# SUSTAINABLE SUPPLY CHAIN MANAGEMENT INCENTIVES AND OPERATIONAL PERFORMANCE OF FOOD FRANCHISING OUTLETS IN KENYA

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# DECLARATION

This Research Project is my original work and has not been presented or published for the award of any degree in this or any other university

**Signed: ……. Date: ……**

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D61/73686/2012

The research project has been submitted for examination with my approval as the university supervisor.

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*"**Education is our passport to the future, for tomorrow belongs to the people who prepare for it today."***

***Malcolm X***

# DEDICATION

First and foremost, I dedicate this study to God Almighty for seeing me through this entire MBA Program. To my loving and supportive parents, I extend my uttermost appreciation for their inspiration and support during the entire period. To my adorable daughter Caitlin Amara Mugo and beloved family who stood by me and encouraged me to work hard during the entire course.

***'Shukran'***

# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF FIGURES

# ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| COFEK | Consumers Federation of Kenya |
| NEMA | National Environment Management Authority |
| SSCM | Sustainable Supply Chain Management |
| SCOR | Supply Chain Operations Reference |
| SMEs | Small and Medium Enterprises |
| CSR | Corporate Social Responsibility |
| BSC | Balance Score Card |
| ISO | International Standard Organisation |
| TBL | Triple Bottom Line |
| NGO | Non-Governmental Organisation |
| RBT | Resource Based Theory |
| ROI | Return on Investment |
| SC | Supply Chain |

# ABSTRACT

Food franchising outlets are facing rapid growth in markets such as Kenya and a concurrent need for sustainable supply chain management. The companies attempt to address supply risk and threats to the triple bottom line (TBL) through managing suppliers and inputs and at the same time need to overcome the uncertainty raised by the host environment. Government policy seems to influence the directions and choice of sustainable supply chain management activities engaged in by the firms. Food franchising outlets are aware that local stakeholder expectations may affect operations significantly and as such, they are needed to carefully evaluate their operations in the host market and seek balance between sustainable supply chain management practices and local stakeholder expectations. The study therefore looks at the incentives adopted for sustainable supply chain management and operational performance of food franchising outlets in Kenya. The research design for the study was descriptive survey. The researcher proposed to do a census on all the listed fifteen food franchise outlets. The researcher utilized the statistical package for Social sciences (SPSS) software to analyze the efficiency and effectiveness of the data in details. The study finally concludes that SSCM incentives are significant in enhancing the operational performance of the food franchise outlets and from the findings it was concluded that the outlets should adopt SSCM as part of their operational strategy in order to enhance operational performance and the study recommended that awareness about SSCM should be raised in order for sustainability to be deeply entrenched in the activities and philosophy of the firm.

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background of theStudy

As a result of Globalization, increasing competition, growing demands of environmental protection, resource scarcity and the need for reliable cost efficient and incorporating of the changes in customers taste and preferences is posing challenges to these firms. SSCM is very crucial in maintaining the integrity of a brand managing operational costs and ensuring business continuity (United Nations 2000). Thus products should be designed in a manner that sustainable supply chain strategies can create a sustainable competitive advantage and incorporate the Kyoto Protocol which is a tool for ensuring environmental sustainability. According to Seuring and Mueller (2008), the concept of sustainability has become increasingly important in supply chain management as companies respond to external pressure from policy makers and consumers as well as internal pressure from a sense of responsibility and values among leaders.

Environmental deterioration resulting from global warming, ozone depletion, air pollution, and resource shortages has attracted increasing attention worldwide (Babiak & Trendafilova, 2011). Firms are important sources of environmentalproblems, and their supply chain activities (for example purchasing, manufacturing, and logistics) often have substantial impacts on the environment (Eltayeb et al., 2010).Rising environmental awareness and mounting government regulations demand that firms green their operations (Sarkis et al., 2011). Environmentally responsible firms then can enjoy rewards such as improved corporate images, efficient resource utilization, reduced disposal and legal costs, or new business opportunities created by increasing demand for green offerings (Porter & van der Linde,1995; Min & Galle, 1997; Montabon et al., 2007). Some organizations embrace green practices and fulfill their social responsibilities enthusiastically; others are reluctant to adopt such practices, regardless of market pressures or government regulations.

### 1.1.1 Sustainable Supply Chain Management Incentives

Incentives can be seen as inducement or supplemental reward that serves as a motivational device for a desired action or behavior, (Abraham, 1999). Incentives acts as payments linked to the achievement of previously set targets which are designed to motivate people to achieve higher levels of performance. The targets are usually qualified in terms of output or sales. Alexander et al

(2000) noted that remunerative incentives (or financial incentives) are said to exist where an agent can expect some form of material reward especially money in exchange for acting in a particular way. Moral incentives are said to exist where a particular choice is widely regarded as the right thing to do, or as particularly admirable, or where the failure to act in a certain way is condemned as indecent. A person acting on a moral incentive can expect a sense of self-esteem, and approval or even admiration from his community while a person acting against amoral incentive can expect a sense of guilt, and condemnation or even ostracism from the community. Coercive incentives are said to exist where a person can expect that the failure to act in a particular way will result in physical force being used against them by others in the community for example, by inflicting pain in punishment, or by imprisonment, or by confiscating or destroying their possessions, (Alexander, P., Ryan, R. & Deci, E. 2000;Ndinda, 2013).

Sustainable supply chain management (SSCM) can be defined as "the strategic, transparent integration and achievement of an organization's social, environmental, and economic goals in the systematic coordination of key inter-organizational business processes for improving the long-term economic performance of the individual company and its supply chain" (Carter and Rogers, 2008).

The range of barriers to development and implementation of green/sustainable Supply Chain Management has resulted in a multitude of policy strategies. Sustainable Supply Chain Management addresses a number of environmental issues, including climate change, clean air and water, toxic pollutant reduction and resource efficiency. Policy is driven not just by involuntary, government-mandated rules and programs, but also through a variety of collaborative, voluntary efforts on the part of government, industry, academia and civil society. When government purchasing guidelines create a preference for particular green products, they can, in some circumstances, provide enough evidence of a market to justify investment by firms in adopting specific technologies; regulatory restrictions when accompanied by penalties, can create enough of an incentive even to the point of comply or go out of business; standards, certification and labeling; databases, tools and information sharing; awards and recognition; economic incentives; research funding; partnerships and collaborations; technical assistance in implementation of technologies or technology transfer that will enable SSCM. (Matus, 2010)

The government may offer incentives to encourage adoption of green supply chain management, this may be through financial incentives, education, pilot projects and tax breaks (Scupolaetal, 2003). Corporate Social Responsibility of a company determines its approach towards the green

supply chain management practices. It refers to the obligations of a firm to society and its stakeholders (Smith et al, 2003). It is an important driver to environmental management.

Macro-level sources of institutional pressures can influence businesses and supply chains to adopt more socially and environmentally responsible practices. These stem from state regulations, industrial self-regulation, monitoring organisations (for example NGOs, institutional investors and the media), business publications and education, trade or employer associations and formal processes of stakeholder engagement (Caprar and Neville, 2012; Zhu *et al.*, 2013). The institutional perspective elucidates what drives the spread of sustainability principles within and between firms in the chain, and also why the adoption varies in different economic settings.

Organisations are compelled to satisfy the interests of their primary stakeholders to ensure the viability of their business operations. Central to the stakeholder theory interpretation is that these demands and expectations of stakeholders should be considered as an input for implementing and managing sustainable supply chains (Golicic and Smith, 2013).

One of the biggest challenges to sustainable supply chain work is aligning the incentives of all supply chain players so that they work together on improving environmental and social outcomes (Dolsak&Ostrom, 2003; Sustainability Institute, 2003). During periods when demand exceeds supply: it will be very difficult for firms to pressure suppliers into adopting sustainable supply chain practices, as is the case with sugar and also weak relationships with suppliers can lead to difficulties aligning incentives along the Supply Chain. Dynamic nature of supply chains: A SC party (for example a supplier) is likely to play different roles in different SC. For example, a supplier may supply a critical component to one manufacturer in one supply chain and be a dual supply source for another manufacturer in a different supply chain thus creating challenges in incentive distribution along the SC (Elkafi et al, 2012).

Resistance from Various Sources: Including sustainability in the supply chain is to look beyond the existing supply chain and involving issues like quality product and service, better technology or processes which result in less wastage. It also involves evaluating suppliers' and distributors' performance, human resource management, eco-friendly product design and manufacturing, cost, finance, which means changes in the existing supply chain to achieve the desired goals (Ansari and Qureshi, 2015). However, changes in the organization have always faced resistance and this may in turn affect incentives planning. According to Ageron *et al.* (2012), some of the factors that offer

resistance to implementation of sustainability in the SC and thus incentive distribution are:

Top Management and Finance: Weak top management leads to failure in incentive planning in sustainability supply chain management. Top management may better understand the role of finance/accounting in the supply chain but not in a position to know what would be the impact of improving the technical requirements of the product. Moreover, improving the standards of the product will increase the cost of the product and hence create financial burden on the organization which is one of the reasons restricting top management from implementing sustainability in supply chain and giving incentives. Finance is identified as one of the principal barriers for implementation of sustainable supply chain by most of the companies due to two major concerns: difficulty in evaluating the return on investment and difficulty in distributing the costs and benefits between the partners (Ageron *et al.*, 2012).Training and human resource development should be the practices of the firm to be competitive in market, and new technologies and developments should not be seen as financial burden on the organization (Gowen and Tallon, 2002).

Miscommunication or Insufficient Information**:** Effective communication is required for the success of incentives in sustainability of supply chain. If the demand of the product is increased in the market, the same should be communicated to the organization for increasing the supply of the product, as the organization may not be having much stock of finished goods since it increases the inventory and hence cost of storage. Companies and suppliers lack effective communication and understanding between them. Internal IT infrastructure should be developed by the company for setting up effective communication channels with the suppliers and audit services (Ageron *et al.*, 2012).

Incentives motivate the adoption of sustainable supply chain management and the speed of its implementation. Through facilitation such as sharing of information and acquiring of new technologies firms are able and willing to be part of the revolution. Incentives helps to promote collaboration among partners in the Supply Chain thus creating a united front towards protection of resources and development of policies. Incentives help to achieve highest performance possible and thus there is ownership of responsible practices (Porteous & Rammohan, 2013).

Incentives that are aligned, that is to say risks, costs and rewards of doing business are distributed fairly across the network leads to a supply chain working well and a company's actions are able to optimize the supply chain's performance. Coordinating actions across firms is tough because

organizations have different cultures and companies cannot count on shared beliefs or loyalty to motivate their partners. To induce supply chain partners to behave in ways that are best for everybody, companies have creates or modify monetary incentives (Narayanan and Raman, 2004).

### 1.1.2 Operational Performance

Operational Performance is also the firm's performance measured against standard or prescribed indicators of effectiveness, efficiency, and environmental responsibility such as, cycle time, productivity, waste reduction, and regulatory compliance. Rahman and Sohal (2001) explained that to determine the operational performance of firms, organizations use both financial and non-financial metrics. This performance can also be subdivided into three categories such as financial performance (profit), internal non-financial performance (productivity) and external non-financial performance (customer satisfaction). Poor environmental standards of small suppliers often affect the performance and image of large firms in the same supply chain (Cousins et al, 2004). The outcome of their research showed that there is a positive relationship between best business practices and business operational performance.

A study of performance measurement practices in supply chain management by Kurien and Qureshi (2011) found that companies have understood that in order to compete in a continuously changing environment, it is necessary to monitor and understand firm performances. Operational measurement has therefore been recognized as a crucial element to improve business performance.

### 1.1.3 Food Franchising Outlets in Kenya

Until recently, the franchise business model has been slow to take hold in Kenya because local investors know little or nothing about its potential rewards, industry insiders say; however, American franchises such as KFC, Subway, Cold Stone Creameries and Naked Pizza have begun to set base in Nairobi. Given the establishment of the counties, investment prospects outside of Nairobi are likely to emerge in the coming years.

Consumer Lifestyle Reports in Kenya have reported increased consumer expenditure, on eating, drinking habits and shopping especially among the urban population, as a result of growing disposable income. Kenya’s evolving lifestyle trends can be seen in more shopping malls and recreational facilities coming up across Nairobi and other leading Kenyan cities including: Eldoret, Kisumu, Mombasa, Nyeri, Nakuru and Machakos. This is a key pointer to investors wishing to set

up shop in various locations in Kenya. Franchises in the food, restaurant and beverages industries are the most successful - ranking them by growth, branch and demand. Kenyans are spending more time and money eating out or ordering in especially during work hours and the fast food industry has benefited greatly as a result. Some of the popular food franchises in Kenya include: Debonairs, Pizza Inn, KFC, Subway, Cold Stone Creameries and Steers. Franchising is also now beginning to take hold because investment in services that meet basic needs is lucrative.

The primary hurdle involves formalizing remittance procedures for fees and royalties to the franchisor or licensor. Legal forms of the business are governed by the Companies Act of 2009. Immigration laws and work permits governing foreign investors also apply. Additionally, there are licensing requirements that are peculiar to particular businesses. There are significant guarantees against expropriation of private property under the Constitution of Kenya, which require due process along with full and adequate compensation in the event of expropriation. The average startup investment in money and time for a franchise will depend on the nature of the industry as franchising in some industries will require a higher upfront investment capital and time while others may require less. The average startup cost in the food/restaurant industry in Kenya is US$100,000.

The introduction of the new county system of government will definitely boost the need for foreign investments in Kenya as different counties strive for sustainability. This shall subsequently oversee efforts by county governments to undertake regulatory reforms that shall enhance their business environments in terms of making them friendly for foreign investments (Catherine Malinda, 2013).

### 1.2 Statement of the Problem

There are strong indications that we are moving from a world of abundant, cheap energy to a world of limited and expensive energy (Hartmann, 2004). Due to the complexity of its products, the food supply chain is poised to face some of the future's most compelling supply chain challenges. Thus Food Franchising Outlets are called upon to combine the 6R concepts (Recover, Reuse, Recycle, Redesign, Reduce, and Remanufacture) as envisaged by Joshi et al., 2006.

Responsible and ethical procurement is especially challenging for food and beverage because agricultural commodities typically rely on low-cost labor inputs and environmentally damaging technology and practices in order to produce high volumes. These negative environmental and

social impacts threaten the reputation of food franchising outlets in the short-term, and the certainty of food supply capacity in the long term.

Jessica (April, 2007) in her research found that prevailing supply chain incentives and norms often contradict the behaviors necessary to improve environmental and social performance and thus creating a sustainable supply chain requires different models and working relationships.

Chen et al, 2014 found that with the growing influence of global warming and environmental impacts, sustainability was essential and vital for the supply chains, so as its members. Customers or clients tended to put more emphasis on friendly environment. In their research striking a balance in green and running the SC well requires great deals of efforts. Motivation is always a key. Their research investigated several enterprises' green policies and their promotion incentive systems. The connection between policies and incentives can be sorted into different types, such as: enterprise image, profits increasing, social responsibility and others. Implementing a policy effectively among all the members in the supply chain is an important issue.

Molla (2011) conducted a study on green SCM practices in the food manufacturing industry in Kenya. In this study it was found that green supply chain management practices adoption is still limited among the food manufacturing companies in Kenya and that most of these companies have only planned to consider, or at most, are considering adoption except for eco-design practice which was currently under consideration. International firms were found to have a higher adoption rate of green supply chain management practices than local based firms. Serene (2010) carried out a study of firm's incentives in the savings and credit cooperative societies in Kenya. Dickens (2002) did a study on incentives practices in hospitality industry in Kenya. Ndinda (2013) conducted a study on incentives among dairy firms in Kenya. In the study it was found that incentives work towards achieving the intended objective or action.

Omariba (2014) conducted a study on green SCM practices and SC performance in mobile phone firms in Kenya. In this study it was found that the drivers/incentives for adoption of Green SCM are Government regulations, cost implication and CSR. Babu (2013) found that the drivers or incentives to green supply chain management are rivals, Government, environmental organisations, the need for differentiation from competitors and supply chain members. This research was geared towards closing the knowledge gap existing in the area of supply chain management incentives and to determine the SSCM incentives commonly used in this sector and to establish relationship

between SSCM incentives and operational performance of food franchising outlets in Kenya.

### 1.3 Objectives of the Study

(i) To determine the Sustainable Supply Chain Management Incentives commonly used by food franchising outlets in Kenya.

(ii) To establish relationship between sustainable supply chain management incentives and operational performance of food franchising outlets in Kenya.

### 1.4 Value of the Study

The study will add to the pool of knowledge in the field of food franchising outlet and operational performance. It will also be of importance in aiding the government of Kenya in formulating policies relating to adoption of SSCM. This study will also lay ground for further research as regards the SSCM incentives and operational performance.

# CHAPTER TWO

## LITERATURE REVIEW

### 2.1 Introduction

The concept of SSCM is considered across the entire supply chain; the upstream, the focal organization, and the downstream supply chain. In the upstream- suppliers are considered while in the downstream-consumers and ultimately, its disposal is taken in consideration.

### 2.2 Theoretical Foundation

The theories under focus are Institutional, Stakeholder and Resource Based theories which will be used to look at SSCM incentives.

#### 2.2.1 Institutional Theory

It describes how external influence from the Government, media and public associations impact organizational behaviour and decision-making and how such pressure gradually creates institutional rules. Organisations seek survival and legitimacy by conforming to critical institutional rules which stem from coercive, mimetic and normative isomorphic drivers (DiMaggio and Powell, 1983; March and Olsen, 1984). Coercive isomorphism explains how Government regulators with who the organization is connected to influences the organisation's response to pressure exerted (Sarkis *et al.*, 2011). Mimetic isomorphism occurs in when organisations imitate other successful and legitimate organisations in the industry to reduce cognitive uncertainty (Connelly *et al.*, 2011, Aerts, Cormier & Magnan, 2006). In normative isomorphism, organisations that comply with standards, legislation and societal norms are secured against the possible consequences of environmental and social misconduct, including penalties, protests, campaigns and sanctions (Videras and Albertini, 2000; Peters *et al.*, 2011).

Institutional pressures can influence businesses and supply chains to adopt more socially and environmentally responsible practices. These stem from state regulations, industrial self-regulation, monitoring organisations for example NGOs, institutional investors and the media, business publications and education, trade or employer associations and formal processes of stakeholder

engagement (Caprar and Neville, 2012; Zhu *et al.*, 2013). The food franchising outlets in Kenya are under immense pressure from COFEK and NEMA to become more environmentally friendly and disciplined and also to ensure quality.

### 2.2.2 Stakeholder Theory

Stakeholders can be classified as primary or secondary (Clarkson, 1995), Mitchell *et al.* (1997) further present a classification based on the dimensions of power, urgency and legitimacy to help unpack stakeholder saliency. With regard to these three attributes, the spectrum of stakeholders starts with definitive stakeholders on one side and ends with non-stakeholders on the other side (Mitchell *et al.*, 1997).

Stakeholders can influence organisations to follow specific actions, including sustainability initiatives and voluntary integration of sustainability into business operations (Rowley, 1997; Vurro*et al.*, 2009; Russo and Perrini, 2010). Organisations are compelled to satisfy the interests of their primary stakeholders to ensure the viability of their business operations. Central to the stakeholder theory interpretation is that these demands and expectations of stakeholders should be considered as an input for implementing and managing sustainable supply chains (Golicic and Smith, 2013). This explains how the sustainability commitment of stakeholders can be the primary driver for the adoption of sustainability practices at the supply chain level.

Poor environmental performance leads to poor company's relationship with its stakeholders. This will affect the firm's reputation and shareholders will suffer financial losses on their investments if a firm is found liable to environmental damage and this is due to stakeholders such as customers shunning the concerned firm.

### 2.2.3 Resource Based Theory (RBT)

The RBT suggests how valuable, rare and inimitable resources can become as the basis for competitive advantage of firms (Barney, 1991). Hart (1995) introduces the natural resource-based view of organisations, highlighting the sustainability risks and opportunities, and discusses how environmentally and socially sustainable economic activities can build competitiveness for organisations. Sustainability initiatives such as environmentally friendly production lines can lead to long-term sustained competitive advantage for firms (Connelly *et al.*, 2011).

From an organisational perspective, the resources including assets, capabilities, competencies, processes and know-how are necessary to implement strategies and improve competitiveness both at the firm and the supply chain levels. The effective utilisation and sharing of resources and capabilities between the supply chain entities, as posited by more recent RBT thought, for example Priem and Swink (2012), can be seen as a competitive advantage that enhances the implementation of sustainable practices across the supply chain.

### 2.3 Incentive Theory

Incentive theory in psychology treats motivation and behavior of the individual as they are influenced by beliefs, such as engaging in activities that are expected to be profitable. Incentive theory is promoted by behavioral psychologists, to mean that a person's actions always have social ramifications and if actions are positively received people are more likely to act in this manner, or if negatively received people are less likely to act in this manner, (Steven, 2011).

Williams (2004) noted that incentive theory involves positive reinforcement; the stimulus has been conditioned to make the person happier as opposed to in drive reduction theory, which involves negative reinforcement: a stimulus has been associated with the removal of the punishment the lack of homeostasis in the body. Incentive theories include drive reduction theory and goal setting theory (Ndinda, 2013).

### 2.4 Sustainable Supply Chain Management Incentives

Incentives can be seen as inducement or supplemental reward that serves as a motivational device for a desired action or behavior, (Abraham, 1999). Incentives acts as payments linked to the achievement of previously set targets which are designed to motivate people to achieve higher levels of performance. The targets are usually qualified in terms of output or sales.

According to Seuring and Muller (2008) sustainability depends on external triggers. The government, customers and other stakeholders exert pressure and/or offer incentives to the focal company. The focal company and suppliers can give or receive pressures and incentives to and from each other respectively. As a result of the external pressures, the focal organization strives to achieve sustainability by adopting SSCM practices.

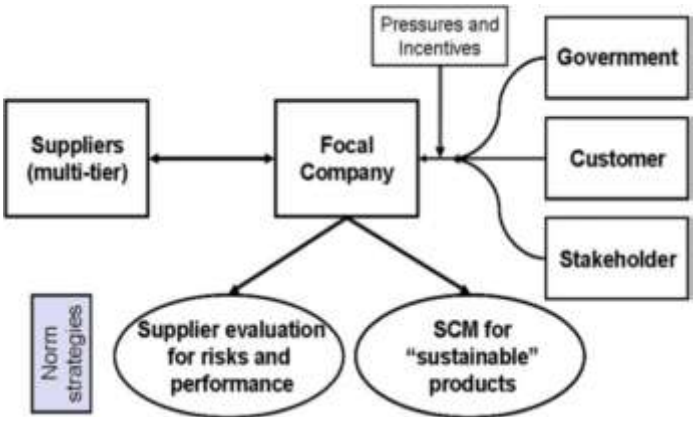



Figure 2.1: Triggers of Sustainability (Seuring and Muller, 2008)

### 2.4.1 Regulatory restrictions

Bansal and Roth (2000) found that regulatory measures are official mechanisms that take the form of standards, laws, procedures and incentives set by regulatory institutions to inspire firms to become environmentally responsible. It is true that requirements imposed by government and regulatory bodies provide ultimate incentives for firms to adopt Green Supply Chain.

Chen et al (2014) in their study of incentives and its policies for sustainability in supply chain found that many countries have legislated relevant laws to cope with environmental issues. To them this would become the most powerful incentive to enterprises and its supply chain members. For entering the market, some certain products must be certificated and that some laws were made to trigger the green trend.

Global market demands and governmental pressures are pushing businesses to become more sustainable (Guide & Srivastava, 1998). Walton, Handfield and Melynyk (1998) found that increasing government regulation and stronger public mandates for environmental accountability have brought sustainability issues into the executive suites, and onto strategic planning agendas. Regulatory restrictions can be closely related to technology mandates which when accompanied by penalties, can create enough of an incentive even to the point of "comply or go out of business" to compel innovation (Matus, 2010).

Government regulation and policies play an important role in encouraging firms to adopt sustainability practices. Government 'command and control' perspective for example, mandating levels of environmental taxes such as carbon tax, forces firms to adopt minimum environmental

standards for example mandating a certain percentage of power generation to come from renewable sources or subsidising certain technologies and industries such as solar and wind power generation. Jain & Sharma (2014) found that Government is one of the major incentive that motivate firms undertake SSCM and constitutes 17% of the level of importance.

Davidson and Worrell (2001) found that regulatory pressures are often associated with an organization's decision to adopt GSCM practices. These pressures arise from threats of non-compliance penalties and fines. Andrews *et al*. (2003) found that pressures from regulators might encourage organizations to adopt proactive environmental practices, form collaborative relationships and explore more non-regulatory ways for greater environmental improvements.

Chung and Wee (2011) and Sheu (2011) noted that effective green regulation and incentive programs have been developed as a result of government intervention in several countries. Chen and Sheu (2009) went further to suggest that relevant public policies are central to substantiating the greening of the supply chain. Lu et al. (2007) noted that many organizations are making efforts to accelerate the greening of their supply chain in response to stringent legislation and regulation. These efforts include pro-actively addressing environmental and social concerns in advance of regulation (Zailani et al., 2012).

The Government may offer incentives such as financial incentives, seminars, environmental education and tax incentives such as tax breaks (Scupolaetal, 2003) to promote the adoption of SSCM and this may include exemption in VAT for environmentally friendly materials. In Kenya NEMA as a Government agency encourages use of Environmental systems like the ISO 14000 for ensuring compliance and proper waste management systems.

Firms adopting SSCM can reduce the risk of being prosecuted for anti-environmental practices through sustained dedication of resources, activity measurement and management involvement.

### 2.4.2 Social and Environmental Responsibility

Corporate Social Responsibility (CSR) of a company determines its approach towards the green supply chain management practices. It refers to the obligations of a firm to society and its stakeholders (Smith et al, 2003). It is an important driver to environmental management. The firms may have a policy towards environmental protection. Firms with relevant CSR programs may win the customers leading to better performance.Dow Jones Sustainability Indexes is the most credible

international corporate social responsibility rating tools. The index picks out the elite for more than 50 countries from global companies. It has become the solid standard for corporate investments and it provides evidence that sustainable development pays.

Social and Environmental responsibility aims at assessing and taking responsibility for the company's effects on the environment and impact on social welfare. It applies to company's efforts that go beyond what may be required by regulators or environmental protection groups. Corporate social responsibility may also be referred to as "corporate citizenship" and can involve incurring short-term costs that do not provide an immediate financial benefit to the company, but instead promote positive social and environmental change. Social responsibility becomes an integral part of the wealth creation process which if managed properly should enhance the competitiveness of business and maximize the value of wealth creation to society (Ram Bhool& M. S. Narwal, 2013).

Corporate Social Responsibility (CSR) has a significant influence on supply chain management (Cruz, 2009). CSR depicts fair treatment to the workforce and setting up the SC such that it does not damage the environment. Keating et al. (2008) explained CSR in a way that an organizational philosophy should be such that its profit-making activities should have minimum social impact. CSR results in generating specific standards and codes that bring in standardized procedures and organized behaviors, thereby causing the enterprise to operate according to the principles of efficiency and effectiveness and also increasing its overall productivity (Tencati et al., 2010)

Business and organisations do not operate in a vacuum. Their relationship to the society and environment in which they operate is a critical factor in their ability to continue to operate effectively. It is also used as a measure of their overall performance. Through the use of ISO 26000 business are able to get guidance and operate in a socially responsible way that is in an ethically and transparent way that contributes to the welfare of the society (www.iso.org).

According to Tang and Zhou (2012), corporates or organizations generate waste and emissions such as solid waste, toxic waste, air pollution and water pollution during production activities which is dangerous to the planet. They suggest that corporates need to take into account the environmental factors such as consume less natural resources, dispose of fewer wastes, generate fewer greenhouse gases in their decision-making and daily operations to minimize the negative impact on the planet.

According to Stephan (2012) environment, health and safety (EHS) has two objectives which include prevention of incidents that might result from abnormal operating conditions and reduction of adverse effects that result from normal operating conditions for example release of harmful substance into the environment must be prevented. Action must also be taken to reduce the company's carbon print and to prevent workers from developing work related diseases.

### 2.4.3 Economic Benefits or Cost Reduction Benefits

The ultimate goal of business is to generate profits for the firms. By adopting SSCM firms are able save on the manufacturing cost and increase the profit. Economic or Cost reduction benefits is the achievement of real and permanent reduction in the unit cost of goods manufactured or services rendered without impairing their suitability for the use intended or diminution in the quality of the product. By cost reduction its implied that the retention of essential characteristics and quality of the product and thus it must be confined to permanent and genuine savings in the costs of manufacture, administration, distribution and selling, brought about by elimination of wasteful and inessential elements from the design of the product and from the techniques and practices carried out in connection therewith. The essential characteristics and techniques and quality of the products are retained through improved methods and techniques used and thereby a permanent reduction in the unit cost is achieved (Bhool & Narwal, 2013).

According to Klassen and Mclaughlin (1996), organisations that minimize the negative environmental impacts of their products and processes, recycle post-consumer waste and establish environmental management systems are poised to expand their markets or displace competitors that fail to promote strong environmental performance. Routroy (2009) stated that the objective of SSCM is to manufacture environmentally friendly product with minimum resources such as material, energy and water and with minimum wastage. The benefit of SSCM is to create a competitive advantage to the organization.

Revenues can be positively impacted when customers prefer the products of environmentally friendly firms, resulting in increased market share vis-a-vis less environmentally oriented competitors. Costs can be lowered when firms invest in environmental management systems that result in a decrease in accidental environmental releases and liability. Costs may be reduced through proactively managing environmental regulations, which may create barriers and advantages that are difficult for competitors to imitate. (Maruf Hasan, 2013).

The benefits derived from the implementation of SSCMstrategy are cost saving, increasing customer satisfaction, new market opportunities, improving corporate image, and higher profits (Agan et al, 2013). Routroy (2009) also found that some of the significant benefits of SSCM are the system cost reduction, easier penetration of global markets, reduction of resource usage, reduction of wastes and risks, good publicity, achieving competitive advantage, and enhancement of customer satisfaction. Moreover, the higher profits can motivate firms to implement SSCM increasingly. Economic benefit can lead to better financial performance. Li (2014) found that the adopting of environmental innovation practice is lead to improve a firm's environmental performance, and indirectly improve financial performance. The finding indicated that firms should change the attitude and perception to intent on environment improvement as an economic and competitive opportunity.

### 2.4.4 Competitor Pressure on adoption of SSCM

Large and successful firms in an industry usually face intense scrutiny from competitors and external environmental activists (Zhu and Sarkis, 2007). Hence many organizations work in an environment that includes pressures from their competitors that induce organizations to adopt green initiatives to combat competition and gain competitive advantages (Canning and Hanmer-Lloyd, 2001; Carter and Ellram, 1998. Hart (1995) suggests that firms should focus on cooperative actions in order for green initiatives to gain sustained competitive advantages. Hart's study emphasizes that a cooperative orientation in pollution prevention, product stewardship, and sustainable development strategies is required to achieve sustained competitive advantage.

Through SSCM applications some companies obtained large gains and the developments that cause an increase in brand value in addition to cost savings push the rivals to do similar practices. According to a research conducted by Interbrand in the year 2012, Toyota‘s brand value had increased by 47 percent and reached 28 billion dollars by producing environmental friendly car known as Prius.

Competitive pressure is forcing many organizations in Malaysia to invest in reverse logistics activities such as recycling, refurbishing and remanufacturing. The Malaysian Government, in order to address the environmental impacts of packaging, has instituted legislation and programs that aims to minimize the amount of packaging that enters the waste stream. Recycling and reuse are now key strategies that have been adopted by several organizations in Southeast Asia with an

objective of reducing packaging for household goods. In Thailand and Malaysia, Amway has instituted a reverse logistics system to bring back the empty plastic containers that it uses to deliver detergent and other household cleaning products to customers. Amway's action has forced its competitors to devise appropriate reverse logistics strategies to compete in the marketplace (Chin-Chun Hsu et al., 2013). Due to increasing competition in the market, one who supplies the good or service at the lowest possible cost with better quality will emerge successful in the market.

The competitors and market influence the sustainability initiatives where customers define the market of the products by demanding for a sustainable product. According to Zhu and Sarkis (2006) the environmental properties of the products must meet the customer requirements.

### 2.4.5 Green Purchasing

Green purchasing refers to environmentally conscious purchasing practices that seek to ensure sustainability by reducing sources of waste and promoting the recycling, reuse, and substitution of materials (Carter & Carter, 1998; Min & Galle, 2001).In this definition, green purchasing relates closely to environmental, responsible, or sustainable purchasing concepts that center on firms' efforts to set purchasing policies or guidelines that reflect concerns for the natural environment and then take accordant actions to acquire raw materials, select suppliers, and choose products,with an emphasis on environmentally friendly packaging, recycling, reuse, resource reduction, and disposal (Zsidisin & Siferd, 2001; Pagell, Wu, & Wasserman, 2010; Bjorklund, 2011).

The green purchasing can also be defined as the process of formally introducing and integrating environmental issues and concerns into the purchasing process, seeking to acquire goods and services characterized by a low environmental impact that is products environmentally friendly in nature and produced using environmentally friendly processes. The initiatives to minimize environmental impact in inbound supply chain, according to the green purchasing approach include eco-labeled product purchase, adoption of environmental criteria into the supplier assessment environmental system and collaboration with suppliers (Colicchia et al, 2011). Green Purchasing enables better compliance with existing norms, improvement of brand image for consumers and better ranking by non-financial notation organisations. Buyers will preferably choose suppliers with certified processes ISO 14001 for instance, to create a balance in green purchasing companies will encourage suppliers who have low raw material consumption, controlled emissions and pollution levels and raw material tracking. Furthermore they tend to select products made out of a

large proportion of recycled and recyclable materials, and stamped by reliable eco-labels (Loebich and Donval, 2011).

Green purchasing objectives also can extend beyond recycling and reuse, such that evaluations and audits of supply chains might investigate life-cycle costs, product designs for disassembly or reuse, and supplier or production choices. In this light, purchasing functions can encourage product choices and designs that lead to desirable reuse, recycling, and disassembly capabilities, as well as adopt alternative supply sources (Burt & Soukup, 1985; Stuart, 1991; Dowlatshahi, 1992; Ellram & Pearson, 1993; Handfield, 1993). Min and Galle (1997) argue, firms' efforts to become green cannot succeed unless they integrate their environmental goals with their purchasing activities. Green purchasing is also essential to green supply chains. As Carter and Carter (1998) point out, the firm as a whole should use manufacturing resources that are easy to recycle and reuse, such as fewer materials, screwing or snapping components instead of welded ones, and inks that can be easily separated from paper fibers (Kopicki, Berg, Legg, Dasappa, & Maggioni, 1993).

Supplier involvement is crucial to achieving environmental goals. Rao and Holt (2005) argue that environmentally proactive companies are increasingly managing their suppliers' environmental performance to ensure that purchased materials are environmentally friendly and have been produced by environmentally conscious processes. The most prominent guideline for green purchasing in the electronics industry is the Electronic Industry Code of Conduct. Leading multinational corporations operating in Malaysia including Sony and Matsushita have all instituted green procurement policies with local suppliers. Green purchasing revolves around evaluation of suppliers' environmental performance and providing advice to suppliers to improve their performance. Environmentally proactive organizations often encourage their suppliers to obtain environmental management certification such as the ISO 14001.Hines and Jones (2001) suggest that the mentoring role within green supply chain management is an emerging concept that can provide a significant relationship between the customer and the supplier.

Green packaging minimizes the amount of material used, and addresses the environmental concerns that surround product packaging. Wal-Mart Stores Inc. committed to reduce packaging across its global supply chain by 5% by 2013 developed a scorecard system that allows suppliers to evaluate themselves relative to other suppliers, based on specific metrics. Green sourcing promotes Some of the key issues in Green Purchasing include coordination with suppliers for green innovation or research, supplier environmental certification, supplier initiative on environmental

issues and compliance. Preuss (2001) suggested that purchasing could become an important agent for change concerning environmental initiatives in the supply chain. The potential benefits that a company may achieve from Green Purchasing are cost saving, waste reduction, enhanced company reputation/image and improved environmental performance. The major obstacles to Green Purchasing are high cost of environmental programs, uneconomical recycling, uneconomical reuse (Min and Galle,1997), and availability.

The large number of environmental problems that consumers face is the key reason behind the shift from traditional or non-green purchasing behavior to greener purchasing patterns. Dagher and Itani (2012) posited that consumers are trying to help improve the environment with green purchasing. Being environmentally friendly is not the only aim of consumers who engage in green purchasing behaviour; they also purchase green products when they know that such a purchase will bring them immediate benefits (Vermillion and Peart,2010). Kotler (2011) found that consumers are using a new dimension, the degree of social corporate responsibility towards the environment, when they want to choose among brands available in the market. In recent years, the proportion of consumers who had never bought a green product decreased to less than one-half (Manget et al., 2009). The product market for healthy and sustainable lifestyle is valued to be worth approximately $209 billion and covers approximately17% to 19% of all consumers (Kotler, 2011). This market includes energy-efficient products, eco-tourism and solar panels, among many other items (Kotler, 2011). Green consumers are changing marketplaces in many significant ways (Vermillion and Peart, 2010), and consumers are recognizing the enormous impact that their buying behaviours have on the environment (Abdul Wahid et al., 2011), which reinforces the position of the environment as a top world concern and brings us to empirically examine the factors that may increase green purchasing behaviour because of the importance such behavior has on the environment and consumers.

To practice green purchasing, firms need to incorporate environmental sustainability issues into their choices of raw materials, parts, and equipment, moving beyond traditional procurement criteria such as cost, quality, flexibility, or payment terms (Lambert & Cooper, 2000; de Burgos Jim´enez & Lorente 2001). Such additional considerations increase purchasing complexity and might not align perfectly with a firm's long-standing practices (Handfield, Walton, Sroufe, & Melnyk, 2002;Montabon, Sroufe, & Narasimhan, 2007; Eltayeb, Zailani, & Jayaraman, 2010).Zhu & Sarkis (2004) suggest, by adopting green purchasing, an MNC's subsidiaries directly affect

suppliers' practices and thus create a ripple effect, through which local firms mimic environment practices to gain legitimacy. Green purchasing then becomes institutionalized on a global scale (Kostova, Roth, & Dacin, 2008). Green purchasing is an important issue and has drawn international attention because it can be used to mitigate the environmental impacts of consumption and promote clean production technology in the green supply chain system. Each company can choose the optimal appropriate green purchasing strategy and can obtain the competitive advantages of the whole green supply chain when facing a highly competitive global market.

Under green purchasing, green suppliers, waste management, packaging problems, environmental regulations, resource reduction, resource reuse, and resource recycling areconsidered. In general, the major performance metrics of green purchasing include quality, delivery time, capacity of manufacturing systems, price, financial status, capability of Research &Developmentand packaging cost (Choi and Hartley, 1996; Hemsworth, Sanchez-Rodriguez, &Bidgood,2008; Noci, 1997; Park, Hartley, & Wilson, 2001).Under green purchasing, the overall performance of companies can be enhanced by evaluating the environmental performance of suppliers and relevant performances of the whole supply chain system (Hervani, Helms, &Sarkis, 2005; Mebratu, 2001; Rao & Holt, 2005; Vachon & Klassen, 2008; Zhu, Sarkis, &Geng, 2005; Zhu, Sarkis, & Lai, 2007a, 2007b). As a result, performance evaluation will be more definite if green purchasing can be used in conjunction with the performance metrics of the SCOR model.

Institutions around the world have adopted green purchasing as a way to reduce the human health, environmental and social impacts of routine purchasingdecisions.The adoption of green purchasing is one of the commonly accepted dimensions of GSCM practice. According to Lee (2008), a buyingorganization with a green supply chain initiative will pay attention to green practices of their suppliers, especially the small and medium-sized enterprises. In order to ensure that suppliers meet their environmental objectives, the buying firm may deploy collaboration-based activities that include training, environmental information sharing and joint research. Other organizations may adopt a less collaborative approach by simply demanding that their suppliers adopt environmental systems such asISO 14001. According to Heras-Saizarbitoria et al. (2011) and Vachon (2007), external motivators and particularly, customer pressure are key drivers of the adoption ofISO 14001.There is also evidence that some organizations adopt compliance and evaluative approach to the GSCM practices of their suppliers. This involves evaluation of suppliers based on environmental criteria and a requirement for suppliers to develop and maintain some form of

environmental management system (Sarkis, 2012; Zhu et al., 2005; Large and Thomsen, 2011;Min and Galle, 2001).

### 2.4.6 Employee Training

Training has direct relationship with the performance of employees. Training is a formal and systematic modification of behavior through learning which occurs as result of education, instruction, development, and planned experience (Michael Armstrong, 2000). Effective training program and education are among the major requirements for achieving successful implementation of SSCM in any organization (Ravi and Shankar 2005; Sarkis et al. 2007;Wu et al. 2010). Training is an important part of every firm's agenda due to the benefits accruing from it and its implications necessitate that employees' training to improve green practices should be versatile and jobspecificwith strategies developed to motivate the employees to engage in green practices. Methods of training have to be evaluated and studied before companies rely on them to train a competent workforce and this is to ensure that it complies with the standards required. Management may encourage employees to learn green information by organizing seminars, conferences or environmental studies either through self-initiatives or through the firms funding of courses. The success of an organization is related to its ability to manage effective cooperation (Tyler, 2003) and upon its employees. It is important to ensure that an adequate supply of staff is equipped with the necessary skills for special or managerial positionsin order to drive the green agenda with efficiency. Trained personnel may contribute in training the customers, leading to better customer involvement in SSCM implementation.

For a firm strategy to be adopted and be effectively implemented the firm should commit to offer training to the staff and a strategy manager in collaboration with the Human Resource Development manager should set up training programs. Employee training systems facilitate the intelligent and complementary deployment of a firm's existing resources and capabilities to affect a desired result and this deployment typically occurs through the development of new organizational routines and activities across functional departments via the development of coordination and skills as necessitated by the organization's unique structure, product and process innovations in place.

Today, almost all companies provide some type of training to their employees. Modern business trends demands more efficiency, accuracy and effectiveness in less time and cost and this can be achieved only through design and development of excellent training programs to the employees.

Some companies have a very formal process of training while other companies use outside consultants to conduct employee training sessions (Hughey & Mussnug, 2007). More costly but effective training can save money that is wasted on cheap but inefficient training (Ginsberg, 1997) and the skill and competency levels of employees are heavily dependent on the amount and type of training they get. The role of Staff training systems is supported in particular promoting higher levels of environmental capabilities by drawing on expertise developed earlier in basic levels of environmental management by developing or acquiring the necessary socially complex or process based resource (Sarkis, 2009). Ifinedo (2008) suggest that organizational capabilities are closely tied to environmental performance and that organizations possessing greater capabilities can more easily adopt environmental management practices.

### 2.4.7 Customer Pressure on adoption of SSCM

Customer awareness, pressure & support is that driver of Green Supply Chain Management which states that the understanding and knowledge that a buyer should have of his rights as a customer. The awareness is very important for the buyer since it permits him to get the most from what he buys. Customer demands have a strong influence on the decisions that companies take towards Eco-design (Alhola 2008). To obtain the most sustainable solution, the environment consideration of properties of products and services must meet customer requirement (Zhu et al. 2008a, 2008b).Customers aware of green products may prefer to purchase green products, which may further increase an organization's reputation and sales volumes (Luthraet al. 2011).

Customer pressure has been shown to have a moderating impact on sustainability practices and outcomes (Zhu and Sarkis, 2007). Customer pressure or market pressure's moderating effect has been examined in the relationship between green supply chain management practices and performance outcomes (Zhu and Sarkis, 2007). The findings conclude that customer pressure positively moderates the relationship and lack of customer pressure leads to a loss of customers and negatively impacts economic performance (Zhu and Sarkis, 2007).The customer demand for a green product is a key driver in green supply chain management. According to Heras-Saizarbitoria et al. (2011) and Vachon (2007), external motivators and particularly, customer pressure are key drivers of the adoption ofISO 14001.

Consumer demands have been realized as a powerful pressure for change within organizations offering products or services in those markets. Consumers demand more value and quality from

products, and since environmental awareness has increased, this type of pressure creates market opportunities in the form of environmental attributes and responsibility within the supply chain(Paquette, 2005). The role of customers and environmental societies has been recognized for more environment friendly products (Vachon and Klassen 2006a). The influence on SC initiatives had been followed by regulations and customer pressures (Eltayebet al. 2011). Environmentally responsible organizations make themselves more attractive to customers and investors. The human factor plays an important role on both levels (Hanna et al. 2000; Lazuraz et al. 2011).

To improve the environmental supply chain performance, organizations need to make interactions with customers (Carter and Ellram 1998). Environmental collaboration with upstream suppliers and downstream customers has been found useful for organizations to reap performance gains (Vachon and Klassen 2008; Yang et al. 2009; Zhu et al.2010).Customers having the choice of purchase and persuading organizations to act pro-environmentally may be possible by creating environmental consumer demand, when consumers request only environment-friendly products and refuse to buy products not meeting this requirement (H'Mida 2009).

GSCM practices have been about developing policies and practices protecting the environment along the supply chain and involve as many people as possible in this process, including manufacturers and suppliers, retailers, and customers (Zhu and Sarkis 2006; Lazuraz et al. 2011).

Green supply chain programs may be initiated to position manufacturers to their customers or investors and to facilitate environmental compliance.

Green et al. (2012) suggested the model of green supply chain practices that link manufacturers with suppliers and customers to support environmental sustainability throughout the supply chain. The result suggested that organizations working with suppliers and customers achieve better environmental sustainability in the supply chain. Cooperation with customers is strongly associated with environmental performance.

A large number of customers prefer organizations that have superior environmental records and greener products and are ready to pay a premium for it (Lakshmi and Visalakshmi 2012). Organizations have begun to implement GSCM practices in response to customer demand (Green et al. 2012). Khidir and Zailani (2011) emphasize that the pressures of regulation and the customers can be considered coercive isomorphism, because they focus on the use of rules, laws and

persuasion as the basis for compliance.

Khidir and Zailani (2011) show that Malaysian firms respond to regulations and pressure from customers demanding the adoption of green SC initiatives, but the decision is based on evaluation of the benefits obtained by the firm to adopt these practices. Consumers are beginning to question the environmental effect of the goods that they buy, and expect firms to pursue a minimum green standard in their product and process designs (Tate et al., 2010).From an institutional theory perspective, normative pressure causes organizations to confirm and be perceived as more legitimate and trustworthy (Sarkis et al., 2011). This pressure is exerted by external stakeholders such as customers who have a vested interest in the firm (Vachon et al., 2009).

In Malaysia customer requirements form the core normative pressure to adopt green supply chain initiatives (Eltayeb et al., 2010). Their customers exert pressure on Malaysian manufacturers to take an environmentally conscious approach to product design, to minimize adverse environmental impacts of the product throughout its product life, and to promote recycling and reuse of the product and its packaging (Hitchcock, 2012).Greater customer education regarding the potential economic and noneconomic benefits of reverse logistics (Dowlatshahi, 2000), consumer rights (Van Nunen and Zuidwijk,2004) and specific customer requirements regarding quality, reliability, delivery (Dowlatshahi, 2000) create the urgency for an efficient and effective SSCM system.

### 2.5 Operational Performance

The operational performance as defined by Kaplan and Norton (1992) can be seen to cover aspects of business such as: the financial results, the operating performance through the dimensions of time, quality and flexibility, the way the company is perceived externally through its customers and the cultural aspects of the working environment through the human resource dimension. Kaplan and Norton (1992) listed various methods to measure the overall organizational performance which are; accounting measures (profitability measures, growth measures, leverage, liquidity and cash flow measures), operational performance (market share, changes in intangible assets such as patents or human resources, customer satisfaction and stakeholder performance market based measures (return on shareholder performance), market based measures (return on shareholder, market value added, holding period returns), survival measures (takes time horizons of five years and less) and economic value measures (residual income, economics value added and cash flow return on investment).

Operational Performance is also the firm's performance measured against standard or prescribed indicators of effectiveness, efficiency, and environmental responsibility such as, cycle time, productivity, waste reduction, and regulatory compliance. Rahman and Sohal (2001) explained that to determine the operational performance of firms, organizations use both financial and non-financial metrics. This performance can also be subdivided into three categories such as financial performance (profit), internal non-financial performance (productivity) and external non-financial performance (customer satisfaction). Poor environmental standards of small suppliers often affect the performance and image of large firms in the same supply chain (Cousins et al, 2004). The outcome of their research showed that there is a positive relationship between best business practices and business operational performance.

### 2.6 Sustainable Supply Chain Management Incentives and Operational Performance

A key objective of application of incentive is to motivate in the adoption of sustainability in the supply chain management for strategic, transparent integration and achievement of an organization's social, environmental, and economic goals in the systematic coordination of key inter-organizational business processes for improving the long-term economic performance of the individual company and its supply chain.

The SCOR Model has been identified as a key element which should be included in supply chain management curricula in order to prepare students for successful careers in the field (Grandzol & Grandzol, 2011). The model is used as a strategic planning tool to simplify the complexities of supply chain management by bringing order to the different activities that comprise the supply chain. The Supply-Chain Council introduced the SCOR model in 1996 and it provides a framework that includes supply chain business processes, performance metrics, best practices, and people features. In the SCOR model the metrics are linked with five management processes: plan, source, make, deliver, and return (Enable was added in 2012). The SCOR model contains hundreds of performance metrics that are divided under five core supply chain performance attributes namely; Reliability which involves achievement of customer demand fulfillment on-time, complete, without damage. Responsiveness entails the time it takes to react to and fulfill customer demand. Agility involves the ability of supply chain to increase or decrease demand within a given planned period. Cost is objective assessment of all components of supply chain cost and assets involve the assessment of all resources used to fulfill customer demand (Supply Chain Council, 2010).

If companies' incentives such as risks, costs and rewards of doing business are fairly distributed across the supply chain then the supply chain works well as compared to when incentives are not in line, the companies' actions won't optimize the chain's performance. Misaligned incentives have been blamed for excess inventory stock outs, incorrect forecasts, inadequate sales effort and even poor customer service. Narayanan & Raman (2004) further say that aligning partners' incentives increases the market share and that aligning enables profit making.

Gunasekaran et al. (2001) presented a framework for measuring the performance of a SC.They divided the SC performance measures into financial and non-financial measures and used three measurement levels (strategic, tactical and operational) as well as four SC activities/operations (plan, source, make/assembly and deliver) to form the measurement framework.

Supply Chain Performance Measurement can be done through Balance score card (BSC). According to (Halme, 2010) the BSC has four main areas of measurement. The four areas are; the customer perspective which evaluates on how the company adds value for the customers. The customer estimates the value through time, quality, performance, service and cost. In BSC the company has to set goals for these value adding elements and translate these into specific measures. Customer based measures have to be translated into a measures of what the company have to do internally to meet its customers' expectations. Customer value derives from processes, decisions and actions in the organization. The second area is the internal business perspective focuses on these elements. The third are is financial perspective which measures financial success. Goals in this area are deals typically with profitability, growth, and shareholder value.

As a result of sustainability in the supply chain management due to motivation in the form of incentives there are benefits accruing which impact on the operational performance of an organization. Some of the operational performance constructs as a result of sustainability as identified by Maruf Hasan (2012) are cost savings & increased efficiency, product quality improvement, increase in market share, new market opportunities and increase in sales. Revenues can be positively impacted when customers prefer the products of environmentally friendly firms, resulting in increased market share vis-a-vis less environmentally oriented competitors. Costs can be lowered when firms invest in environmental management systems that result in a decrease in accidental environmental releases and liability.

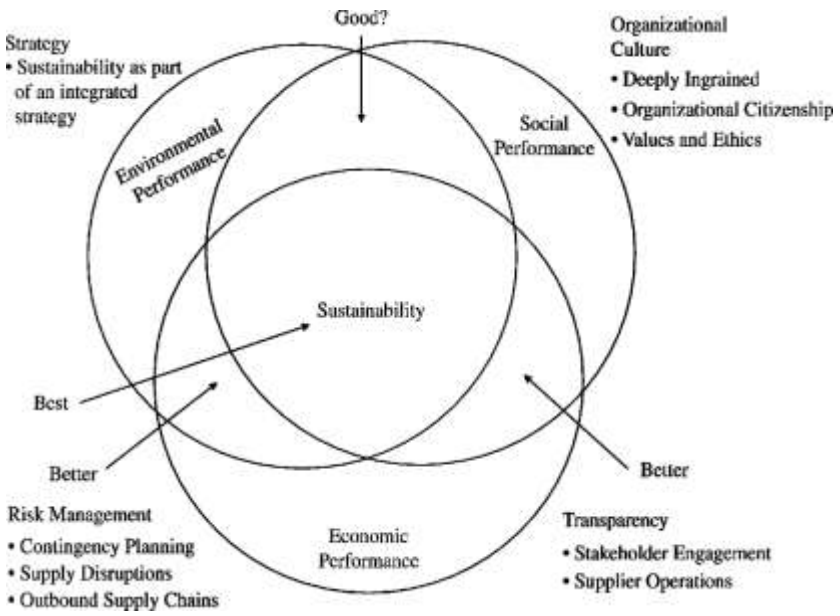
Szwilski (2000) argued that an environmental management system is an innovative environmental

policy and information management tool for industry to improve organizational operational performance.

## 2.7 Summary of literature

Sustainable supply chain incentives have been explained in detail in literature. From the literature it is clear that there are a number of incentives that may lead to the adoption of SSCM and its practices. However, Government regulation or regulatory restrictions or legislation has been depicted as the 'mother of all incentives' because it leaves no option for a firm but to comply with it or to exit the market. The literature has pointed out the benefits accrued from adoption of SSCM practices and its impact on the operation performance. Operational performance has been shown to have such indicators as increase in sales and reputation, increase in revenue and opportunities among others. It has been found that there lacks a comprehensive framework on the SSCM practices and as a result different organizations have adopted different practices that they deem possible to their business context. The issue of incentives in the adoption of SSCM in Kenya is an area that needs further research. Firms' management should develop a habit of regular environmental audits where environmental performance is constantly monitored and recorded Irungu and Mungai (2013).

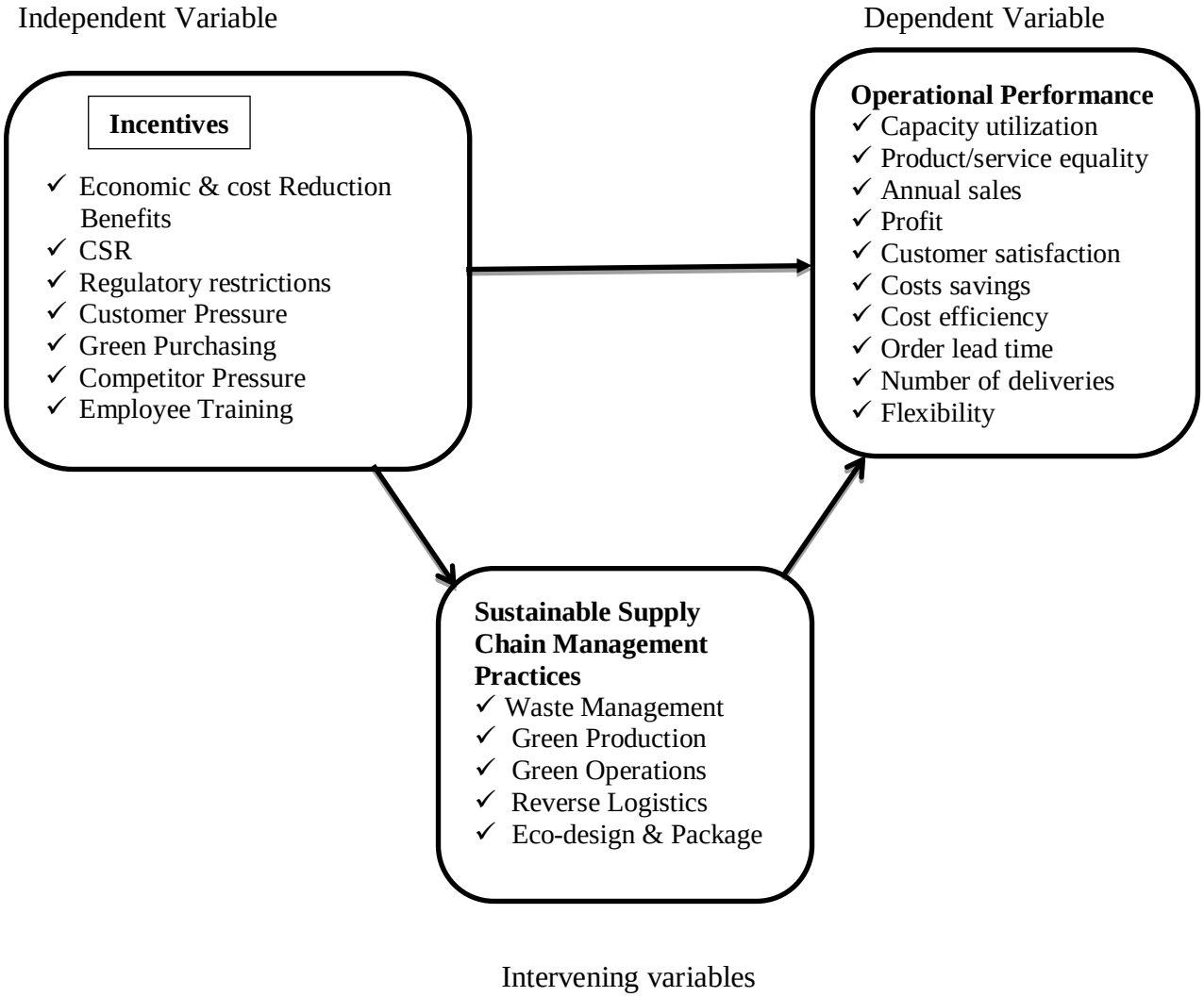
Figure 2.2: Outline of what is involved in a Sustainable Supply Chain




Source: Carter and Easton (2011)

## 2.8 Conceptual Framework

The study was guided by the conceptual model shown in figure 2.3, and from the literature review SSCM incentives has been seen to boost many aspects of operational performance. In addition to SSCM incentives, SSCM practices can contribute to the totality of operational performance to be realized thus making SSCM practice an intervening variable in this study.




**Source: (Author, 2015)**

Figure 2.3: Conceptual Framework

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter presents the research methodology that will be applied in conducting the study. It covers the research design, target population, data collection methods and techniques for data analysis.

## 3.2 Research Design

To explain the effect SSCM incentives have on the operational performance of food franchising outlets in Kenya the study will use a descriptive research design. A descriptive research enables collection of data that can be used for statistical inference by way of observation, description, recording, analyzing and reporting.Cross-sectional surveys are carried out once and represent a snapshot of the populations for which they gather data (Cooper and Schindler 2006).

Descriptive research design will be appropriate for this study since the researcher will sought to determine the various sustainable supply chain management incentives that enhance operational performance of food franchising outlets and thus be in a position to draw conclusions. A survey method will be used to collect primary data by use of questionnaire.

## 3.3 Target Population

The population of the study will compriseof food franchising outlets in Nairobi. This area was chosen because it is where most of the food franchising outlets are concentrated thereby giving a sizeable population where a proportionate sample was to be derived.

## 3.4 Data collection

To determine the SSCM practice in the companies and the incentives encountered in its implementation. A survey method will be used to collect primary data by use of questionnaire. The questionnaire will be divided into three parts according to the objectives under investigation in the study.

The first part encompasses the general information of the company; second part investigates the incentives of sustainable supply chain management commonly used by food franchising outlets and the third part the effect of sustainable supply chain incentives on the firm's operational performance. A likert type of scale will be used having different guidelines for various sections because it is used to rank. The respondents will include operations manager, procurement and SCM managers, staff in the procurement and supply chain management department. The questionnaires will be administered through email and drop and pick method.

### 3.5 Data Analysis

Descriptive statistics will be used to analyze objective one by applying measures of central tendencies of percentages, mean, mode, median and standard deviation. Objective two will be analyzed using regression analysis and correlation coefficient with sustainable supply chain management incentives as the independent variables and operational performance as the dependent variable.

Data will be analyzed using the Statistical package for social sciences (SPSS) software. The following regression equation will be used. **S=a + b1x1 + b2x2 + b3x3 + b4x4 + b5x5+ b6x6 + b7x7 + e.** Where: S= operational performance; a= the S intercept, b1, b2, b3, b4, b5, b6 and b7 are regression coefficients attached to the variables; e is the error term; x1 = legislation/Regulatory restrictions; x2 = corporate social responsibility; x3 = competitor pressure; x4 = customer pressure; x5=Economic benefits & cost reduction; x6 = green purchasing and x7 = employee training.

**Table 3.1: Summary of data analysis**

| **Objectives** | **Data collection means** | **Measurement** |
|---|---|---|
| To determine the Sustainable Supply Chain Management Incentives commonly used by food franchising outlets in Kenya. | Questionnaire | Descriptive Statistics |
| To establish the relationship between sustainable supply chain management incentives and operational performance of food franchising outlets in Kenya. | Questionnaire | Regression & Correlation |

# CHAPTER FOUR

# DATA ANALYSIS, FINDINGS AND DISCUSSION

## 4.1 Introduction

This chapter describes the actual findings according to the feedback from the respondents and links them to the objectives of the study. Questionnaires were used to seek the respondents' perceptions on the various attributes defining the Sustainable Supply Chain Management incentives and Operational Performance of food Franchising Outlets in Kenya. In total 20 questionnaires were distributed and out of these 15 questionnaires were filled up and returned indicating a response rate of approximately75% and according to Cooper and Schindler, (2008) a response rate of above 60% is deemed to be good. The various tables that were formed in processing the information and the results obtained from the calculations undertaken are included in this chapter.

## 4.2 Descriptive Statistics

This section presents the descriptive statistics of the variables of the study, the study had seven variables with regulatory/legislation restrictions, corporate social responsibility, competitor pressure, customer pressure, economic benefits and cost reduction, green purchasing, employee training as the independent variables, and operational performance as the dependent variable, in this study means, frequencies and standard deviation were used. Descriptive statistics is a set of brief descriptive coefficients that summarizes a given data set, which can either be a representation of the entire population or a sample and the measures used to describe the data set are measures of central tendency and measures of variability or dispersion. (Cooper and Schindler, 2008).

### 4.2.1. Gender of the respondents

The respondents were asked to indicate their respective gender. The results were as indicated in Table 4.2

**Table 4.2: Gender of the respondents**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Male | 10 | 66.7 | 66.7 | 66.7 |
| | Female | 5 | 33.3 | 33.3 | 100.0 |
| | Total | 15 | 100.0 | 100.0 | |

**Source: Research Data (2015)**

From Table 4.2 above most of the respondents(10) were male representing a 66.7%,while female were 5 representing 33.3%.From this results, it can therefore be argued that most of the franchises are ran by male.

### 4.2.2: Duration in the firm

The respondents were asked to indicate the time they have worked in their respective firms. The results were as indicated in Table 4.3

**Table 4.3: Duration in the firm**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 0-5 years | 14 | 93.3 | 93.3 | 93.3 |
| | 6-10 years | 1 | 6.7 | 6.7 | 100.0 |
| | Total | 15 | 100.0 | 100.0 | |

**Source: Research Data (2015)**

From Table 4.3 above, most of the respondents (14) indicated that they had worked in their respective firms for a duration ranging between 0-15 years; this represented 93.3%, while 1 respondent indicated that he had been in the firm for a period ranging between 6-10 years representing 6.7%.

### 4.2.3: Duration the firm has adopted sustained supply chain management

The respondents were asked to indicate the time their respective firms had adopted sustainable supply chain management. The results were as indicated in Table 4.4

**Table 4.4: Duration the firm has adopted Sustained Supply Chain Management**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1 year | 3 | 20.0 | 21.4 | 21.4 |
| | 2 years | 1 | 6.7 | 7.1 | 28.6 |
| | 3 years | 5 | 33.3 | 35.7 | 64.3 |
| | 4+ years | 5 | 33.3 | 35.7 | 100.0 |
| | Total | 14 | 93.3 | 100.0 | |
| Missing | System | 1 | 6.7 | | |
| Total | | 15 | 100.0 | | |

**Source: Research Data (2015)**

From Table 4.4, majority of the respondents (5) stated that the firm had adopted sustainable supply chain management for a period 3 years representing 33.3%, similarly 5of the respondents had adopted sustainable supply chain management for a period of more than 4 years representing 33.3%, 3 respondents representing 20% had used the supply chain management for a period of 1 year while 1 respondent representing 6.7% did not respond.

### 4.3 Sustainable Supply Chain Management Incentives

This section highlights in detail the incentives used to establish the sustainable supply chain management by Food Franchising Outlets in Kenya.

#### 4.3.1:Regulatory/Legislation restrictions

Regulatory/legislation restriction is one of the incentives implemented for establishing sustainable supply chain management in the food franchising outlets in Kenya.

The researcher sought the respondents' perception regarding the various aspects defining regulatory/legislation restriction. The respondents were expected to indicate to what extent they agreed to the various statements that defined this variable. Responses were captured in a five point Likert's scale (1= Very Great extent, 2= Great extent, 3= Moderate extent, 4= Small Extent, 5= Very Small extent). The results were as presented in table 4.5

**Table 4.5 Means and Standard Deviations for measure of Regulatory/legislation restrictions**

| **Descriptive Statistics** | | | |
|---|---|---|---|
| | N | Mean | Std. Deviation |
| The firm adoption of environmental management systems like ISO certification(ISO 14000) has triggered sustainability trend in the management of their supply chain | 15 | 1.20 | .414 |
| The firm has brought sustainability issues into the board of management and onto strategic planning agendas as a result of Government regulation and stronger public mandates for environmental accountability | 15 | 1.27 | .458 |
| The firm is implementing regulatory restrictions as a sustainable supply chain management incentive for sustainable performance | 15 | 1.53 | 1.187 |
| The firm ensures proper solid waste management due to NEMA promotion of environmental management systems in supply chains of firm and organisations | 15 | 1.67 | .724 |
| The firm considers legislation/Government regulation as the most powerful incentive to cope with environmental issues and sustainability in the management of their supply chain | 15 | 1.80 | .561 |
| The firm has a policy to manage waste and sustainability in the supply chain as a result of Government intervention and pressure | 15 | 1.93 | .458 |
| The firm adopts sustainable supply chain management practices to reduce the risk of being prosecuted for anti-environment and un ethical practices | 15 | 2.00 | .756 |
| The firms employees are well conversant with various legislation on environmental practices and performance | 15 | 2.67 | 1.047 |
| The firm purchases bio degradable materials from their suppliers due to lower financial implications | 15 | 3.20 | 1.207 |
| The firm is inspired by the environmental regulations awareness and laws to become environmentally responsible | 15 | 3.47 | 7.633 |
| The firm explores more non-regulatory ways for greater environmental improvements due to pressures from regulators | 15 | 3.47 | 1.302 |
| The firm is encouraged or forced to adopt minimum environmental standards as a results of subsidizing of renewable technologies an industries such as solar power generation | 15 | 3.73 | 1.223 |

| | | | |
|---|---|---|---|
| The firm has been offered Government incentives such as training, seminars, certification, awards, recognition and environmental education to encourage adoption of sustainable supply chain management | 15 | 4.60 | .737 |
| Valid N (list wise) | 15 | 2.5 | 1.363 |

**Source: Research Data (2015)**

To a great extent ($1.2 \leq \text{Mean} \leq 2.5$) regulatory/legislation restrictions were implemented by the food franchising firms; the respondents agreed to a great extent that the firms adoption of environmental management systems like ISO certification (ISO 14000) has triggered sustainability trend in the management of their SC thus important for their operations as depicted by its mean. Similarly, the respondents felt that sustainability issues have been brought into the board of management and onto strategic planning agendas as a result of Government regulations. The firms also considered regulatory restrictions as the most powerful incentive to cope with environmental issues, sustainability and therefore they are implementing it as a SSCM incentive for sustainable performance. In addition the firms have a policy to manage waste and this ensures proper solid waste management in the Supply Chain.

The respondents also agreed to a great extent that the food franchising firms' adopt SSCM practices to reduce the risk of being prosecuted for anti-environment and unethical practices.

To a moderate extent the respondents agreed that the food franchising firms' employees were well conversant with the various legislation on environmental practices and performance, that the firms purchases bio-degradable materials from their suppliers due to lower financial implications and explores more non-regulatory ways for greater environmental improvements. In addition, the firms are inspired by the environmental regulations awareness and laws to become environmentally responsible.

Further, the respondents agreed to a small extent that the firms were encouraged or forced to adopt minimum environmental standards as a result of subsidizing of renewable technologies such as solar power generation. Lastly, the respondents also agreed to a small extent that the food franchising firms have been offered incentives such as training, seminars, certification, awards, recognition and environment education to encourage adoption of SSCM.

The overall mean for regulatory restrictions was 2.5 and the overall standard deviation was

1.363,the parameters above the grand mean, meant that those factors were not critical or important to the respondents but are necessary, the parameters with a mean below the grand meant that those factors were very critical and necessary for the operations of the firms.

This means that the regulatory/legislation restriction to a great extent is an incentive for encouraging sustainable supply chain management with an overall mean of 2.5.This finding was consistent with a study that was carried out by Bansal and Roth (2000) who concluded that laws in any business environment do provide an incentive for the operations of firms, the argument being that laws offer a level playing ground for all firms in a particular industry such that no single firm has un due advantage over others.

### 4.3.2: Corporate Social Responsibility

CSR is one of the incentives implemented for establishing sustainable supply chain management in the food franchising outlets in Kenya.The researcher sought the respondents' perception regarding the various aspects defining corporate social responsibility. The respondents were expected to indicate to what extent they agreed to the various statements that defined this variable. Responses were captured in a five point Likert's scale (1= Very Great Extent, 2= Great Extent, 3= Moderate extent, 4= Small Extent, 5= Very Small extent). The results were as presented in table 4.6

**Table 4.6 Means and Standard Deviations for measure of Corporate Social Responsibility**

| **Descriptive Statistics** | | | |
|---|---|---|---|
| | N | Mean | Std. Deviation |
| The firm identifies and understands various Health, Safety and Environment (HSE) regulations and observe labour practices as in the HSE policy | 15 | 1.40 | .507 |
| The firm's social and environmental responsibility aims at assessing and taking responsibility for the firm's effects on the environment and impact on social welfare | 15 | 1.467 | .6399 |
| The firm's relationship to the society and environment in which it operate is a critical factor in its ability to continue to operate effectively. | 15 | 1.47 | .640 |

| | | | |
|---|---|---|---|
| The firm takes into account the environmental factors such as consume less natural resources, dispose of fewer wastes, generate fewer greenhouse gases in their decision-making and daily operations to minimize the negative impact on the environment. | 15 | 1.53 | .743 |
| The firm takes action to reduce the company's carbon print and to prevent workers from developing work related diseases | 15 | 1.53 | .640 |
| The firm engages in corporate social responsibility and has a policy towards environmental protection | 15 | 1.60 | 1.056 |
| The firm corporate social responsibility results in generating specific standards and codes that bring standardized procedures causing efficiency and effectiveness and increase in overall performance | 15 | 1.80 | .775 |
| The firm's CSR depicts fair treatment to the workforce and setting up of supply chain such that it does not damage the environment | 15 | 1.800 | .8619 |
| The firm considers CSR as an important driver to environmental management and has relevant CSR programs which may win the customers leading to better performance | 15 | 1.867 | .9904 |
| The firm's CSR determines its approach towards the sustainable supply chain management practices | 15 | 2.00 | .926 |
| The firm considers social responsibility as an integral part of the wealth creation process and when properly managed enhances its competitiveness | 15 | 2.13 | .516 |
| The firm organizational philosophy such as the profit making activities have minimum social impact | 15 | 2.13 | 1.598 |
| The firm is able to get guidance through the use of ISO 26000 and operates in a socially responsible way that is in an ethically and transparent way that contributes to the welfare of the society | 15 | 2.27 | 1.335 |
| The firm incurs costs that doesn't lead to immediate financial benefit but promote positive social and environmental change | 15 | 2.533 | .8338 |
| The firm corporate social responsibility determines its approach towards the green/sustainable supply chain management practices | 15 | 2.600 | .9103 |

| | | | |
|---|---|---|---|
| The firm's social and environmental responsibility applies to its efforts that go beyond what may be required by regulators or environmental protection groups | 15 | 2.733 | .7037 |
| The firm uses ISO 26000 as a measure of their overall performance | 15 | 3.27 | .884 |
| Grand mean | 15 | 2.01 | 0.856 |

**Source: Research Data (2015)**

To a great extent ($1.4 \leq$ Mean $\leq 2$) CSR was implemented by the food franchising firms, the respondents agreed to a great extent that the firms identifies and understands various Health, Safety and Environment (HSE) regulations and observe labour practices as in the HSE policy, therefore taking action to reduce the firms carbon print and to prevent workers from developing work related diseases as well as depicting fair treatment to the workforce. The firm's relationship to the society and environment in which it operates is a critical factor in its ability to continue to operate effectively and the firms CSR has resulted in generating specific standards and codes that bring standardized procedures causing efficiency, effectiveness and increase in overall performance. The firms engages in CSR which they consider as an important driver to environmental management and they have programs and policies toward environmental protection that can lead to better environmental performance. In addition the firms' social and environmental responsibility aims at assessing and taking responsibility for the firms effects on the environment as well as taking into account the environmental factors such consuming less natural resources in their decision making and daily operations to minimize on the negative impact on the environment.

The respondents also agreed to a moderate extent that the food franchising firms' CSR determines its approach towards the SSCM practices and their socio-environmental responsibility applies to its efforts that go beyond what may be required by regulators or environmental protection groups. The firms considers social responsibility as an integral part of the wealth creation process and when properly managed enhances its competitiveness and that its organizational philosophy such as the profit making activities have minimum social impact. The firms also incur costs that does not lead to immediate financial benefit but promote positive social and environmental change.

Further, to a small extent the respondents felt that the use of ISO 26000 as a measure of overall performance was a critical aspect that enables them to operate in the environment.

The overall mean for CSR was 2.01 and the overall standard deviation was 0.856, the parameters below the grand mean and the standard meant that those factors were not critical or important to the respondents but are necessary, the parameters with a mean above the grand meant that those factors were very critical and necessary for the operations of the firms.

This means that the CSR to a great extent is an incentive for encouraging sustainable supply chain management with an overall mean of 2.01

This finding is consistent with a study that was carried out by Cruz (2009), the researcher concluded that CSR has a significant influence on performance and thus firms should not shy away from doing both social and environmental work for the society as this improves the image as well as sales which subsequently increases profits thus boosting expansion and growth.

### 4.3.3: Competitor Pressure

Competitor Pressure is one of the sustainable supply chain management incentives used in controlling the food franchising outlets in Kenya. The researcher sought the respondents' perception regarding the various aspects defining competitor pressure. The respondents were expected to indicate to what extent they agreed to the various statements that defined this variable. Responses were captured in a five point Likert's scale (1= Very Great Extent, 2= Great Extent, 3= Moderate Extent, 4= Small Extent, 5= Very Small Extent). The results were as presented in table 4.7

**Table 4.7 Means and Standard Deviations for measure of Competitor Pressure**

| **Descriptive Statistics-Competitor Pressure** | | | |
|---|---|---|---|
| | N | Mean | Std. Deviation |
| The firm considers a cooperative orientation in pollution prevention, product stewardship and sustainable strategies as a requirement for achieving sustained competitive advantage | 14 | 2.286 | .7263 |
| The firm's competitors and market influence the sustainability initiatives where customers and competitors define the market of the products by demanding for a sustainable product and selling sustainable product respectively | 15 | 2.333 | 2.4976 |
| The firm's competitor pressure for a green product is a driver in its sustainable supply chain management and adoption of ISO 14001 by the firm in its operations | 15 | 2.733 | 1.2228 |

| | | | |
|---|---|---|---|
| The firm's SSCM applications has made it obtain large gains and the adoption of developments that cause an increase in brand value in addition to cost savings is as a result of push by rivals to do similar practices | 15 | 2.733 | 1.2799 |
| The firm face intense scrutiny from competitors and external environmental activists hence working in an environment that includes pressure has induced it to adopt green initiatives to combat competition and gain competitive advantages | 15 | 3.000 | .9258 |
| The firm considers investing in reverse logistics activities such as recycling due to competitive pressure and to competing in the sector. | 15 | 3.333 | 1.2910 |
| Grand mean | 14 | 2.736 | 1.323 |

**Source: Research Data (2015)**

To a great extent ($2.3 \leq \text{Mean} \leq 2.7$) Competitor Pressure was implemented by the food franchising firms, the respondents agreed to a great extent that the firms considered a cooperative orientation in pollution prevention, product stewardship and sustainable strategies was a requirement for achieving sustained competitive advantage, also the respondents indicated that the firm's competitors and market influence the sustainability initiatives where customers and competitors define the market of the products by demanding for a sustainable product and selling sustainable product respectively. The firms adopted ISO 14001 and considered competitor pressure for green product as a driver in its SSCM and that the application and adoption of SSCM and developments has made it obtain large gains and increase in brand value as well as cost savings.

To a moderate extent the respondents felt that their firms face intense scrutiny from competitors and external environmental activists hence working in an environment that includes pressure inducing them to adopt green initiatives to combat competition and gain competitive advantages. In addition they indicated that the firms considers investing in reverse logistics activities such as recycling in order to compete in the sector.

The overall mean for competitor pressure was 2.736 and the overall standard deviation was 1.323, the parameters above the grand mean meant that those factors were not critical or important to the respondents but are necessary, the parameters with a mean below the grand meant that those factors were very critical and necessary for the operations of the firms.

This means that competitor pressure to a Great extent is an incentive for encouraging sustainable supply chain management with an overall mean of 2.736.

This finding is consistent with a study that was carried out by Hart (2005) where it was concluded that performance increases due to competitor pressure as this pressure forces firms to develop ways and means to gain competitive advantage in the environment.

### 4.3.4: Customer Pressure

Customer Pressure is one of the sustainable supply chain management incentives used in implemented in the food franchising outlets in Kenya.The researcher sought the respondents' perception regarding the various aspects defining customer pressure. The respondents were expected to indicate to what extent they agreed to the various statements that defined this variable. Responses were captured in a five point Likert's scale (1= Very Great Extent, 2= Great Extent, 3= Moderate Extent, 4= Small Extent, 5= Very Small Extent). The results were as presented in table 4.8.

**Table 4.8 Means and Standard Deviations for measure of Customer Pressure**

| **Descriptive Statistics** | | | |
|---|---|---|---|
| | N | Mean | Std. Deviation |
| The firm's customer demands have a strong influence on the decisions that the firm takes toward eco-design of its products and process and pursuance of a minimum green standard | 15 | 1.533 | .7432 |
| The firm considers the environment in the properties of its products and services and this meets customer requirement in order to obtain the most sustainable solution | 15 | 1.533 | .7432 |
| The firm environmental collaboration and interactions with upstream suppliers and downstream customers is useful in reaping performance gains and environmental supply chain performance | 15 | 2.267 | 1.0998 |
| The firm's reputation and sales volumes is increased when customers aware of green products prefer to purchase green products from the firm | 15 | 2.467 | .6399 |
| The firm's customer pressure causes it to confirm to sustainability practices and be perceived as more legitimate and trustworthy to gain competitive advantage | 15 | 2.533 | .9155 |

| | | | |
|---|---|---|---|
| The firm development of policies and sustainability practices protecting the environment along the supply chain involves customers in the process of formulation and development | 15 | 2.733 | 1.0328 |
| The firm's customer demand for a green product is a key driver in its sustainable supply chain management and adoption of ISO 14001 by the firm in its operations | 15 | 2.867 | 1.0601 |
| The firm's customers exert pressure on it to take an environmentally conscious approach to product design, to minimize adverse environmental impacts of the product throughout its product life, and to promote recycling and reuse of the product and its packaging | 15 | 3.133 | 1.0601 |
| The firm's market opportunities in the form of environmental attributes and responsibility within the supply chain are created as a result of customer pressure | 15 | 3.200 | .6761 |
| The firm's urgency for an efficient and effective sustainable SCM system is due to greater customer education regarding the potential economic and non-economic benefits of reverse logistics, consumer rights and specific customer requirements regarding quality, reliability, delivery | 15 | 3.200 | .6761 |
| The firm responds to pressure from customers demanding the adoption of green supply chain initiatives, but the decision is based on evaluation of the benefits obtained by the firm to adopt these practices | 15 | 3.333 | 5.2599 |
| The firm's sustainability practices and outcomes in the supply chain have been moderately impacted by the customer pressure and lack of it leads to a loss of customers and negatively impacts economic performance | 15 | 3.467 | .6399 |
| Grand Mean | 15 | 2.69 | 1.274 |

**Source: Research Data (2015)**

To a great extent ($1.5 \leq \text{Mean} \leq 2.7$) customer pressure was implemented by the food franchising firms, the respondents agreed to a great extent that the firms' customer demands have a strong influence on the decisions that the firms takes toward eco-design of its products, process and pursuance of a minimum green standard, that the firm considers the environment in the properties of its products and services and this meets customer requirement in order to obtain the most sustainable solution, the firms' reputation and sales is increased when customers aware of green products prefer to purchase them, that the firms environmental collaboration and interactions with upstream suppliers and downstream customers is useful in reaping gains and environmental supply chain performance, that the firms confirms to sustainability practices and be perceived as more

legitimate and trustworthy to gain competitive advantage and lastly that the firms development of policies and sustainability practices protecting the environment involves customers in formulation and development.

Further, the respondents agreed to a moderate extent that the food franchising firms market opportunities in the form of environmental attributes and responsibility within the supply chain are created due to customer pressure, the firms' urgency for an efficient and effective SSCM system is due to greater customer education on consumer rights, specific customer requirements regarding quality, reliability and delivery; the firms responds to pressure from customers demanding the adoption of green SC initiatives but the decision is based on evaluation of the benefits obtained by the firm to adopt these practices and lastly, the firms sustainability practices and outcomes in the supply chain have been moderately impacted by the customer pressure.

The overall mean for customer pressure was 2.69 and the overall standard deviation was 1.274, the parameters above the grand mean, meant that those factors were not critical or important to the respondents but are necessary, the parameters with a mean below the grand meant that those factors were very critical and necessary for the operations of the firms,

This means that customer pressure to a great extent is an incentive for encouraging sustainable supply chain management with an overall mean of 2.69.

This is consistent with a study that was carried out by Paquette (2005) who found out that customer pressure do influence firm's performance positively by their demands of better products that better meet their needs, thus firms that produce products to satisfy the market needs find themselves in a better position in the market thus boosting their performance.

### 4.3.5 Economic Benefits/Cost Reduction Benefits

Economic/cost reduction benefit is one of the sustainable supply chain management incentives used in controlling the food franchising outlets in Kenya.The researcher sought the respondents' perception regarding the various aspects defining economic /cost reduction benefits. The respondents were expected to indicate to what extent they agreed to the various statements that defined this variable. Responses were captured in a five point Likert's scale (1= Very Great extent, 2= Great extent, 3= Moderate extent, 4= Small Extent, 5= Very Small extent). The results were as presented in table 4.5.

**Table 4.9 Means and Standard Deviations for measure of Economic benefits.**

| **Descriptive Statistics** | | | |
|---|---|---|---|
| | N | Mean | Std. Deviation |
| The firm ultimate goal for adopting sustainable supply chain management is to generate profits and gaining new market opportunities | 15 | 1.467 | .8338 |
| The firm adopts sustainable supply chain management to create a competitive advantage | 15 | 1.533 | .5164 |
| The firm's adoption of environmental innovation practices and economic benefit leads to better or improved financial performance | 15 | 1.533 | .5164 |
| The firm's market expands due to minimization of negative environmental impacts of the products & processes and recycle of post-consumer waste | 15 | 1.667 | 1.0465 |
| The firm's revenue is positively impacted when customers prefer their products due to being environmentally friendly | 15 | 2.000 | .8452 |
| The firm's costs are lowered when investing in environmental management systems that decreases accidental environmental releases and liability | 15 | 2.067 | .7988 |
| The firm achieves real and permanent reduction in the unit cost of goods or services without impairing suitability and quality of the product | 15 | 2.133 | .8338 |
| The firm's cost reduction is confined to permanent and genuine savings in the costs of manufacture, administration, distribution and selling brought about by elimination of wasteful and inessential elements from the design of the product, techniques & practices carried out in connection therewith | 15 | 2.133 | .5164 |
| The firm's unit cost is achieved by retaining essential characteristics and quality of the products through improved methods and techniques | 15 | 2.533 | 2.4456 |
| The firm's costs may be reduced through proactively managing environmental regulations | 14 | 3.000 | .3922 |
| Grand Mean | 14 | 2.01 | 0.875 |

**Source: Research Data (2015)**

To a great extent ($1.5 \leq \text{Mean} \leq 2$) Economic/cost reduction benefit was implemented by the food franchising firms, the respondents agreed to a great extent that the firms ultimate goal for adopting

sustainable supply chain management is to generate profits, gain new market opportunities and expand the market due to minimization of negative environmental impacts of the products, processes and recycle of post-consumer waste, that the firm adopts sustainable supply chain management to create a competitive advantage, the firms' adoption of environmental innovation practices and economic benefits leads to better or improved financial performance, that the revenue is positively impacted when customers prefer their environmentally friendly products**.**

Further, to a moderate extent the respondents indicated that their firms cost reduction is confined to permanent and genuine savings in the costs of manufacture, administration, distribution and selling resulting from elimination of wasteful elements from the product design, that the firms achieves real and permanent reduction in the unit cost of goods or services without impairing suitability and quality of the product, that the firms costs are lowered when investing in environmental management systems that decreases accidental environmental releases and liability and lastly the unit cost is achieved by retaining essential characteristics and quality of the products through improved methods and techniques. Lastly, the respondents agreed that the firms' costs may be reduced through proactively managing environmental regulations.

The overall mean for economic benefits or cost reduction benefits was 2.01 and the overall standard deviation was 0.875, the parameters above the grand mean, meant that those factors were not critical or important to the respondents but are necessary, the parameters with a mean below the grand meant that those factors were very critical and necessary for the operations of the firms.

This means that Economic/cost reduction benefit to a great extent is an incentive for encouraging sustainable supply chain management with an overall mean of 2.01.This finding was consistent with a study that was carried out by Routroy (2009), where the researcher argued that the desire by firms to cut down their cost so as to boost performance was a necessary incentive.

### 4.3.6: Green Purchasing

Green purchasing is one of the sustainable supply chain management incentives used in controlling the food franchising outlets in Kenya.The researcher sought the respondents' perception regarding the various aspects defining green purchasing. The respondents were expected to indicate to what extent they agreed to the various statements that defined this variable. Responses were captured in a five point Likert's scale (1= Very Great Extent, 2= Great Extent, 3= Moderate Extent, 4= Small Extent, 5= Very Small Extent). The results were as presented in table 4.10

**Table 4.10 Means and Standard Deviations for measure of Green purchasing**

| **Descriptive Statistics** | | | |
|---|---|---|---|
| | N | Mean | Std. Deviation |
| The firm's consumers are recognizing the enormous impact their buying behaviours have on the environment which reinforces the position of the environment as a top world concern and thus increase their green purchasing behavior | 15 | 1.600 | .5071 |
| The firm's green purchasing performance metrics include quality, delivery time, capacity of production systems, price, financial status, capability of R&D and packaging cost | 15 | 1.600 | .9103 |
| The firm centers to set purchasing policies or guidelines that integrates and reflect concerns for natural environment in its purchasing process | 15 | 1.667 | .7237 |
| The firm's purchasing enables better compliance with existing norms, improvement of brand image for consumers and better ranking by non-financial notation organisations. | 15 | 1.733 | .5936 |
| The firm integrates their environmental goals with their purchasing activities in order to become green or initiate green initiatives in their supply chain | 15 | 1.800 | .5606 |
| The firm's approach to minimize environmental impact in inbound supply chain includes eco-labeled product purchase, adoption of environmental criteria into the supplier assessment systems | 15 | 1.867 | .6399 |
| The firm has developed a scorecard based on specific metrics and manages as well as evaluates their suppliers' environmental performance and provides advice to them on improving their performance | 15 | 1.933 | 1.0998 |
| The firm acquires raw materials, select suppliers and choose products with an emphasis on environmentally friendly packaging, recycling, reuse, resource reduction and disposal | 15 | 2.000 | 1.1339 |
| The firm's green purchase helps to promote clean production technology in the sustainable supply chain | 15 | 2.000 | .7559 |
| The firm's purchasing practices seek to ensure sustainability by reducing sources of waste and promote recycling, reuse, substitution of materials and proper sourcing | 15 | 2.067 | 1.1629 |

| | | | |
|---|---|---|---|
| The firm has adopted green purchasing as a way to reduce the human health, environmental and social impacts of routine purchasing decisions | 15 | 2.067 | .7037 |
| The firm ensures that suppliers meet their environmental objectives through collaborative activities that include training, environmental information sharing, green innovation and research | 15 | 2.067 | .7988 |
| The firm's purchasing is an important agent for change concerning environmental initiatives and compliance in the supply chain | 15 | 2.133 | .9904 |
| The firm practices green purchasing by incorporating environmental sustainability issues into their choices of materials, parts and equipment moving beyond traditional purchasing criteria such as cost, quality, flexibility or payment terms | 15 | 2.133 | .8338 |
| The firm considers purchasing green materials due to their lower financial implications as compared to other non-green materials | 15 | 2.133 | .9155 |
| The firm chooses suppliers whose processes are ISO 14001 certified and encourages those who have low raw material consumption, controlled emissions, pollution levels and raw material tracking | 15 | 2.267 | .7037 |
| The firm has chosen an optimal appropriate green purchasing strategy and can obtain competitive advantages of the sustainable supply chain when faced with a competitive market | 15 | 2.267 | .7988 |
| The firm's purchasing objective extends beyond recycling and reuse such that evaluations and audits of supply chains investigates life cycle costs, product designs for reuse and supplier or production choices | 15 | 2.467 | .5164 |
| The firm's shift from non-green or traditional purchasing to green purchasing practices is as a result of consumers awareness and experience of environmental problems | 15 | 2.467 | .6399 |
| The firm adoption of green purchasing directly affect their suppliers practice and thus causing ripple effect through which local firms considers environment practices to gain legitimacy | 15 | 2.867 | .7432 |
| The firm's employees are aware of the firm's green purchasing policy and actually implements it | 15 | 3.200 | .7746 |
| Grand mean | 15 | 2.187 | 0.786 |

**Source: Research Data (2015)**

To a great extent ($1.6 \leq \text{Mean} \leq 2.2$) Green Purchasing was implemented by the food franchising firms, the respondents agreed to a great extent that the firms consumers are recognizing the enormous impact their buying behaviours have on the environment which reinforces the position of the environment as a top world concern and thus increase their green purchasing behavior, that the firms green purchasing performance metrics include quality, delivery time, capacity of production systems, price, financial status, capability of R&D and packaging cost, the firms centers to set purchasing policies or guidelines that integrates and reflect concerns for natural environment in its purchasing process, the firm's purchasing enables better compliance with existing norms, improvement of brand image for consumers and better ranking by non-financial notation organisations, the firm integrates their environmental goals with their purchasing activities in order to become green or initiate green initiatives in their supply chain, that the firm's approach to minimize environmental impact in inbound supply chain includes eco-labeled product purchase, adoption of environmental criteria into the supplier assessment systems.

The respondents also agreed to a great extent that the firm has developed a scorecard based on specific metrics and manages as well as evaluates their suppliers' environmental performance and provides advice to them on improving their performance, that the firm acquires raw materials, select suppliers and choose products with an emphasis on environmentally friendly packaging, recycling, reuse, resource reduction and disposal. Similarly, the firm's green purchase helps to promote clean production technology in the sustainable supply chain, the firm's purchasing practices seek to ensure sustainability by reducing sources of waste and promote recycling, reuse, substitution of materials and proper sourcing, that the firm has adopted green purchasing as a way to reduce the human health, environmental and social impacts of routine purchasing decisions, on the same note the firm ensures that suppliers meet their environmental objectives through collaborative activities that include training, environmental information sharing, green innovation and research, the firm's purchasing is an important agent for change concerning environmental initiatives and compliance in the SC.

The respondents also agreed to a great extent that the firm practices green purchasing by incorporating environmental sustainability issues into their choices of materials, parts and equipment moving beyond traditional purchasing criteria such as cost, quality, flexibility or payment terms. Lastly, the firm considers purchasing green materials due to their lower financial implications as compared to other non-green materials.

Further, to a moderate extent the respondents felt that the firms chooses suppliers whose processes are ISO 14001 certified and encourages those who have low raw material consumption, controlled emissions, pollution levels and raw material tracking, the firm has chosen an optimal appropriate green purchasing strategy and can obtain competitive advantages of the sustainable supply chain when faced with a competitive market, the firm's purchasing objective extends beyond recycling and reuse such that evaluations and audits of supply chains investigates life cycle costs, product designs for reuse and supplier or production choices, that the firm's shift from non-green or traditional purchasing to green purchasing practices is as a result of consumers awareness and experience of environmental problems, that the firm adoption of green purchasing directly affect their suppliers practice and thus causing ripple effect through which local firms considers environment practices to gain legitimacy and lastly the firms' employees are aware of the firms green purchasing policy and actually implements it.

The overall mean for green purchasing was 2.187 and the overall standard deviation was 0.76, the parameters above the grand mean, meant that those factors were not critical or important to the respondents but are necessary, the parameters with a mean below the grand meant that those factors were very critical and necessary for the operations of the firms.

This means that green purchasing to a great extent is an incentive for encouraging sustainable supply chain management with an overall mean of 2.187.

This was consistent with a study that was carried out by colicchia et al (2011) who found out that to minimize environmental impact a firm must then collaborate with suppliers via green purchasing; this will eliminate a lot of wastage costs thus boosting performance of the firm in question.

### 4.3.7: Employee Training

Employee Training is one of the sustainable supply chain management incentives used in controlling the food franchising outlets in Kenya.The researcher sought the respondents' perception regarding the various aspects defining employee training. The respondents were expected to indicate to what extent they agreed to the various statements that defined this variable. Responses were captured in a five point Likert's scale (1= Very Great Extent, 2= Great Extent, 3= Moderate Extent, 4= Small Extent, 5= Very Small Extent). The results were as presented in table 4.11

**Table 4.11 Means and Standard Deviations for measure of Employee Training**

| **Descriptive Statistics** | | | |
|---|---|---|---|
| | N | Mean | Std. Deviation |
| The firm has a training policy and the training has a direct relationship with the environmental performance of employees | 15 | 1.467 | .7432 |
| The firm training policy is an integral part of the firm's agenda and its implications necessitate that employees' training to improve green practices be versatile and job specific | 15 | 1.600 | .7368 |
| The firm has an effective training program and education and these are major requirements for achieving successful implementation of SSCM in the firm | 15 | 1.667 | .7237 |
| The firm commits itself to offer training to staff in order for the firm's sustainability strategy to be adopted and be effectively implemented in its operation | 15 | 1.667 | .6172 |
| The firm analyzes and studies the methods of training before it relies on them to train a competent workforce and this is to ensure that it complies with the standards required | 15 | 1.733 | .7037 |
| The firm's employee training systems facilitates the intelligent deployment of its existing resources and capabilities to enhance sustainable supply chain management | 15 | 3.000 | 5.2915 |
| The firm has a formal process of training and also uses outside consultants to conduct employee training sessions for improving environmental performance and sustainability knowledge in its supply chain operations | 15 | 3.267 | 1.3345 |
| The firm's management encourages employees to learn green information by organizing seminars, conferences or environmental studies either through self-initiatives or through the firms funding of courses | 15 | 4.600 | 7.9174 |
| Grand Mean | 15 | 2.375 | 2.26 |

**Source: Research Data (2015)**

To a great extent ($1.5 \leq \text{Mean} \leq 2.4$) Employee Training is implemented by the food franchising firms, the respondents agreed to a great extent that the firms have a training policy and the training has a direct relationship with the environmental performance of employees as well as the firm training policy is an integral part of the firm's agenda and its implications necessitate employees' training to improve green practices be versatile and job specific. The respondents also indicated that the firms have an effective training program and education and these are major requirements for achieving successful implementation of SSCM in the firm, that the firms commits themselves to

offer training to staff in order for the firms sustainability strategy to be adopted and be effectively implemented in its operation. Finally, the firm analyzes and studies the methods of training before it relies on them to train a competent workforce and this is to ensure that it complies with the standards required.

On the other hand the respondents agreed to a moderate extent that the firms' employee training systems facilitates the intelligent deployment of its existing resources and capabilities to enhance SSCM and that the firms have a formal training process and uses outside consultants to conduct employee training sessions for improving environmental performance and sustainability knowledge in its supply chain.

Further, the respondents agreed to a small extent that the firms' management encourages employees to learn green information by organizing seminars, conferences or environmental studies either through self-initiative or through the firms 'sponsorship.

The overall mean for employee training was 2.375 and the overall standard deviation was 2.26, the parameters above the grand mean, meant that those factors were not critical or important to the respondents but are necessary, the parameters with a mean below the grand meant that those factors were very critical and necessary for the operations of the firms.

This means that employee training to a great extent is an incentive for encouraging sustainable supply chain management with an overall mean of 2.375.

This was consistent with other studies carried out that have shown that capacity building in a firm boosts performance, a study by Wu et al (2010) found out that training of employees lowers accidents in a work place, reduces response time to customer demands, boosts decision making thus boosting overall performance of the firm.

### 4.4: Operational Performance

The researcher sought the respondents' perception regarding the various aspects defining operational performance. The respondents were expected to indicate to what extent they agreed to the various statements that defined this variable. Responses were captured in a five point Likert's scale (1= Very Large extent, 2= Large extent, 3= Moderate extent, 4= Small Extent, 5= Very Small extent). The results were as presented in table 4.5

**Table 4.12 Means and Standard Deviations for measure of Operational Performance**

| **Descriptive Statistics** | | | |
|---|---|---|---|
| | N | Mean | Std. Deviation |
| Range of Product &Service | 15 | 1.333 | .8997 |
| Purchase order cycle time | 15 | 1.333 | .8165 |
| Cost savings | 15 | 1.733 | .9612 |
| Profit | 15 | 1.733 | 1.1629 |
| Number of deliveries of Products | 15 | 1.933 | .8837 |
| Annual sales | 15 | 2.533 | .9904 |
| Return on investment | 15 | 3.400 | 1.2984 |
| Cost efficiency | 15 | 4.267 | 1.2228 |
| Employee satisfaction | 15 | 4.600 | 1.1212 |
| Employees Productivity | 15 | 4.667 | .8165 |
| Action on customer complaints | 15 | 4.733 | .7988 |
| Product flexibility | 15 | 4.733 | .7037 |
| Competency development | 15 | 4.733 | .7988 |
| Capacity Utilisation | 15 | 4.800 | .5606 |
| Product availability | 15 | 4.800 | .5606 |
| Customer satisfaction | 15 | 4.867 | .3519 |
| Order lead time | 15 | 4.867 | 3.9976 |
| Quality of Products and services | 15 | 4.933 | .2582 |
| Grand mean | 15 | 3.593 | 1.011 |

**Source: Research Data (2015)**

To a great extent ($1.3 \leq \text{Mean} \leq 3.6$) the respondents agreed with the operational performance of supply chain in the food franchising firms with regards to range of product &service, purchase order cycle time, cost savings, profit, number of deliveries of products, annual sales and return on investment. It shows that those parameters are doing well and that this factors were very critical in their operations. Similarly, it indicates that the firms dwell on them and they rate them highly.

On the other hand, the respondents agreed to a small extent that cost efficiency, employee satisfaction, employees' productivity, action on customer complaints, product flexibility,

competency development, capacity utilization, product availability, customer satisfaction, order lead time, quality of products and services are critical aspects of operational performance in their supply chain.

The overall mean for operational performance was 3.593 and the overall standard deviation was 1.011, the parameters above the grand mean, meant that those factors were not critical or important to the respondents but are necessary, the parameters with a mean below the grand meant that those factors were very critical and necessary for the operations of the firms, in this regard therefore most of the respondents felt that in terms of the range of product &service, purchase order cycle time, cost savings, profit, number of deliveries of products, annual sales and return on investment, their firms were doing very well and that this factors were very critical aspects for their operation performance and survival in the environment as their means were below the grand mean, however the respondents indicated that despite having scored so well in the important aspects that drive performance they still had challenges with some other important aspects such as cost efficiency, employee satisfaction, employees' productivity, action on customer complaints, product flexibility, competency development, capacity utilization, product availability, customer satisfaction, order lead time, quality of products and services.

### 4.4.1 The relationship between Regulatory/legislation Restrictions and Operational Performance

To establish the relationship between regulatory restrictions, and operational performance of food franchising outlets in Kenya, a regression model was used, where Operational Performance was the dependent variable with regulatory being the Independent variable.

**Table 4.13 The Relationship between Regulatory restrictions and Operational Performance**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .634[a] | .403 | .357 | .49450 |

a. Predictors: (Constant), Regulatory **Source: Research Data (2015)**

From Table 4.13 R was 0.634 meaning that there was a positive relationship between regulatory restrictions and Operational performance while R squared was 0.403 meaning that 40.3% of

Operational performance variations can be attributed to regulatory changes while 59.7 % is due to other factors. This implies that the regression model for regulatory restrictions did not have some good explanatory powers as only 40.3% of the variations could not be explained.

**Table 4.14: Analysis of Variances (ANOVA) in the Regression model for Regulatory Restrictions**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 2.142 | 1 | 2.142 | 8.760 | .011[b] |
| | Residual | 3.179 | 13 | .245 | | |
| | Total | 5.321 | 14 | | | |

a. Dependent Variable: Operational Performance

b. Predictors: (Constant), Regulatory

**Source: Research Data (2015)**

From Table 4.14, the results show that the model had an F ratio of 8.760 and the p value was 0.011< 0.05, therefore the overall regression model for regulatory restriction is statistically significant and can be used for prediction purposes at 5 % significance level, this further indicate that the independent variable used in this study (regulatory restriction's) is statistically significant in predicting the overall performance of food franchising outlets in Kenya.

**Table 4.15: Coefficients for the model for Regulatory Restrictions**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 4.967 | .457 | | 10.859 | .000 |
| | Regulatory | -.519 | .175 | -.634 | -2.960 | .011 |

a. Dependent Variable: Operational Performance **Source: Research Data (2015)**

From Table 4.15 the results show that the model had a t- ratio of -2.960, β=-0.519 and the p value was 0.011< 0.05, therefore the using the t-ratio and beta, the model was statistically significant and can be used for prediction purposes at 5 % significance level.

### 4.4.2 The relationship between CSR and Operational Performance

To establish the relationship between CSR, and operational performance of food franchising outlets in Kenya, a regression model was used, where Operational Performance was the dependent variable with CSR being the Independent variable.

**Table 4.16 The Relationship between CSR and Operational Performance table**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .812[a] | .660 | .634 | .37320 |

a. Predictors: (Constant), Corporate Social responsibility

**Source: Research Data (2015)**

From Table 4.16 R was 0.812 meaning that there was a strong positive relationship between CSR and Operational performance while R squared was 0.66 meaning that 66% of Operational performance variations can be attributed to CSR changes while 34% is due to other Factors. This implies that the regression model for CSR did have some good explanatory powers as only 34% of the variations could not be explained.

**Table 4.17:Analysis of Variance (ANOVA) in Regression Model for CSR**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 3.510 | 1 | 3.510 | 25.204 | .000[b] |
| | Residual | 1.811 | 13 | .139 | | |
| | Total | 5.321 | 14 | | | |

a. Dependent Variable: Operational Performance

b. Predictors: (Constant), Corporate Social responsibility

**Source: Research Data (2015)**

From Table 4.17, the results show that the model had an F ratio of 25.204 and the p value was 0.000< 0.05, therefore the overall regression model for CSR is statistically significant and can be used for prediction purposes at 5 % significance level, this further indicate that the independent variable used in this study (CSR) is statistically significant in predicting the overall performance of food franchising outlets in Kenya.

**Table 4.18: Coefficients for the Model for CSR**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 5.667 | .410 | | 13.823 | .000 |
| | Corporate Social responsibility | -.996 | .198 | -.812 | -5.020 | .000 |

a. Dependent Variable: Operational Performance

**Source: Research Data (2015)**

From Table 4.18 the results show that the model had a t- ratio of -5.020, β=-0.996 and the p value was 0.000< 0.05, therefore the using the t-ratio and beta, the model was statistically significant and can be used for prediction purposes at 5 % significance level.

### 4.4.3 The relationship between Competitor pressure and Operational Performance

To establish the relationship between competitor pressure, and operational performance of food franchising outlets in Kenya, a regression model was used, where Operational Performance was the dependent variable with competitor pressure being the Independent variable.

**Table 4.19 The Relationship between Competitor pressure and Operational Performance**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .216[a] | .047 | -.027 | .62468 |

a. Predictors: (Constant), Competitor pressure

**Source: Research Data (2015)**

From Table 4.19 R was 0.216 meaning that there was a positive relationship between competitor pressure and Operational performance while R squared was 0.047 meaning that 4.7% of Operational performance variations can be attributed to competitor pressure changes while 95.3% is due to other Factors. This implies that the regression model for competitor pressure did not have some good explanatory powers as only 4.7% of the variations could be explained.

**Table 4.20: Analysis of Variance (ANOVA) in Regression Model for Competitor pressure**.

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | .248 | 1 | .248 | .636 | .440[b] |
| | Residual | 5.073 | 13 | .390 | | |
| | Total | 5.321 | 14 | | | |

a. Dependent Variable: Operational Performance

b. Predictors: (Constant), Competitor pressure

**Source: Research Data (2015)**

From Table 4.20, the results show that the model had an F ratio of 0.636 and the p value was 0.44> 0.05, therefore the overall regression model for competitors pressure is not statistically significant and cannot be used for prediction purposes at 5 % significance level, this further indicate that the independent variable used in this study (Competitor pressure) is not statistically significant in predicting the overall performance of food franchising outlets in Kenya.

**Table 4.21: Coefficients for the Model for Competitor pressure.**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | T | Sig. |
| 1 | (Constant) | 4.272 | .777 | | 5.502 | .000 |
| | Competitor pressure | -.220 | .275 | -.216 | -.797 | .440 |

a. Dependent Variable: Operational Performance

**Source: Research Data (2015)**

From Table 4.21 the results show that the model had a t- ratio of -0.797, β=-220 and the p value was 0.440> 0.05, therefore the using the t-ratio and beta, the model was not statistically significant and cannot be used for prediction purposes at 5 % significance level.

### 4.4.4 The relationship between Customer pressure and Operational Performance

To establish the relationship between customer pressure, and operational performance of food franchising outlets in Kenya, a regression model was used, where Operational Performance was the dependent variable with customer pressure being the Independent variable.

**Table 4.22: The Relationship between Customer Pressure and Operational Performance**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .345[a] | .119 | .051 | .60050 |

a. Predictors: (Constant), Customer pressure

**Source: Research Data (2015)**

From Table 4.22 R was 0.345 meaning that there was a positive relationship between customer pressure and Operational performance while R squared was 0.119 meaning that 11.9% of Operational performance variations can be attributed to customer pressure changes while 88.1% is due to other factors. This implies that the regression model for competitor pressure did not have some good explanatory powers as only 11.9% of the variations could be explained.

**Table 4.23: The analysis of Variances (ANOVA) in Regression model for Customer Pressure**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | .633 | 1 | .633 | 1.756 | .208[b] |
| | Residual | 4.688 | 13 | .361 | | |
| | Total | 5.321 | 14 | | | |

a. Dependent Variable: Operational Performance

b. Predictors: (Constant), customer pressure

**Source: Research Data (2015)**

From Table 4.23, the results show that the model had an F ratio of 1.756 and the p value was 0.208> 0.05, therefore the overall regression model for customer pressure is not statistically significant and cannot be used for prediction purposes at 5% significance level, this further indicate that the independent variable used in this study (Customer pressure) is not statistically significant in predicting the overall performance of food franchising outlets in Kenya.

**Table 4.24: Coefficients for the model for Customer Pressure**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 4.508 | .654 | | 6.896 | .000 |
| | customer pressure | -.313 | .236 | -.345 | -1.325 | .208 |

a. Dependent Variable: Operational Performance

**Source: Research Data (2015)**

From Table 4.24 the results show that the model had a t- ratio of -1.325, β=-.313 and the p value was 0.208> 0.05, therefore the using the t-ratio and beta, the model was not statistically significant and cannot be used for prediction purposes at 5 % significance level.

### 4.4.5 The relationship between Economic/cost reduction Benefits and Operational Performance

To establish the relationship between economic benefits, and operational performance of food franchising outlets in Kenya, a regression model was used, where Operational Performance was the dependent variable with economic benefits being the Independent variable.

**Table 4.25: The Relationship between Economic benefits and Operational Performance**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .404[a] | .163 | .099 | .58523 |

a. Predictors: (Constant), economic benefits

**Source: Research Data (2015)**

From Table 4.25 R was 0.404 meaning that there was a positive relationship between economic benefits and Operational performance while R squared was 0.163 meaning that 16.3% of Operational performance variations can be attributed to changes while 83.7% is due to other Factors. This implies that the regression model for economic benefits did not have some good explanatory powers as only 16.3% of the variations could be explained.

**Table 4.26:The Analysis of Variances(ANOVA) for Regression model for Economic Benefits**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | .869 | 1 | .869 | 2.536 | .135[b] |
| | Residual | 4.452 | 13 | .342 | | |
| | Total | 5.321 | 14 | | | |

a. Dependent Variable: Operational Performance

b. Predictors: (Constant), economic benefits

**Source: Research Data (2015)**

From Table 4.26, the results show that the model had an F ratio of 2.536 and the p value was 0.135>0.05, therefore the overall regression model for economic benefits is not statistically significant and cannot be used for prediction purposes at 5% significance level, this further indicate that the independent variable used in this study (economic benefits) is not statistically significant in predicting the overall performance of food franchising outlets in Kenya.

**Table 4.27:Coefficients for the model for Economic Benefits**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 4.950 | .820 | | 6.039 | .000 |
| | economic benefits | -.640 | .402 | -.404 | -1.593 | .135 |

a. Dependent Variable: Operational Performance

**Source: Research Data (2015)**

From Table 4.27 the results show that the model had a t- ratio of -1.593, β=-.640 and the p value was 0.135> 0.05, therefore the using the t-ratio and beta, the model was not statistically significant and cannot be used for prediction.

### 4.4.6 The Relationship between Green Purchasing and Operational Performance

To establish the relationship between green purchasing, and operational performance of food franchising outlets in Kenya, a regression model was used, where Operational Performance was the dependent variable with green purchasing being the Independent variable.

**Table 4.28: The Relationship between Green purchasing and Operational Performance**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .444[a] | .197 | .135 | .57339 |

a. Predictors: (Constant), Green purchasing

**Source: Research Data (2015)**

From Table 4.28 R was 0.444 meaning that there was a positive relationship between green purchasing and Operational performance while R squared was 0.197 meaning that 19.7% of

Operational performance variations can be attributed to changes while 80.3% is due to other Factors. This implies that the regression model for green purchasing did not have some good explanatory powers as only 19.7% of the variations could be explained.

**Table 4.29: The Analysis of Variances (ANOVA) for Regression model for the Green Purchasing**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 1.047 | 1 | 1.047 | 3.184 | .098[b] |
| | Residual | 4.274 | 13 | .329 | | |
| | Total | 5.321 | 14 | | | |

a. Dependent Variable: Operational Performance

b. Predictors: (Constant), Green purchasing

**Source: Research Data (2015)**

From Table 4.29, the results show that the model had an F ratio of 3.184 and the p value was 0.098< 0.05, therefore the overall regression model for green purchasing is statistically significant and can be used for prediction purposes at 5% significance level, this further indicate that the independent variable used in this study (green purchasing) is statistically significant in predicting the overall performance of food franchising outlets in Kenya.

**Table 4.30: Coefficients for the model for the Green Purchasing**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 5.191 | .867 | | 5.987 | .000 |
| | Green purchasing | -.722 | .405 | -.444 | -1.784 | .098 |

a. Dependent Variable: Operational Performance

**Source: Research Data (2015)**

From Table 4.30 the results show that the model had a t- ratio of -1.784, β=-.722 and the p value was 0.098< 0.05, therefore the using the t-ratio and beta, the model was statistically significant and

can be used for prediction.

### 4.4.7: The Relationship between Employee training and Operational Performance

To establish the relationship between green Employee training, and operational performance of food franchising outlets in Kenya, a regression model was used, where Operational Performance was the dependent variable with employee training being the Independent variable.

**Table 4.31: The Relationship between Employee training and Operational Performance**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .013[a] | .000 | -.077 | .63972 |

a. Predictors: (Constant), employee training

**Source: Research Data (2015)**

From Table 4.31 above, R was 0.013 meaning that there was a positive but very weak relationship between employee training and Operational performance while R squared was 0.000 meaning that Operational performance variations could not be attributed to changes in employee training and all the variations in the operational performance was 100% due to other Factors. This implies that the regression model for employee training did not have any good explanatory powers as no variations could be explained.

**Table 4.32: The Analysis of Variances (ANOVA) for regression model for Employee training**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | .001 | 1 | .001 | .002 | .964[b] |
| | Residual | 5.320 | 13 | .409 | | |
| | Total | 5.321 | 14 | | | |

a. Dependent Variable: Operational Performance

b. Predictors: (Constant), employee training

**Source: Research Data (2015)**

From Table 4.32, the results show that the model had an F ratio of 0.002 and the p value was

0.964> 0.05, therefore the overall regression model for employee training is not statistically significant and cannot be used for prediction purposes at 5 % significance level, this further indicate that the independent variable used in this study (employee training) is not statistically significant in predicting the overall performance of food franchising outlets in Kenya.

**Table 4.33: Coefficients for the model for Employee training**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 3.653 | .335 | | 10.917 | .000 |
| | employee training | .006 | .123 | .013 | .046 | .964 |

a. Dependent Variable: Operational Performance

**Source: Research Data (2015)**

From Table 4.30 the results show that the model had a t- ratio of 0.046, β=0.006 and the p value was 0.964> 0.05, therefore the using the t-ratio and beta, the model was not statistically significant and cannot be used for prediction.

### 4.4.8: The Relationship between Regulatory restrictions, CSR, Competitor pressure, Customer pressure, Economic benefits, Green purchasing and Employee training and Operational Performance

To establish the relationship between sustainable supply chain management incentives, and operational performance of food franchising outlets in Kenya, a regression model was used, where Operational Performance was the dependent variable with sustainable supply chain management incentives being the Independent variables.

**Table 4.34: The Relationship between sustainable supply chain management incentives and Operational Performance**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .898[a] | .807 | .614 | .38289 |

a. Predictors: (Constant), employee training, Regulatory, Competitor pressure, Green purchasing, economic benefits, Corporate Social Responsibility, customer pressure

**Source: Research Data (2015)**

From Table 4.34, R was 0.898 meaning that there was a positive and very strong relationship between sustainable supply chain management incentives and Operational performance while R squared was 0.807 meaning that 80.7% of the Operational performance variations could be attributed to changes in sustainable supply chain management incentives while 17.3% of the variations was due to other Factors. This implies that the regression model for sustainable supply chain management incentives did have any good explanatory powers as only 17.3% of the variations could not be explained.

**Table 4.35: Analysis of Variances(ANOVA) for the Regression model for the Sustainable Supply Chain Management Incentives [a]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 4.295 | 7 | .614 | 4.185 | .039[b] |
| | Residual | 1.026 | 7 | .147 | | |
| | Total | 5.321 | 14 | | | |

a. Dependent Variable: Operational Performance

b. Predictors: (Constant), employee training, Regulatory, Competitor pressure, Green purchasing, economic benefits, Corporate Social responsibility, customer pressure **Source: Research Data (2015)**

From Table 4.35, the results show that the model had an F ratio of 4.185 and the p value was 0.039<0.05, therefore the overall regression model for sustainable supply chain management

incentives is statistically significant and can be used for prediction purposes at 5 % significance level, this further indicate that the independent variable used in this study (sustainable supply chain management incentives) were statistically significant in predicting the overall performance of food franchising outlets in Kenya.

**Table 4.36: Coefficients for the model for the Sustainable Supply Chain ManagementIncentives**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 6.296 | .800 | | 7.869 | .000 |
| | Regulatory | .129 | .236 | .157 | .545 | .603 |
| | Corporate Social responsibility | -1.205 | .405 | -.982 | -2.972 | .021 |
| | Competitor pressure | -.045 | .429 | -.044 | -.104 | .920 |
| | customer pressure | -.136 | .382 | -.150 | -.356 | .733 |
| | economic benefits | -.424 | .398 | -.267 | -1.066 | .322 |
| | Green purchasing | .234 | .452 | .144 | .519 | .620 |
| | employee training | .131 | .086 | .297 | 1.524 | .171 |
| a. Dependent Variable: Operational Performance | | | | | | |

**Source: Research Data (2015)**

From Table 4.36, the model for the study will therefore be;

Operational performance=6.296(Constant) -1.205(CSR).

The other independent variables are eliminated from the model because at 5% margin of error and 95% level of confidence their p-values are not significant, thus the model is modified to only accommodate CSR where; β=-1.205,T-value=-2.972 and p=0.021<0.05,thus its statistically significant.

From the results above, when all the independent variables were regressed against the dependent variable, betas for regulatory/legislation restrictions, competitor pressure, customer pressure, economic/cost reductions benefits, green purchasing and employee training was found not to be statistically significant; for regulatory/legislation restrictions (β=0.129, t=0.545 and p=0.603> 5%) for competitor pressure (β=-.045, t=-.104, and p=0.92>5%) for customer pressure, β=-.136, t=-.356 and p=0.733>5% ,for economic benefits (β=-.424, t=-1.066, and p=0.322>5%),for green

purchasing (β=0.234, t=0.519, and p=0.62>5%), for employee training (β=0.131, t=1.524, and p=0.171>5%) all of which were found not statistically significant at 5% margin of error and 95% level of confidence.

The Standardized Beta Coefficients give a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable. At 5% level of significance and 95% level of confidence system (regulatory restrictions), had a co efficient value of 0.129 level; competitor pressure had a coefficient of 0.390.Benefits had 0.240 and challenges had 0.186,while the combination of the two was at -0.045,customer pressures had -0.136,economic benefits had -0.424,green purchasing had 0.234 and employee training had 0.131 thus we conclude an increase of legislation restrictions will subsequently increase the operational performance by 0.129,however an increase of competitors pressure will decrease operational performance by-0.045 as they is an inverse relationship between performance and competitor pressure, similarly an inverse relationship exists between customer pressure, economic benefits and operational performance but a positive relationship exists between green purchasing, employee training and performance meaning that an increase in green purchasing and training of employee will subsequently increase productivity of the firm.

### 4.5 Discussion of Findings

The study had two major objectives and the first objective was to establish relationship between sustainable supply chain management incentives and operational performance of food franchising outlets in Kenya. This objective was established by the use of regression model, where each of the independent variable was regressed with the dependent variable and later all the seven independent variable were regressed in a multi regression with the dependent variable. This study was guided by seven independent variables; regulatory restrictions, competitor pressure, customer pressure, economic benefits, green purchasing, employee training and CSR.

From the analysis of the study, all the seven independent variables when regressed on their own were found to have a positive relationship with the dependent variable (operational performance), however the relationship was found not to be as strong as it was when all the independent variables were multi regressed against the dependent variable, regulatory restrictions was seen to have an R

of 0.634, this meant that the variable on its own had an influence of 63.4% on operational variable. This is consistent with a study that was carried out by Bansal and Roth(2000) who concluded that laws in any business environment do provide an incentive for the operations of firms, the argument being that laws offer a level playing ground for all firms in a particular industry such that no single firm has un due advantage over others. Another study carried out by Chen et al (2014) also concluded the same that laws are vital incentives for performance of firms for they help to cope with the environment well.

On the other hand CSR had an R of 0.812 which was positive and had the strongest relationship with the operational performance, this meant that 81.2% of the CSR had an impact on the performance of firms, and this is consistent with a study that was carried out by Cruz (2009),the researcher concluded that CSR has a significant influence on performance and thus firms should not shy away from doing both social and environmental work for the society as this improves the image as well as sales which subsequently increases profits thus boosting expansion and growth, another study by Tencati et al (2010) also found out that CSR has a great impact on overall productivity of a firm, in their study productivity was defined by three aspects; internal returns, labour productivity and wealth.

Competitor pressure had an R of 0.216 meaning that, it only influenced performance by 21.6%, this is such as small impact but an influence nevertheless, this is consistent with a study that was carried out by Hart (2005) where it was concluded that performance increases due to competitor pressure as this pressure forces firms to develop ways and means to gain competitive advantage in the environment. Another study by zhu and Sarkis (2006) found that competitor's pressure in the environment was a necessary incentive as it helps firms to be more efficient and economical in their operations.

Customer pressure had an R of 0.345 meaning that, it influenced operational performance by only 34.5 %,thus the relationship between customer pressure and performance is weak but positive, this is consistent with a study that was carried out by Paquette (2005) who found out that customers pressure do influence firm's performance positively by their demands of better products that better meet their needs, thus firms that produce products to satisfy the market needs find themselves in a better position in the market thus boosting their performance, also another study by Hanan et al (2000) found the same results that customers pressure do play a role in boosting overall performance of the firms, in this study firms that concentrate on what customers want, they will

end up selling more as opposed to those that don't.

Economic/cost reduction benefits had an R of 0.404, meaning that this variable influenced the dependent variable by 40.4%,this was consistent with a study that was carried out by Routroy (2009), where the researcher argued that the desire by firms to cut down their cost so as to boost performance was a necessary incentive, Hassan (2013) argues that the firm cannot keep passing on its in efficiencies to the consumers, thus firms must endeavor to cut down costs by adoption of systems that are cost effective in their operations such as supply chain management systems.

Green purchasing had an R of 0.444 meaning that it influenced the operational performance by just 44.4%, this was consistent with a study that was carried out by colicchia et al (2011) who found out that to minimize environmental impact a firm must then collaborate with suppliers via green purchasing, this will eliminate a lot of wastage costs thus boosting performance of the firm in question, another study by Hines and Jones (2001) suggested that the mentoring role within green supply chain management is an emerging concept that can provide a significant relationship between the customer and the supplier, this relationship do play a huge role when it come to the overall performance of the firm. Carter and Carter (1998) found out that, firm's that use manufacturing resources that are easy to recycle and reuses boost their overall operational performance.

Employee training had an R of 0.013, meaning that the variable only influences the performance by just 1.3%, this is inconsistent with other studies carried out that have shown that capacity building in a firm boosts performance, a study by Wu et al (2010) found out that training of employees lowers accidents in a work place, reduces response time to customer demands, boosts decision making thus boosting overall performance of the firm, another study by Tyler (2003), found out that training of labour increases their productivity, boosts flexibility and efficiency.

When all the seven independent variables were regressed in multi regression the R was 0.898,meaning that all the independent variables influenced the dependent variable by 89.8%,this is a much bigger impact than for individual independent variables, this implies that for a firm to perform exceptionally well it must combine all the SSCM incentives, the R-squared was also huge for the multi regression as it was 0.807 meaning that 80.7% of the variations in operational performances could be explained by the seven independent variables.

The study also found out that, the individual independent variables regression model for competitor's pressure, customer pressure, economic/cost reduction benefits and employee training were not to statistically significant as their P-values were greater than 5% margin of error. Competitor's pressure P-value=0.44>0.05, customer pressure P-value=0.208>0.05, economic/cost reduction benefits P-value=0.135>0.05 and employee training P-value=0.964>0.05, this meant that these variables model could not be used for prediction purposes at 5%.however when all the seven independent variables were multi regressed the whole model became statistically significant at 5% error margin as P-value was 0.039<0.05.

The second objective was to determine the Sustainable Supply Chain Management Incentives commonly used by food franchising outlets in Kenya, in this objective the incentives were found to be regulatory restrictions, CSR, competitor pressure, customer pressure, economic benefits, green purchasing and employee training and the results were obtained using the descriptive statistics, regulatory restrictions was found to have a grand mean of 2.5 and a standard deviation of 1.363,CSR had a grand mean of 2.01 and a standard deviation of 0.875,competitive pressure had a grand mean of 2.736 and a standard deviation of 1.323,customer pressures had a grand mean of 2.69 and a standard deviation of 1.274,economic benefits had a grand mean of 2.01 and a standard deviation of 0.875,green purchasing had a mean of 2.187 and a standard deviation of 0.786 while employee training had a mean of 2.375 and 2.26.

# CHAPTER FIVE

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.1 Introduction

This chapter presents the summary of findings, conclusions, recommendations and limitations of the study and suggestions for future research.

## 5.2 Summary of Findings

The study was conducted in food franchising outlets in Kenya. The main objectives of the study was to determine the SSCM Incentives commonly used by food franchising outlets in Kenya and to establish relationship between sustainable supply chain management incentives and operational performance of food franchising outlets in Kenya. Data was collected through the use of questionnaires and analyzed through the use of data analysis software SPSS version 22, statistically the data was analyzed through descriptive statistics and the underlying relationships was done through the use of regression model, regression ANOVA and regression co efficient.

The study had seven independent variables that is; regulatory restrictions, competitor pressure, customer pressure, economic benefits, green purchasing, employee training and CSR, these were regressed in a simple linear trend against the dependent variable operational performance. Each of the independent variable was regressed against the dependent variable and the results indicated that all of them had a positive relationship as it was depicted by the individual R's, however this changed a little when a multi regression model was used, the R was still positive but much stronger. It was also found out that while using beta's, F-ratio's and T-ration for the individual independent variables the individual regression models for competitor's pressure, customer pressure, economic/cost reduction benefits and employee training were not statistically significant at 5% margin of error and at 95% level of confidence, however when multi factors were added to the model, the model became statistically significant. This can be attributed to the fact that there is a mitigating effect such that the insignificants of the 4 independent variables (competitor's pressure, customer pressure, economic/cost reduction benefits and employee training) is cancelled out by the strong significant level of the remaining 3 independent variables (CSR, Regulatory and green purchasing).The general analysis and conclusion is that a firm should adopt all the incentives so as to boost overall performance.

The second objective of the study was to determine the Sustainable Supply Chain Management Incentives commonly used by food franchising outlets in Kenya. In this regard the study adopted the descriptive statistics or the various incentives.

The first incentive was regulatory restriction and from the study the level of regulatory of franchise firms in Kenya was found to be high as the grand mean was 2.5 and the standard deviation was 1.363,the restriction being high can be argued to be good and the main reason for this high level of restriction's is that the restaurant franchising industry is a sensitive sector that hugely involve health and safety for the meals that the public consume, thus quality and hygiene is a priority so as to safeguard what the public consumes. Therefore the government has moved in to put measures to ensure that quality of food is not compromised and that there is a level playing ground for the firms.

The second incentive was CSR and the level of CSR among the Franchising firms in Kenya was found to be low as the grand mean was 2 and the standard deviation was 0.856,the main reason for these from the results was the cost aspect, the firms felt that CSR activities involve costs that even when incurred do not translate to financial benefits to the firm, considering that Franchising firms chase growth and are profit oriented, they therefore prioritize the primary objective of their existence as opposed to the CSR activities that could either be secondary or tertiary objectives.

The third incentive was competitor pressure and the level of this variable was high as the grand mean was 2.736 and the standard deviation was 1.323, the reason for this high level of competitor pressure among the franchising firms in Kenya is the product factor. Most of the franchising firms deal with fast foods that are in high demand especially in the urban areas, this therefore makes the industry to have cut throat competition as the firms are competing to have an edge in the market, this competition has led to adoption of measures such as aggressive adverts, adoption of information systems, outside catering and the likes.

The fourth incentive was customer pressure, the level of this variable was found out to be high as the grand mean was 2.69 while the standard deviation was 1.274, the high level customer pressure can be attributed to the high bargaining power the customers have in the industry, options are many thus they demand quality products for the value of their cash.

The fifth incentive was economic/cost reduction benefits, the level of this was found to be low as

the grand mean was 2.01 and the standard deviation was 0.875,the low level of cost reduction benefits can be attributed to a couple things; one is the market demands that is the competitor pressure and customer pressures, to cater for the needs of these stakeholders the company must incur costs thus this makes this an incentive to go the supply chain management way, second is the fact that the some of the franchising firms are in start stage and by a matter of principle start companies do incur huge costs to gain ground in the market.

The sixth incentive was green purchasing, the level of green purchasing was found to be low as the grand mean was 2.187 and standard deviation was 0.786 and the main reason for this among the franchising firms in Kenya is fact that the concept of green purchasing is new, thus most of the firms have not embraced the concept, but some aspects of the green purchasing such awareness among the employees was found to be there as the mean for this was high at 3.2,this therefore shows that there is hope and in the near future the concept will be in full operational.

The seventh incentive was employee training, the level of this was found to be average as the grand mean was 2.375 and standard deviation was 2.26, this can be attributed to the cost factor, firms are not willing to send their employees for capacity building as they fear to incur the cost, however most of the firms were found to be encouraging their employees to attend training such as seminars and conferences.

### 5.3 Conclusion

This study had two major objectives, the first one was to determine the Sustainable Supply Chain Management Incentives commonly used by food franchising outlets in Kenya which was handled by the use of descriptive statistics where means and standard deviations were applied and the second objective was to establish relationship between sustainable supply chain management incentives and operational performance of food franchising outlets in Kenya which was handled by the use of the regression model.

From the study it was found out that the level of regulatory restrictions was high and this was seen to be a good move due to the nature of the industry that involves the need of quality and hygiene, also the need for having a level playing ground, regulatory was also found to have a strong positive relationship with the overall performance as R was 0.634.

The level of CSR was found to be low in the franchising firms in Kenya and this was due to the

cost aspect, firms felt that they will incur cost for CSR and this won't have a financial benefit in return. The relationship of CSR with operational performance found to be positive and strong as R was 0.812, meaning that firms still believed that despite the cost aspect engaging in CSR can still boost performance.

The level of competitor pressure was found to be high as the industry is volatile and very competitive and due to this firms do incur costs to better their products and service delivery so as to have an edge in the market. The relationship of competitor pressure with operational performance was however found to be positive and weak as R was 0.216 meaning that competitors do not play a major role to the operational performance.

The level of customer pressure was found to be high as the customers are demanding more of quality products and services for the value of their cash thus firms have incur costs to better their products and service delivery so as to get as many customers market. The relationship of competitor pressure with operational performance was however found to be positive as R was 0.34 meaning that customer's pressure does not play a major role to the operational performance.

The level of economic benefits/cost reduction was found to be low in the franchising firms in Kenya and this was due to the customer and competitor pressure aspect, firms felt that they will incur cost to cater for competitor and customers. The relationship of economic/cost reduction benefits with operational performance found to be positive as R was 0.404, meaning that economic/cost reduction benefit isn't impacting performance heavily.

The level of green purchasing was found to be low and the main reason for this among the franchising firms in Kenya is fact that the concept of green purchasing is new, thus most of the firms have not embraced the concept. The relationship of green purchasing with operational performance was positive as R was 0.444 meaning that green purchasing isn't impacting performance heavily.

The level of this was found to be average this can be attributed to the cost factor, firms are not willing to send their employees for capacity building as they fear to incur the cost, however the relationship of employee training was positive and very weak as R was 0.013 meaning that employee training isn't impacting performance heavily.

## 5.4 Limitation of the Study

The study had one big limitation. The study did not attain 100% response rate because the Food Franchising firms in Kenya which was the context considered involved some parameters profit, cost reduction and ROI which some respondents felt that such information was too sensitive to share, in this perspective only a few were willing to respond to some questions that were very critical in the study.

Despite the above limitation, the quality of the study was not compromised; the study has made an immense contribution to the existing body of knowledge, especially in the area sustainable supply chain management incentives which has not been fully exploited.

## 5.5 Recommendations

From the study findings, the following recommendations are proposed; first the Food Franchising firms in Kenya should embrace the training culture, most of the firms were not serious on capacity building citing cost as a reason, but firms in this sector should remember that capacity building improves effectiveness and efficiency of workers as well as overall productivity of the workers which translates to overall increase in productivity and performance of the firm.

The Food Franchising firms in Kenya should also have training policies at their work places as this was found to be missing ,the policy will define who, when where the capacity building will take place. Capacity building is one aspect of having an edge in the market, considering that most of the franchises are in fast foods sector service delivery is core and one to improve service delivery is via capacity building.

Food franchising firms in Kenya should strive to be ISO certified, this is one way to show quality compliance and adherence, considering the sector in which they operate in quality, health and safety is very important and ISO certification is one way to boost the customer's confidence.

Food Franchising firms in Kenya should also strive to adopt the use of Information systems such supply chain management(SCM),Customer relationship management(CRM),enterprise resource management(ERP) as this is one way to improve efficiency and boost overall operational performance.

The government should endeavor to regulate the Food Franchising firms in Kenya more as a

properly regulated sector has order and tend to perform better as there is no firm taking advantage of the other or that has undue advantage.

### 5.6 Suggestion for Further Research

This study only considered the sustainable supply chain management incentives and operational performance of food franchising outlets in Kenya. Other areas of study could be SCM incentives in the private hospitals or publics hospitals and the impact on performance.

Another area of study could be factors for adoption of SCM systems among the food franchising outlets in Kenya.

Another area of study could be challenges for adoption of SCM systems among the food franchising outlets in Kenya.

Another area of study could be SCM incentives in the public or private universities or high schools and the impact on performance.

The study recommends that there is need to increase awareness on sustainable supply chain management practices on the enhancement of operational performance in the Food Franchising Outlets in Kenya, this will assist in proper planning and utilization of resources.

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# APPENDICES

## Appendix I: Research Questionnaire

### Introduction

This questionnaire has been designed for the sole purpose of collecting data on the Sustainable Supply Chain Management Incentives and Operational Performance of Food Franchising Outlets in Kenya. The data collected will be treated with a very high degree of confidentiality and it is meant for academic purpose only.

### Part I: General Information

1. Name of the firm …….

2. Gender:

   Male ( )  Female ( )

3. Position in the firm ……...

4. How long has your firm been in operation? .....years

5. How long have you worked in this firm? ……years

6. How long has your firm adopted Sustainable Supply Chain Management?

   a) 1 year ( ) b) 2 years ( ) c) 3 years d) If more please indicate here the number of years …….

   e) Under consideration ( )

**Part II: Commonly used incentives of sustainable supply chain management**

7. Indicate to what extent your firm has implemented the regulatory restriction as an incentive for sustainable supply chain management.

1= Very Great Extent 2= Great Extent 3= Moderate Extent 4= Small Extent 5= Very Small Extent

| **Regulatory Restrictions** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| The firm adopts sustainable supply chain management practices to reduce the risk of being prosecuted for anti-environmental and unethical practices | | | | | |
| The firm purchases biodegradable materials from their suppliers due to lower financial implications | | | | | |
| The firm is inspired by the environmental regulations awareness and laws to become environmentally responsible | | | | | |
| The firm is implementing regulatory restrictions as a sustainable supply chain management incentive for sustainable performance | | | | | |
| The firm's adoption of environmental management systems like ISO Certification (ISO 14000) has triggered sustainability trend in the management of their supply chain | | | | | |
| The firm ensures proper solid waste management due to NEMA promotion of environmental management systems in supply chains of firms and organisations | | | | | |
| The firm considers legislation/Government regulation as the most powerful incentive to cope with environmental issues and sustainability in the management of their supply chain. | | | | | |
| The firm has a policy to manage waste and sustainability in the supply chain as a result of Government intervention and pressure | | | | | |
| The firm has brought sustainability issues into the board of management and onto strategic planning agendas as a result of Government regulation and stronger public mandates for environmental accountability. | | | | | |
| The firm is encouraged or forced to adopt minimum environmental standards as a result of subsidising of renewable technologies and industries such as solar power generation | | | | | |
| The firm explores more non-regulatory ways for greater environmental improvements due to pressures from regulators | | | | | |
| The firm's employees are well conversant with various legislation on environmental practices and performance | | | | | |
| The firm has been offered Government incentives such as training, seminars, certification, awards, recognition and environmental education to encourage adoption of sustainable supply chain management | | | | | |

8. Indicate to what extent your firm has implemented the Social and Environmental Responsibility as an incentive for sustainable supply chain management.

1= Very Great Extent 2= Great Extent 3= Moderate Extent 4= Small Extent 5= Very Small Extent

| **Social and Environmental Responsibility** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| The firm engages in corporate social responsibility and has a policy towards environmental protection | | | | | |
| The firm is able to get guidance through the use of ISO 26000 and operates in a socially responsible way that is in an ethically and transparent way that contributes to the welfare of the society | | | | | |
| The firm's relationship to the society and environment in which it operate is a critical factor in its ability to continue to operate effectively. | | | | | |
| The firm uses ISO 26000 as a measure of their overall performance | | | | | |
| The firm takes into account the environmental factors such as consume less natural resources, dispose of fewer wastes, generate fewer greenhouse gases in their decision-making and daily operations to minimize the negative impact on the environment. | | | | | |
| The firm takes action to reduce the company's carbon print and to prevent workers from developing work related diseases | | | | | |
| The firm identifies and understands various Health, Safety and Environment (HSE) regulations and observe labour practices as in the HSE policy | | | | | |
| The firm's CSR determines its approach towards the sustainable supply chain management practices | | | | | |
| The firm incurs costs that doesn't lead to immediate financial benefit but promote positive social and environmental change | | | | | |
| The firm considers social responsibility as an integral part of the wealth creation process and when properly managed enhances its competitiveness | | | | | |
| The firm organizational philosophy such as the profit making activities have minimum social impact | | | | | |
| The firm corporate social responsibility results in generating specific standards and codes that bring standardized procedures causing efficiency and effectiveness and increase in overall performance | | | | | |
| The firm corporate social responsibility determines its approach towards the green/sustainable supply chain management practices | | | | | |
| The firm considers CSR as an important driver to environmental management and has relevant CSR programs which may win the customers leading to better performance | | | | | |
| The firm's social and environmental responsibility aims at assessing and taking responsibility for the firm's effects on the environment and impact on social welfare | | | | | |
| The firm's social and environmental responsibility applies to its efforts that go beyond what may be required by regulators or environmental protection groups | | | | | |
| The firm's CSR depicts fair treatment to the workforce and setting up of supply chain such that it does not damage the environment | | | | | |

9. Indicate to what extent your firm has implemented the economic and cost reduction as an incentive for sustainable supply chain management.

1= Very Great Extent 2= Great Extent 3= Moderate Extent 4= Small Extent 5= Very Small Extent

| **Economic Benefits or Cost Reduction Benefits** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| The firm's market expands due to minimization of negative environmental impacts of the products & processes and recycle of post-consumer waste | | | | | |
| The firm's revenue is positively impacted when customers prefer their products due to being environmentally friendly | | | | | |
| The firm achieves real and permanent reduction in the unit cost of goods or services without impairing suitability and quality of the product | | | | | |
| The firm's costs are lowered when investing in environmental management systems that decreases accidental environmental releases and liability | | | | | |
| The firm's costs may be reduced through proactively managing environmental regulations | | | | | |
| The firm's unit cost is achieved by retaining essential characteristics and quality of the products through improved methods and techniques | | | | | |
| The firm's cost reduction is confined to permanent and genuine savings in the costs of manufacture, administration, distribution and selling brought about by elimination of wasteful and inessential elements from the design of the product, techniques & practices carried out in connection therewith | | | | | |
| The firm ultimate goal for adopting sustainable supply chain management is to generate profits and gaining new market opportunities | | | | | |
| The firm adopts sustainable supply chain management to create a competitive advantage | | | | | |
| The firm's adoption of environmental innovation practices and economic benefit leads to better or improved financial performance | | | | | |

10. Indicate to what extent your firm has implemented the competitor pressure as an incentive for sustainable supply chain management.

1= Very Great Extent 2= Great Extent 3= Moderate Extent 4= Small Extent 5= Very Small Extent

| **Competitor Pressure** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| The firm's competitors and market influence the sustainability initiatives where customers and competitors define the market of the products by demanding for a sustainable product and selling sustainable product respectively | | | | | |
| The firm's competitor pressure for a green product is a driver in its sustainable supply chain management and adoption of ISO 14001 by the firm in its operations | | | | | |
| The firm considers a cooperative orientation in pollution prevention, product stewardship and sustainable strategies as a requirement for achieving sustained competitive advantage | | | | | |
| The firm considers investing in reverse logistics activities such as recycling due to competitive pressure and to competing in the sector. | | | | | |
| The firm face intense scrutiny from competitors and external environmental activists hence working in an environment that includes pressure has induced it to adopt green initiatives to combat competition and gain competitive advantages | | | | | |
| The firm's SSCM applications has made it obtain large gains and the adoption of developments that cause an increase in brand value in addition to cost savings is as a result of push by rivals to do similar practices | | | | | |

11. Indicate to what extent your firm has implemented the green purchasing as an incentive for sustainable supply chain management.

1= Very Great Extent2= Great Extent3= Moderate Extent 4= Small Extent 5= Very Small Extent

| **Green Purchasing** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| The firm's purchasing practices seek to ensure sustainability by reducing sources of waste and promote recycling, reuse, substitution of materials and proper sourcing | | | | | |
| The firm centers to set purchasing policies or guidelines that integrates and reflect concerns for natural environment in its purchasing process | | | | | |
| The firm acquires raw materials, select suppliers and choose products with an emphasis on environmentally friendly packaging, recycling, reuse, resource reduction and disposal | | | | | |
| The firm's approach to minimize environmental impact in inbound supply chain includes eco-labeled product purchase, adoption of environmental criteria into the supplier assessment systems | | | | | |
| The firm's purchasing enables better compliance with existing norms, improvement of brand image for consumers and better ranking by non-financial notation organisations. | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| The firm chooses suppliers whose processes are ISO 14001 certified and encourages those who have low raw material consumption, controlled emissions, pollution levels and raw material tracking | | | | | |
| The firm's purchasing objective extends beyond recycling and reuse such that evaluations and audits of supply chains investigates life cycle costs, product designs for reuse and supplier or production choices | | | | | |
| The firm integrates their environmental goals with their purchasing activities in order to become green or initiate green initiatives in their supply chain | | | | | |
| The firm has developed a scorecard based on specific metrics and manages as well as evaluates their suppliers' environmental performance and provides advice to them on improving their performance. | | | | | |
| The firm's purchasing is an important agent for change concerning environmental initiatives and compliance in the supply chain | | | | | |
| The firm's shift from non-green or traditional purchasing to green purchasing practices is as a result of consumers awareness and experience of environmental problems | | | | | |
| The firm's consumers are recognizing the enormous impact their buying behaviours have on the environment which reinforces the position of the environment as a top world concern and thus increase their green purchasing behavior | | | | | |
| The firm practices green purchasing by incorporating environmental sustainability issues into their choices of materials, parts and equipment moving beyond traditional purchasing criteria such as cost, quality, flexibility or payment terms | | | | | |
| The firm adoption of green purchasing directly affect their suppliers practice and thus causing ripple effect through which local firms considers environment practices to gain legitimacy | | | | | |
| The firm's green purchase helps to promote clean production technology in the sustainable supply chain | | | | | |
| The firm's employees are aware of the firm's green purchasing policy and actually implements it | | | | | |
| The firm has chosen an optimal appropriate green purchasing strategy and can obtain competitive advantages of the sustainable supply chain when faced with a competitive market | | | | | |
| The firm's green purchasing performance metrics include quality, delivery time, capacity of production systems, price, financial status, capability of R&D and packaging cost. | | | | | |
| The firm has adopted green purchasing as a way to reduce the human health, environmental and social impacts of routine purchasing decisions | | | | | |
| The firm ensures that suppliers meet their environmental objectives through collaborative activities that include training, environmental information sharing, green innovation and research | | | | | |
| The firm considers purchasing green materials due to their lower financial implications as compared to other non-green materials | | | | | |

12. Indicate to what extent your firm has implemented employee training as an incentive for sustainable supply chain management.

1= Very Great Extent2= Great Extent3= Moderate Extent 4= Small Extent 5= Very Small Extent

| **Employee Training** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| The firm has a training policy and the training has a direct relationship with the environmental performance of employees | | | | | |
| The firm has an effective training program and education and these are major requirements for achieving successful implementation of SSCM in the firm | | | | | |
| The firm analyzes and studies the methods of training before it relies on them to train a competent workforce and this is to ensure that it complies with the standards required | | | | | |
| The firm training policy is an integral part of the firm's agenda and its implications necessitate that employees' training to improve green practices be versatile and job specific | | | | | |
| The firm's management encourages employees to learn green information by organizing seminars, conferences or environmental studies either through self-initiatives or through the firms funding of courses | | | | | |
| The firm commits itself to offer training to staff in order for the firm's sustainability strategy to be adopted and be effectively implemented in its operation | | | | | |
| The firm's employee training systems facilitates the intelligent deployment of its existing resources and capabilities to enhance sustainable supply chain management | | | | | |
| The firm has a formal process of training and also uses outside consultants to conduct employee training sessions for improving environmental performance and sustainability knowledge in its supply chain operations | | | | | |

13. Indicate to what extent your firm has implemented customer pressure as an incentive for sustainable supply chain management.

1= Very Great Extent 2= Great Extent 3= Moderate Extent 4= Small Extent 5= Very Small Extent

| **Customer Pressure** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| The firm's customer demands have a strong influence on the decisions that the firm takes toward eco-design of its products and process and pursuance of a minimum green standard | | | | | |
| The firm considers the environment in the properties of its products and services and this meets customer requirement in order to obtain the most sustainable solution, | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| The firm's reputation and sales volumes is increased when customers aware of green products prefer to purchase green products from the firm | | | | | |
| The firm's sustainability practices and outcomes in the supply chain have been moderately impacted by the customer pressure and lack of it leads to a loss of customers and negatively impacts economic performance | | | | | |
| The firm's customer demand for a green product is a key driver in its sustainable supply chain management and adoption of ISO 14001 by the firm in its operations | | | | | |
| The firm's market opportunities in the form of environmental attributes and responsibility within the supply chain are created as a result of customer pressure | | | | | |
| The firm environmental collaboration and interactions with upstream suppliers and downstream customers is useful in reaping performance gains and environmental supply chain performance | | | | | |
| The firm development of policies and sustainability practices protecting the environment along the supply chain involves customers in the process of formulation and development | | | | | |
| The firm responds to pressure from customers demanding the adoption of green supply chain initiatives, but the decision is based on evaluation of the benefits obtained by the firm to adopt these practices. | | | | | |
| The firm's customer pressure causes it to confirm to sustainability practices and be perceived as more legitimate and trustworthy to gain competitive advantage | | | | | |
| The firm's urgency for an efficient and effective sustainable SCM system is due to greater customer education regarding the potential economic and non-economic benefits of reverse logistics, consumer rights and specific customer requirements regarding quality, reliability, delivery. | | | | | |
| The firm's customers exert pressure on it to take an environmentally conscious approach to product design, to minimize adverse environmental impacts of the product throughout its product life, and to promote recycling and reuse of the product and its packaging | | | | | |

**Part III:**

14. To establish the relationship between sustainable supply chain management incentives and operational performance.

Kindly provide us with the following information for the periods 2012 – 2014 to enable us compute the firm's operational performance

**Operational Performance Parameters**

| **OPERATIONAL PERFORMANCE PARAMETERS** | **Unit of measure** | **2012** | **2013** | **2014** |
|---|---|---|---|---|
| Customer satisfaction | % | | | |
| Annual sales | Kshs | | | |
| Cost savings | Kshs | | | |
| Quality of Products and services | % | | | |
| Profit | Kshs | | | |
| Range of Product & Service | No. | | | |
| Action on customer complaints | % | | | |
| Return on investment | % | | | |
| Order lead time | Days | | | |
| Number of deliveries of Products | No. | | | |
| Cost efficiency | % | | | |
| Employee satisfaction | % | | | |
| Product flexibility | % | | | |
| Employees Productivity | % | | | |
| Capacity Utilisation | % | | | |
| Competency development | % | | | |
| Purchase order cycle time | Time | | | |
| Total Average Inventory | No. | | | |
| Product availability | % | | | |

**Appendix II: Food Franchising Outlets in Kenya**

| NO. | NAME OF FIRM |
|---|---|
| 1. | Kentucky Fried Chicken (KFC) |
| 2. | Cold Stone Creamery |
| 3. | Steers |
| 4. | Debonairs Pizza |
| 5. | Subway |
| 6. | Snack Attack |
| 7. | Naked Pizza |
| 8. | Innscor (Pizza Inn, Galitos) |
| 9. | Innscor (Bakers Inn) |
| 10. | Domino's Pizza |
| 11. | Ocean Basket |
| 12. | Teriyaki Japan |
| 13. | Planet Yogurt |
| 14. | Spurs (Golden Spur Steak Ranch Restaurant) |
| 15. | Al-Baik |

**Source: www.eatout.co.ke (2015)**