply chain, (Rao, 2003; Sarkis, 1999). Management of

wastes in the outbound function such as reverse logistics and waste exchange can lead to cost savings and enhanced competitiveness, (Rao, 2003). Many of these initiatives involve compromises between various logistics functions and environmental consideration in order to improve the environmental performance of an organization, (Wu and Dunn, 1995; Rajesh & Rituraj, 2012).

Disposal has always been a compelling problem and has led to green consciousness. In the case of GSCM, efforts to minimize disposal have been the focus. Bellman and Khare (1999) suggest reducing the economic and environment-related costs of automobile shredding residue (ASR). Various waste management and inventory models take disposal costs into account. Richter and Dobos (1999) analyse economic order quantity (EOQ) repair along with waste disposal with integer set-up numbers. Louwers et al. (1999) include transport costs and waste disposal in their model.

#### **2.4 Drivers of Green Supply Chain Management**

According to Hervani, Helms, and Sarkis (2005) external drivers of GSCM will include market and customers, government regulations, competitors and supply chain pressures. Carter et al. (1998) describe customers as having a direct impact on firms' environmental purchasing activities and Walker et al. (2008) investigates how customers' influence drives green supply chain management. The priorities of the customers can influence the environmental management and environmental purchasing.

Zhu Qinghua et al. (2004) found that the suppliers stress had greater impact on the implementation of green supply chain through research. Fangmiao Hou (2007) pointed out that the close cooperation of suppliers and buyers would promote the successful completion of green purchasing activities.

Zhu and Sarkis (2006) in their study investigated the occurrence of thirteen pressures and drivers for automobile industry and other industries in China. The result from the study indicated that pressures and drivers for automobile industry in China are the greatest among other Chinese

industries. Regulatory compliance is indicated as one from the main pressures on Chinese automobile industries due to China's entry to WTO. Further, the result showed that automobile industry in China have a good opportunity in gaining a competitive advantage and being an environmentally aware industry which is considered in itself as a driver to green its automobile supply chain.

Using Interpretive Structure Modeling (ISM) through an Indian case study, Ali and Diabat (2011) have investigated eleven drivers to implement GSCM practices. Top drivers mentioned in the research were green design, integrated quality environmental management into the planning and operation process, reducing energy consumption, and reusing and recycling materials and packing drivers.

According to Testa and Irlado (2010) there is a positive relationship between adopting GSCM practices and enhanced reputation and brand image of an organization. A sample of 4188 facility manager was investigated in seven OECD (Organization for Economic Co-operation and Development) countries. Although the results were positive from the perspective of enhancing reputation and brand image of an organization, it didn't imply that seeking for efficiency is the driver for adopting GSCM practices.

Andic et al. (2012) have mentioned new drivers to adopt GSCM practices in Turkey different from previous study. The study has considered social responsibilities and 5 commercial prestige as two of the main GSCM drivers in the country other than enhancing economic advantages such as economy of production, increasing competitive advantage and increasing profit. Andic et al. (2012) further, added that environmental activities support organization with negotiation power with potential customers.

Hoskin (2011) have mentioned in his research that adopting green practices lead to customer demand satisfaction. His paper considered one of the most important drivers to adopt GSCM practices which is pressure by large customers. Empirically it was implied that pressure by large

customers pushed New Zealand companies to adopt GSCM practices as conforming to customer's voice. As external driver, Hoskin (2011) mentioned that government legislation is one of the major drivers affecting GSCM practices adoption in the country.

Toke et al. (2012) observed that the Indian manufacturing sector had isolated the drivers of greening supply chain as follows; 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 labeling of products, reverse logistics practices, competitiveness and corporate image.

Chien and Shih (2007) on drivers of green supply chain indicated that domestic environmental regulations prompt companies to adopt relevant strategies and practices to enhance their environmental performance. Primarily government regulation is the major drive for corporation environment awareness (Handfield et al., 1997). Government environmental policy provide statutory requirements in addition to public's increasing environmental conscience and pressure from organized groups sway the companies and businesses towards adopting a green manufacturing and supply chain management system policy.

## **2.5 Benefits of Green Supply Chain Management**

Green supply chain has gained popularity with both academics and practitioners with an aim of reducing waste and preserving the quality of product-life and the natural resources. Eco-efficiency and re-manufacturing processes are now important assets to achieve best practice (Ashley 1993; Srivastava 2007). Global market demands and governmental pressures are pushing businesses to become more sustainable (Guide & Srivastava 1998; Gungor & Gupta, 1999).

Toke et al. (2012) contend that, investment in greening can be resource saving, waste eliminating and productivity improving. Three approaches in GSCM, namely reactive, proactive and value-

seeking, are suggested (Kopicki, et al. 1993; van Hoek, 1999). In the reactive approach, companies commit minimal resources to environmental management, start labeling products that are recyclable and use 'end of pipeline' initiatives to lower the environmental impact of production. In the proactive approach, they start to pre-empt new environmental laws by realizing a modest resource commitment to initiate the recycling of products and designing green products. In the value-seeking approach, companies integrate environmental activities such as green purchasing and ISO implementation as strategic initiatives into their business strategy.

The perspective then changes from greening as a burden to greening as a potential source of competitive advantage (van Hoek, 1999). Owen (1993) and Sarkis (1995) discuss environmentally conscious manufacturing.

Alsinda et al. (2012) it is important to integrate environmental management practices into the whole supply chain management in order to achieve a greener supply chain and maintain competitive advantage and also increase business profit and market share objective. International environmental agreements add to the domestic environmental regulations on environmental friendly business practices and seem to have immediate effect on eco-designing, (Gottberg et al., 2006). Companies and governments are being influenced by international environmental agreements, such as Kyoto agreement, Climate Change Treaty and Montreal Protocol (Chien and Shih ,2007).

GSCM stresses more than just improving environmental performance; the implementation of green supply chain management can ensure that the corporation itself and its suppliers conform to environmental regulations. Effective management of suppliers can reduce transaction costs and promote recycling and reuse of raw materials. Also, the production of waste and hazardous substances can be cut, preventing corporations from being fined as a result of violating environmental regulations. Consequently, the relevant handling and operational cost involved can be further reduced and, in the mean time, the efficiency of using resources can be enhanced (Sarkis, 2003).

Supply chains achieve performance improvements or resource development through either building-specific capability over time or by looking to the supply relationships to gain access to new resources. This may occur through either; coercive pressure pass responsibility upstream or introduce contractual clauses for suppliers (Pagell et al, 2007; Zhu & Sarkis, 2007); or collaboration utilize social capital within existing relationships to develop new competencies. With regard to environmental performance management, coercive pressure provides a minimum level of compliance to requirements amongst suppliers but tends to be limited in its capacity to encourage advanced performance outcomes such as new knowledge or innovation. Collaboration on environmental performance issues tends to increase the range and complexity of possible outcomes such as new products or technologies but requires a far greater level of involvement for customers and suppliers.

Stock (1992) thought that green purchasing can improve a firm's economic position, by reducing disposal and liability costs, conserving resources, and improving an organization's public image. Walton et al. (1998) put forward ten top environmental supplier evaluation criteria, among these, second-tier supplier environmentally friendly practice evaluation was viewed as the second most important criterion. In addition, large customers have exerted pressure on their suppliers for better environmental performance, which results in greater motivation for suppliers to cooperate with customers for environmental objectives (GEMI, 2001). For example, Bristol- Myers Squibb, IBM and Xerox have encouraged their Chinese suppliers to develop environmental management systems in compliance with ISO 14001, while Ford, General Motors and Toyota have required their Chinese suppliers to be certified with ISO 14001 (GEMI, 2001).

## **2.6 Challenges to Green Supply Chain Management**

The effectiveness of green supply chain can be gauged against the barrier to the environmental friendly practices. Some of the barriers to implementation of GSCM are; poor IT implementation; resistance to technology advancement adoption; lack of organization encouragement; poor quality of human resources; market competition and uncertainty; lack of government support system; lack of implementing green practices; lack of top management

commitment; cost implications; supplier reluctance to change towards GSCM and unawareness of customers (Luthra, et al. 2011).

In 2011, Luthra et al. developed a research aiming at developing a structural model of the barriers to implement GSCM in Indian automobile industry. With the help of MICMAC analysis and a structural model of barriers to implement GSCM in Indian automobile industry, Luthra et al. (2011) have initiated their research. Market Competition and uncertainty; lack of implementing green practices; cost implications; unawareness of customers have been identified as top level barriers and lack of government support systems the most important bottom level barrier.

Walker et al. (2008) in his paper included internal and external barriers to adopt GSCM. These barriers categories have included costs, lack of resources as internal barriers. Exposing poor environmental performance, lack of information, poor competition, procurement legislation and supplier's reluctance to change have been considered as external barriers. Lack of governmental is one of major barriers facing GSCM practices in many industries (Walker, 2008; Desheng and Dan, 2008; Lee, 2008).

Sarkis (2011) in his research gave a very unique identification of GSCM considering its boundaries and flows. He previewed GSCM boundaries from nine different perspectives which added a unique value to the research. These nine boundaries were analyzed through different levels ranging from individual (sub-micro) to global cross-industry supply chain (supra-macro) boundaries. From his point of view, GSCM nine boundaries are organizational, proximal, informational, political, temporal, legal, cultural, economic and technological.

Roa and Holt (2005) found that there are some barriers that face GSCM practices such as green purchasing application. These barriers include but are not limited to high cost of environmental programs, uneconomical recycling and reusing. There are also some other elements mentioned in the paper that should be considered, such as lack of management commitment and lack of supplier's awareness. Recently, Abbasi and Nilsson (2012) identified challenges facing



sustainable supply chain and they included costs, complexity, operational, mindset and culture changes and uncertainties as the main barrier.

According to Min and Galle, 1997 there are two most highly rated obstacles to effective implementing green purchasing was cost and revenue. In the process of implementing green procurement, the enterprise is bound to increase investment, training staff costs and the communication costs with suppliers, etc, which hence causes the loss of other investment opportunities (Liu and Zhu, 2009).

Tax structures that distort incentives can discourage industry to implement GSCM. Governments primarily set the environmental regulations for various industries (Scupola, 2003). Time consuming regulatory requirements, fees or levies may discourage smaller firms. Government institutions are considered as barriers to development in the environmental management in the sense that institutional process for implementing GSCM are going on but very limited institutional support is given for new ideas to implement GSCM. The tendency of government to encourage old practices is major barrier (AlKhidir & Zailani, 2009). Therefore lack of government support systems is a barrier to implement efficient GSCM in Indian automobile industry.

Innovative green practices are associated with the explicitness of green practices, accumulation of green related knowledge, organizational encouragement and quality of human resources (Yu Lin & Hui Ho, 2008). Innovative green practices involves hazardous solid waste disposal, energy conservation, reusing and recycling of materials. Innovative green practices promote innovative design, new market opportunities and makes their quality better than others. However, due to market competition and cost implications, organizations try to save cost. Implementing GSCM practices initially involves high investment. Financial constraints also lead to resistance to implementing green practices (Ravi & Shankar, 2005).

## **2.7 Review of Empirical Studies**

Zhu and Sarkis (2006) have investigated the occurrence of thirteen pressures and drivers for automobile industry and other industries in China. Results indicated that pressures and drivers for automobile industry in China are the greatest among other Chinese industries. Regulatory compliance is indicated as one from the main pressures on Chinese automobile industries due to China's entry to WTO. Results showed that automobile industry in China have a good opportunity in gaining a competitive advantage and being an environmentally aware industry which is considered in itself as a driver to green its automobile supply chain. Using Interpretive Structure Modeling (ISM) through an Indian case study, Ali and Diabat (2011) have investigated eleven drivers to implement GSCM practices. Top drivers mentioned in the research were green design, integrated quality environmental management into the planning and operation process, reducing energy consumption, and reusing and recycling materials and packing drivers. Different from previous research, Andic et al. (2012) have mentioned new drivers to adopt GSCM practices in Turkey. The research has considered social responsibilities and 5 commercial prestige as two of the main GSCM drivers in the country other than enhancing economic advantages such as economy of production, increasing competitive advantage and increasing profit. Andic et al. (2012) added that in general, environmental activities support organization with negotiation power with potential customers. Rao and Holt (2005).

Most of the studies however focus on manufacturing industry, transport and engineering and therefore more research need to be done in hospitality industry.

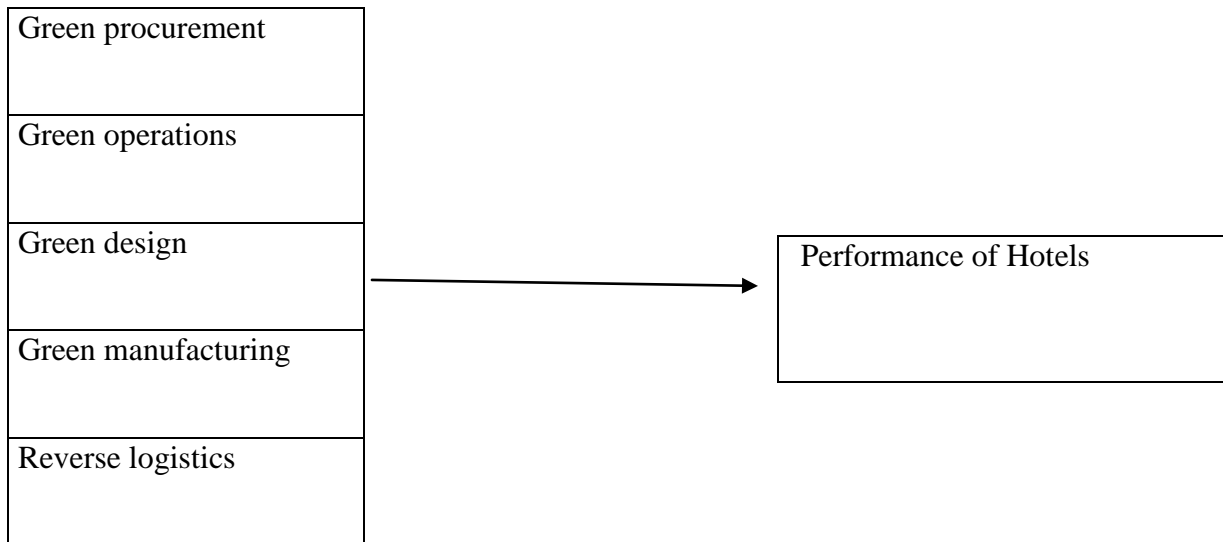
### **Figure 2.8: Conceptual framework**

Figure 2.8 represent the conceptual framework in this case GSCM practices are the independent variables and the performance of hotels is the dependent variable. Performance of hotels depends on green procurement, green operations, green design of products, green manufacturing and reverse logistics. Green procurement is defined as an environmental purchasing consisting of involvement in activities that include the reduction, reuse and recycling of materials in the process of purchasing. It is aimed at minimizing environmental impacts. According to Lund, 1984 green operations relates to all aspects related to product manufacture, usage, handling and waste management once the design has been agreed on. Green design on the other hand is designing products in consideration with environmental safety and health over the product life cycle. Green

manufacturing refers to production process with uses inputs with relatively low environmental impacts and generate low or no waste or pollution. All these practices contribute to the performance of hotels as they result in efficiency as a result of resource saving and cost cutting.

Independent variables

Dependent variables



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

Research methodology is part of project proposal that shows the design of the study, population of the study and data collection techniques. It also shows the type of data to be collected and the source of data where it can be collected. The techniques of data analysis that the researcher used to analyze and interpret the data have been shown in the research methodology which has been reviewed below.

### **3.2 Research Design**

This study used descriptive cross-sectional Survey. This research design is considered appropriate for this study because; data was collected from several organizations concurrently and is less expensive. In addition the characteristics of variables measured do not change much due to short period of data collection.

### **3.3 Population**

The target population comprises the forty nine hotels in Nairobi Kenya, Kenya Association of Hotelkeepers & Caterers. Because of the small number of the hotels a census survey was used. Therefore, the study has been conducted by the data that was collected and analyzed from the forty nine hotels which was taken as target population.

### **3.4 Data Collection**

Primary data was collected by structured questionnaire that was used in this study. The respondents were procurement managers who are in charge of supply chain departments in each hotel. Questionnaire were distributed to the respondents (Procurement managers) . The questionnaires had Part A and part B. Part A was used to capture the back ground information of respondents and the company. Part B was used to capture the information on the green supply chain management practices adopted by each Hotel, drivers of GSCM, benefits and challenges of adopting the same. The questionnaire has both structured and open ended questions. It has been designed on the bases of Likert -type scale. The questionnaire is attached as appendix 1.

### **3.5 Data Analysis**

The data that has been collected based on the specified collection technique has been classified based similarities. Data has been arranged, editing, for accuracy, uniformity, consistency and completeness. The data has been checked to verify errors omissions and inconsistencies. It has been then arranged and entered into the computer in preparation for final analysis.

Data obtained from open ended questions has been evaluated and checked based on the content of the data and has been used to explain the problem. Data has been arranged accordingly and presented in the frequency table. The response rate of respondents has been presented in percentage and seen in the table. Data obtained by use of Likert-type scales and arranged and coded for consistency, omission, and accuracy has been arranged in tables. The data shown in tables have been analyzed using mean scores, standard deviation, frequencies and percentages. Results have been presented in tables.

After the analyses of the data in the form of mean, percentages, Standard deviation frequencies and supported by the explanation of the data from open ended questions, it was presented in table. The data have been interpreted and analyzed as per the research objective. Findings have been discussed and explained in the data analyses.

## CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

### 4.1 Introduction

This chapter presents, interpretation and analysis and the results of the data that has been collected from the study population. It also presents the proportion of respondents, which responded for the questionnaire given to them and type of responses given by the respondents. The type of data, the data analysis, and interpretation of the data have been reviewed below.

### 4.2 General information

This study has been done by considering forty nine hotels in Nairobi County as target population. Data has been collected by using questionnaires prepared in 5-scale likert type and given to respondents. Respondents were procurement managers of each hotel. Respondents have been asked to respond how long they serve in the companies and have responded as per the following manner. The response rate was 91.8% with 45 questionnaires having been returned and 4 questionnaires were not returned.

**Table 4. 1: Background Information of Respondents**

Age	frequency	Percentage
20-30years	1	2.05
30-40years	22	44.90
40-50years	18	36.73
50 and above	4	8.16
Non response	4	8.16

Source: Research Data (2014)

As per the result in table 1, 2.05 % of respondents are 20-30years old and 44.90% of the respondents are 30-40years old. 36.73% of respondents are 40-50years old while those above 50years old contributed 8.16% of the respondent. Four hotels with a proportion of 8.16% of the

total population of the study did not respond at all. The educational background of the respondents is ranging from college diploma to university degree.

#### **4.3 Green supply chain management practices**

The study of implementation of Green supply chain management practices in hotels in Nairobi Kenya has been conducted by collecting and analyzing data about the extent to which the respondents agree on implementation of GSCM practices in the industry. Respondents have been asked to give response on whether their organization have implemented GSCM practices and if so if it is properly implemented and the benefits it have to their organizations. Among the forty nine hotels which are included in the study population, forty two hotels have responded. The response rate of the study is 91.8%. This response rate is considered adequate for this study. The response that has been given by the respondents have been presented and analyzed below.

**Table 2: Mean Score for Green Supply Chain Management practices.**

Practice	Mean	Standard deviation
Use of low energy bulbs	4.08	1.83
Use of solar powered heaters	3.08	2.14
Rain water harvesting and storage in place	2.35	2.92
Use of eco friendly cleaning detergents	3.22	2.01
Use of water efficient shower heads	4.53	1.06
Garbage separated before disposal	3.69	1.52
Staff training on green supply chain management practices	2.86	2.52
Suppliers are evaluated to ensure their products are environmental friendly	2.24	2.86
Purchasing management is evaluated for green purchasing	2.84	2.54

Source: Research Data (2014)

From the table 2 it is clear that most of the hotels in Nairobi have installed energy saver bulbs and also the shower heads in use in most of the hotels are water efficient. It's important for the hospitality industry players to conserve their key raw materials which are energy and water to enable them to achieve sustainability in the supply chains. This is further curtailed by the ever increasing costs of energy and inputs, these have forced business to find new ways to reduce energy use in order to reduce cost.

#### **4.4. Drivers of GSCM**

The study has been conducted by using different approaches for driving GSCM practices in hotels in Nairobi County. Data has been collected from the study sample based on different approaches of adoption of GSCM practices. The approaches that have been used in this study includes: customer requirements, regulatory compliance, competition, Government legislation, Social responsibly and success of other firms

Among the forty nine hotels of the study population, forty five hotels have responded to the questionnaire given to them. This has indicated that the response rate for the study as 91.84%. The data that has been collected from the research population has been presented and analyzed in the following way.

Table 4.3 shows the drivers of GSCM practices in hotel in Nairobi County. The research has looked at six drivers being customer requirement, regulatory compliance, competition, success of other firms, government legislation and social responsibly. From the research competition has come out as the major drive that makes organizations take up GSCM this is because most of the respondent strongly agreed to it being a driver of GSCM. Therefore it is clear that firms will always make sure they remain competitive and they they keep up with the trend in the industry that will keep them competitive. Qinghua, et al., (2008) observed increasing globalization and shifting focus to competition promote acquisition of GSCM practices.



**Table 4. 3: Grand Mean and Standard Deviation of Each Driver of GSCM**

<b>statement</b>	<b>Mean</b>	<b>Standard Deviation</b>
Customer requirements	4.33	1.22
Regulatory compliance	4.30	1.26
Success of other firms	4.25	1.35
Competition	4.39	1.12
Government legislation	4.28	1.66
Social responsibility	4.25	1.35

Source: Research Data (2014)

The mean score and standard deviation for each driver of GSCM has been present above.

In table 4.3 the mean score for competition as one of the drivers of GSCM is 3.57 with 35 respondent (71.43%) stongly being in agreement that competition in the industry does bring about adoption of GSCM in organisation. Ten respondents agreed that competition is a driver to GSCM in their organization and this have a mean of 0.82.Competition according to this research have the highest mean as a driver of GSCM.

In table 4.3 the mean score for success of other firms and social responsibility of the firms as drivers of GSCM is 2.86 with 28 respondent (57.14%) stongly being in agreement that social responsibility of the firms and success of other firms that have adopted GSCM motivates their organisations to take up GSCM. Seventeen respondents agreed that success of other firms and social responsibilities are drivers to GSCM in their organization and have a mean of 1.39. These two drivers according to this research have the lowest mean.

In table 4.3 the mean score for government legislation as a driver of GSCM is 3.06 with 30 respondent (61.22%) stongly being in agreement that legislation laid down by the government

have pushed organizations to take up GSCM. Fifteen respondents agreed that government legislations is a driver of GSCM in their organization and this has a mean of 1.22.

Table 4.4 shows the grand mean and the standard deviation of the drivers of GSCM.

**Table 4.4: Grand Mean and Standard Deviation of Each benefit of GSCM**

<b>statement</b>	<b>Mean</b>	<b>Standard Deviation</b>
Cost saving	4.26	1.22
Enhanced reputation and brand image	4.30	1.25
Customer demand satisfaction	4.25	1.34
Resource saving	4.39	1.12

Source: Research Data (2014)

Table number 4, analysis the benefits/effects of GSCM. It is clear that taking up GSCM not only affect its operations but also improve its reputation and also its brand image. In this research some of the benefits that were looked at were cost saving, enhanced reputation and brand image, customer demand satisfaction and resource saving. The response that respondent gave was mainly biased toward resource saving implying that most of the respondent strongly agreed that taking up GSCM results in resource saving which replicate by bringing about cost cutting. This can be explained by the fact that GSCM aims at reducing or eliminating waste and recycling which in return ensures maximization of the resources. Maximum use of resources will bring about trickling down positive effects to the organization like customer demand satisfaction and brand image. Aramba (2013) established that firms in hospitality industry may derive unlimited benefits; efficiency, profitability and expansion of market share if they adopted GSCM practices. Therefore it is clear that adoption of GSCM is beneficial to organizations. The tables below show the mean score of each benefit of GSCM.

## **CHAPTER FIVE : SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the result of data analysis as well as findings of the study and conclusion reached based on data analysis and interpretations in chapter four. It also incorporates comments and recommendations based on the result of analysis. Summary of findings have been made along with the objective of the study, which is establishing the GSCM practices taken up by hotels in Nairobi County. Conclusion and limitation of the study have been drawn and recommendation for actions and future studies are given.

### **5.2 Summary of the Study**

The study obtained 91.84% of response rate, which is considered to be sufficient for the study. Questionnaires have been given to procurement managers in the organizations (hotels in Nairobi County). One respondent from each hotel have responded to the questionnaires accordingly. Data collected by questionnaires has been presented in frequency table and proportion of respondents has been made. The analysis has shown that adoption of GSCM is driven by different factors in the organization but according to this research the major driver is competition. This is because firms want to keep up with their competitors in the market. It is also clear that by organizations taking up GSCM it result in resource saving and cost cutting thus being beneficial to the organizations.

### **5.3 Conclusion**

From the findings of the study it can be possible to draw conclusion that the hotels in Nairobi County have taken up GSCM based on different drivers and that GSCM do affect their performance. Competition from the study is the main driver of GSCM in hotels in Nairobi followed by customer requirement in this case customer have become empowered and will most of the times demand goods or service that are eco friendly.

Also from the findings it's clear that hotels in Nairobi benefit by taking up GSCM. From the research the major benefit is resource saving followed by cost saving. These two go hand in hand in that as a result of an organization saving its resources the costs are also reduced. Hotels in Nairobi also benefit by enhancing their reputation and also their brand image.

This can lead to the conclusion that hotels in Nairobi county have taken up GSCM based on different factors and the main one is competition in the market and that resource saving is a major benefit resulting from taking up GSCM

#### **5.4 Recommendations**

GSCM is a continuous process that needs to be incorporated in the organization strategic plan. This is because it touches all the areas of operations of an organization and it has come out as a necessary evil that has to be revealed from time to time. The research looked at GSCM of hotels in Nairobi County and how this affects their performance.

#### **5.5 Limitation of the Study**

The study has been conducted by considering the forty nine hotels in Nairobi county registered with Kenya Association of Hotelkeepers and Caterers in 2014. However the registration is not a requirement to all hotels and therefore not all hotels in Nairobi are registered with KAHC. The study findings accuracy was limited to the extent to which the respondents were honest in responding to questions. Given the sensitivity nature of data collection, there may have been likelihood of giving answers for questions that avoid crucial and confidential information.

#### **5.6 Suggestions for further study**

From this research I would recommend further research in different industrial sector in Nairobi County to analyse GSCM and how it affects their performance particularly manufacturing industry. Further research can also be done in hospitality industry and particularly green supply chain management in travel agents and their performance.

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## APPENDIX

### List of Hotels

Member [ "Nairobi"]	Region
<b>Blue Post Hotel</b> Thika-Muranga Highway, 45km from Nairobi City	Nairobi
<b>Blue Waters Restaurant</b>	Nairobi
<b>Central Park Hotel</b> Sheikh Karume Road, central Nairobi	Nairobi
<b>Crowne Plaza</b> Upper Hill, Nairobi	Nairobi
<b>Eka Hotel</b> Its located on Mombasa road	Nairobi
<b>Enashipai Resort &amp; Spa</b> Moi South Lake Rd, Naivasha	Nairobi
<b>Fairmont The Norfolk</b> Harry Thuku Rd, City Center, Nairobi	Nairobi
<b>Fairview Hotel</b> Bishop's Road, Upper Hill	Nairobi
<b>Hemmingways Nairobi</b> Mbagathi Ridge, off Karen road, Karen	Nairobi
<b>Hill Park Hotel</b> Nairobi's Lower Hill	Nairobi
<b>Hilton Nairobi</b> Nairobi CBD, five minutes from KICC	Nairobi
<b>Innscor</b> Nairobi and Mombasa	Nairobi
<b>Intercontinental Nairobi</b> Uhuru Highway, opposite Uhuru Park, Nairobi	Nairobi
<b>International Hotel &amp; Tourism Institute</b> Nyeri road. Kileleshwa	Nairobi
<b>Jacaranda Hotel Nairobi</b> Westlands, Nairobi	Nairobi

<b>Karen Blixen Coffee Garden &amp; Cottages</b> 336 Karen Rd, Karen	<b>Nairobi</b>
<b>Karen Country Club</b> Karen Rd, Karen	<b>Nairobi</b>
<b>Kentmere Club</b> Limuru-Tigoni-Banana Rd,	<b>Nairobi</b>
<b>Kenyatta International Conference Center</b> Harambee Ave,	<b>Nairobi</b>
<b>Kenyatta International Conference Centre</b>	<b>Nairobi</b>
<b>Kivi Milimani</b> Off Ralph Bunche Rd, 2 km from Nairobi city centre	<b>Nairobi</b>
<b>Laico Regency Hotel</b> Loita St, Uhuru Highway,	<b>Nairobi</b>
<b>Maanzoni Lodge</b> Mombasa Road, near Machakos turn off	<b>Nairobi</b>
<b>Milele Nairobi</b>	<b>Nairobi</b>
<b>Muthaiga Country Club</b> Muthaiga Road, opposite Saudi Arabian Embassy	<b>Nairobi</b>
<b>Mvuli House</b> Located at the junction of Mombasa and Langata Roads,	<b>Nairobi</b>
<b>Nairobi Club</b> Ngong Road/Haile Selassie Road Junction	<b>Nairobi</b>
<b>Nairobi Safari Club</b> Nairobi's central business district, 18 km from Jomo Kenyatta International Airport	<b>Nairobi</b>
<b>Nairobi Serena Hotel</b> Kenyatta Ave, Nairobi	<b>Nairobi</b>
<b>Nas Servair</b> Nairobi, JKIA	<b>Nairobi</b>
<b>Ole Sereni Hotel</b> 5 km from Jomo Kenyatta International Airport	<b>Nairobi</b>
<b>Parklands Sports Club</b> Ojijo Rd, Parklands, Nairobi	<b>Nairobi</b>
<b>Presbyterian Guest House &amp; Conference Centre</b>	<b>Nairobi</b>

Off Mombasa Road, Muhoho Ave, South C, Nairobi	
<b>Red Court</b> Red Cross Rd, Off Mombasa Rd, Near Jomo Kenyatta International Airport	<b>Nairobi</b>
<b>Safari Park Hotel &amp; Casino</b> Opp. Moi International Sports Centre, Kasarani, Thika Rd	<b>Nairobi</b>
<b>Sankara Nairobi</b> Woodvale Grove, Westlands,	<b>Nairobi</b>
<b>Sarova Panafric</b> Valley Road, Nairobi	<b>Nairobi</b>
<b>Southern Sun Mayfair</b> Corner Msapo Close/Parklands,Rd, Nairobi	<b>Nairobi</b>
<b>Sovereign Suites</b> Limuru Road, Redhill, Kiambu, Nairobi	<b>Nairobi</b>
<b>The Boma Nairobi</b> Nairobi South C	<b>Nairobi</b>
<b>The Lord Erroll Restaurant</b> 89 Ruaka Rd, Village Market,	<b>Nairobi</b>
<b>The Panari</b> Mombasa Road, 5 km from Jomo Kenyatta International Airport	<b>Nairobi</b>
<b>The Sarova Stanley</b> City centre, Corner of Kimathi St & Kenyatta Ave	<b>Nairobi</b>
<b>The Tamarind Group</b> Nairobi and Mombasa	<b>Nairobi</b>
<b>Tin Tin Restaurant</b> Lower Ground Floor, KICC, Harambee Ave	<b>Nairobi</b>
<b>Tribe - The Village Market hotel</b> Gigiri, Nairobi	<b>Nairobi</b>
<b>Upper Hill Country Club</b> 2nd Ngong Ave, Upper Hill	<b>Nairobi</b>
<b>Utalii Hotel</b> Utalii Hotel is 8 km from city centre and is easily accessible from JKIA onThika Road, Nairobi	<b>Nairobi</b>
<b>Windsor Golf Hotel &amp; Country Club</b> Nairobi	<b>Nairobi</b>

## RESEARCH QUESTIONNAIRE

Information provided in this questionnaire will only be used for academic purpose and will be treated with maximum confidentiality.

There is no right or wrong answers. Your answer will be a reflection of how you view each question.

Please respond with a tick in the bracket ( ) or by stating your answer in the spaces provided.

### SECTION A

1. Name (optional).....
2. Name of the hotel you work for.....
3. Gender: Male ( )      Female ( )
4. Age  
15-20 years ( )      20-30 years ( )      30-40 years ( )      40-50 years ( )  
50 and above ( )
5. Marital status Married ( )      Single ( )
6. Profession.....  
.....
7. Level of education  
Secondary ( )      college ( )      University ( )

### PART ONE: GREEN SUPPLY CHAIN MANAGEMENT.

Green supply chain management is defined as the summing up of green procurement, green manufacturing, green distribution and reverse logistics

1. Have the organization you work in put in place GSCM?
  - a. Yes ( ) No ( )
2. If the organization has implemented GSCM do you think it is implemented properly?
  - a. Yes ( ) No ( )
3. Does the management of the organization lay emphasis on benefits of GSCM?

a. Yes ( ) No ( )

**PART TWO: THE GSCM PRACTICES, DRIVERS, CHALLENGES AND BENEFITS**

In this section you are asked to take into account a number of statements of your view of the current status of the organization departments that have implemented GSCM. Please answer all questions by ticking the most suitable on a scale of 1 to 5 (where 1-strongly agree, 2-agree, 3-Indifferent, 4-Disagree and 5-Strongly disagree).

I.	Green Supply Chain Management practices	1	2	3	4	5
	a) The bulbs in use in all the buildings are low energy bulbs.					
	b) All water in the facility is heated by solar-powered heaters for both cooking and cleaning.					
	c) Rainwater harvesting and storage mechanism put in place.					
	d) All the detergents used for cleaning are eco friendly.					
	e) The shower heads in use are water efficient.					
	f) There are clean and well fenced garbage disposal and composting areas.					
	g) Garbage is separated before disposal.					
	h) Staffs get training on green supply chain management practices.					
	i) Purchasing management is evaluated for green purchasing.					
	j) Training of personnel to buy environmentally friendly goods is done often.					
	k) Supply chain members satisfaction is the key measure to determine the effectiveness of the GSC.					

	l) Management involves employees in GSC planning.					
	m) All suppliers are evaluated to ensure their products are environmental friendly.					
II.	Benefits of GSCM					
	a) Benefits associated to GSCM practices have lead to the organization to go green.					
	b) Green supply chain management practices are cost saving.					
	c) There is a positive relationship between adopting GSCM practices and enhanced reputation and brand image of an organization.					
	d) Adopting green practices leads to customer demand satisfaction.					
	e) GSCM practices leads to resource saving.					
III.	Drivers of GSCM					
	a) Customer requirements have lead to GSCM.					
	b) Regulatory compliance have lead to Hotels welcoming GSCM.					
	c) Success of other firms that have implemented GSCM has lead Hotels implement it too.					
	d) Competitive advantages gained out of a firm going green are a drive to GSCM.					
	e) Government legislation in place pushes Hotels to go green.					
	f) Stress from suppliers is a driver to GSCM.					
	g) In fulfilling social responsibilities it leads to Hotel going green					
IV.	Challenges of implementing GSCM					

	a) High cost associated with implementing and running GSCM is a barrier to adopting it.					
	b) The complexity of GSCM causes firm to shy away.					
	c) Lack of personnel training on green supply chain management practices highly hinders its implementation.					
	d) Competition hinders the implementation of GSCM practices.					
	e) Uncertainty challenges the implementation of GSCM practices.					
	f) Lack of staff training contributes in slow implementation of GSCM practices.					

**SECTION B**

What do you think should be done to improve the effectiveness of the GSCM in your organization.....  
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