SUSTAINABLE SUPPLY CHAIN MANAGEMENT PRACTICES AND OPERATIONAL PERFORMANCE OF LARGE SUPERMARKETS IN NAIROBI COUNTY

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT
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NAIROBI

DECLARATION

I, the undersigned, declare that this is m	y original wor	rk and has n	ot been prese	nted
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DEDICATION

I dedicate this project to my lovely husband and friend William Wanyoike Ngugi for his patience, unwavering support and for being my number one cheer leader as I pursued my MBA. Further, I dedicate this project to my beloved parents Simon Njoroge Mwaura and Magdalene Njeri Njoroge for it all started from sacrifices they made to ensure that I had a good foundation in my education and for their unending love and goodwill.

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ABBREVIATIONS AND ACRONYMS

CSR Corporate Social Responsibility

CCCS Climate change commitment safety

GSCM Green Supply Chain Management

LSNC Large supermarkets in Nairobi County

OP Operational Performance

PM Performance Measurement

RBV Resource Based View

SC Supply Chain

SSC Sustainable Supply Chain

SCM Supply Chain Management

SSS Sustainable Supplier Selection

SCOP Supply Chain Operational Performance

SSCM Sustainable Supply Chain Management

SSNM Sustainable Supply Network Management

SSCMP Sustainable Supply Chain Management Practice

SSCMP's Sustainable Supply Chain Management Practices

TBL Triple Bottom Line

TBL Transactional Cost Analysis

3P'S People, Planet and Profit

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ABSTRACT

Sustainable SC management practices are key in the improvement of operations of a firm based on the fact that it focuses on the social, environmental and economic Supermarkets are key in the provision of all the factors in the organization. necessary consumables in the operations of the firm. This research was on SSCMPs and OP of LSNC. The study was on objectives: To determine extent of implementation of SSCMP adopted by LSNC. To determine the relationship between SSCMP on OP of LSNC. The study adopted a descriptive design. The target population consisted of 40 LSNC. Primary data was used for this study collected by use of questionnaires. The SC quality managers, inventory managers, SC managers, procurement officers or their equivalent in procurement department were the respondents in the various large supermarkets. Descriptive statistics and multiple regression analysis was used in analysis of data collected. From the results SSCMPs had been implemented in LSNC to a large extent. The study findings revealed SSCMPs and quality, followed by dependability and finally cost as operational performance measures were affected positively by implementation of SSCMP in LSNC. The research also concludes that LSNC have adopted SSCMPs to a large extent and 86% of costs, 83% of quality and 85% of dependability is affected by implementation of SSCMP. The study recommends that future studies be carried out on SSCMPs in other supermarkets. In addition, we need to have a holistic view of all the supermarkets in Kenya other than the LSNC. The limitation of this research was that it was solely based on LSNC and also solely focused on OP other than SC as a whole. It was solely based on SSCMPs.

Keywords: Sustainable SC Management practices, operational performance, large supermarkets.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The past three decades have become very dynamic place with changes occurring rapidly in the external and internal environment. This has led to huge challenges to SC managers in managing cost reduction with corporate social responsibilities (Epstein & Buhovac, 2010). Elimination of redundant activities in a SC is key in the attainment of the firm's competitive advantage across their SC. Implementation of sustainable practices like greenness in a firm's operations is highly effected by degradation in the environment, the rates at which global warming occurs. This helps a firm in ensuring that they incorporate these practices in their SC, (Crook, 2008; Deshpande, 2012).

People, Planet, and Profit, are what makes up the 3PS of sustainable practices which is also termed as the triple bottom line. Sustainability has the role of protecting and maximizing the benefit of the 3Ps. Recognition of valuable resources by ensuring that they are in a position to minimize on wastes therefore maximizing profits is the major role played by the planet aspect of sustainability. Use of the triple bottom line (TBL) helps firms be in a position to come up with separate bottom line measurements three in number Goel, P. (2017).

Retail industry has improved the distribution system which has facilitated the penetration of products to the rural areas which has enabled the low income earners to get the products at affordable price as per the quantity. Large supermarkets through creation of jobs have

facilitated growth of the economy and have transformed the market industry (Neven and Readorn, 2005). This study will be guided by resource based view which is based on overreliance by firms on external environment for resources and transactional cost economics theory which guides a firm in evaluating on whether to provide services inhouse or outsource to an external service provider.

1.1.1 Sustainable SC Management Practices

Management of material information and capital along the SC is what is termed as SCM (Seuring and Muller, 2008). This occurs while making sure that all three dimensions of sustainable development, i.e., social, environmental and economic are taken account into. For firms to ensure that they are in a position to improve efficiency and effectiveness of the SC they need to adopt SSCM, (Seuring and Muller 2008). For firms to achieve the best out of SSCM, there is need for them to adequately have much focus on the whole SC as a whole from the supplier's side upstream in the delivery of raw materials to the final steps which entail the delivery of goods to the final customer. SCM is general and entails sustainability as part of it since it is a general umbrella that entails SCP as part of it. For this incorporation to be a success, there is need for implementation of SSCMP using the TBL concept in the SCMP (Ansari and Qureshi, 2015).

The social, environmental and economic aspects are what makes up the three pillars of sustainability. This pillar of SSCMP helps ensure that the welfare of employees is well catered for by the firm in terms of working environment, ethics among other aspects. People entails the social aspect of SSCMPs which has variables that look at health and well-being, quality of life, social capital, among others. Planet are variables that exist in

the external environment. It consists of resources that exists in the natural environment that while profit is made up of variables that are more of economic and helps firms gain profits in a firm (Carter & Rodgers, 2016). It may entail actions like promoting the local suppliers by buying products from them which helps support with regeneration of income locally (Seuring 2014). Implementation of SSCMP helps a firm achieve less product returns, less customer complaints, lower costs of goods, more recycles of products, disposal of wastes that is better. This is the long run helps a firm achieve improved levels of profitability due to high levels of efficiency achieved and low costs profitability (Wamalwa, 2014).

1.1.2 Operational Performance

Performance measurement is a very diverse subject and various parties with different functional backgrounds approach it differently (Neely, 2007). OP is one that is usually established by measuring against a standard that is used to measure the level of effectiveness and efficiency. It goes ahead and evaluates the level to which the firm is responsible to the external environmental in matters pertaining timeliness, leanness, productivity and regulatory compliance (Schoenherr & Swink, 2012). The finance and accounting perspective, views performance as a tool to manage the business and control its activities in terms of cash flow planning, profitability and asset management (Otley, 1999). Clarke, (1999) explored performance measurement from a marketing perspective and concluded that measures used for example market share or return on investment are no longer the issue. The greatest issue is to understand how the measures are interlinked in order to determine how they can be used effectively in management. From an operations point of view, performance measurement helps evaluate the efficiency and effectiveness in

the county government in Kenya (Neely, 2007). All these views of performance measurement are valid but dependent on the area of interest. In SC the major factors that contribute to improvement of OP include procurement, development of new products, production, marketing and logistics (Wong et al., 2011). Cost, quality and dependability will be used as OP measures.

1.1.3 Large Supermarkets in Nairobi County

An intermediary which sells goods to final consumers to be used for various needs. They help meet place and time utility by ensuring that customer needs are met in an organization by availing to consumers when needed. Kenya is the leading country in retail sector in form of number of supermarkets and hypermarkets with over 300 supermarkets country-wide (Economic Survey, 2015). Large supermarkets play a very big role in the economy by provision of employment to more than ten thousand people. Supermarkets through creation of jobs have facilitated growth of the economy and have transformed the market industry (Neven and Readorn, 2005). This industry has improved the distribution system which has facilitated the penetration of products to the rural areas which has enabled the low income earners to get the products at affordable price as per the quantity, (Neven and Readorn, 2005).

Based on a report by Cyton investment's (2017), on retail sector in Kenya, Kenya has fueled investment of billions of shillings' worth of modern shopping malls on retail industry in Kenya over the years. This has been highly attributed by demand as the expenditure level for the average Kenyan having risen by 67% which has fueled the fast growth in the retail industry in Kenya. This high increase in demand has led to much interest in the Kenyan retail industry by external players like South Africa's The Game,

France's Carrefour and Botswana's Choppies which has taken over Ukwala. They have opened stores in major mall; Garden city mall, Sarit Centre, Village market, Two rivers mall and Thika Road Mall. According to Karanja (2018) there are a number of challenges that face supermarkets in Kenya that are an inhibitor to the growth and development of supermarkets in the country. Lack of good management of capital, high saturation of markets in the area, high competition are major challenges that face supermarkets in Kenya.

1.2 Research Problem

Over the years, SSCMP has become a major priority for many companies around the world. Despite the fact that the concept of sustainability has evolved over the years there has been little or no communication on how it is more advantageous as compared to the limitations that are faced in the implementation of SSCMP, (Santos and Filho, 2005). Although many studies have been carried out on sustainability, little or no research has tackled on the impact that SSCMP has on OP.

Supermarkets in Kenya experience a number of limitations that face the retail industry and specifically supermarkets in Nairobi County. This challenges are like green consumerism, pressure from regulatory bodies, governments among others in their quest to meet consumer needs. To counter these challenges, there is need to put in consideration the economic, social and environmental perspectives, Zhu (2008). The supermarkets in Kenya have faced many challenges where large supermarkets are on their knees leading to a situation where suppliers have pulled out resulting in closure of branches. Nakumatt Supermarket for example had expanded beyond its holding capacity resulting to a situation

whereby their capacity was constrained. Customers have become much aware of what is happening in their external environment and are conscious of the social, environmental and economic factors that affect their consumption factors. Supermarkets have to come up with strategies to meet the people, planet and profit aspects of SSCMPs.

Several studies have been carried out on SSCMP. Globally, Salmona (2015) carried out a study on SSCMP in wheat SC in Australia. The study ascertained, the wheat firms implemented sustainable SC in their operations and this improved performance. Morgan (2017) in his study on strategies for SSCMP in Sweden majorly focused on supplier interaction devices. From the results of the research, adoption of SSCMP in a firm's SC require that there is need for adequate communication of what the SSCMP are, the strategies that need to be adopted, in the implementation of SSCMP. (Raimi, Gainyi and Yusuf 2018) researched on the effect of (CSR) and SSCMP of wastes and effluents (SMWE) in Lagos Megacity. The study findings indicated that implementation of CSR helps improves the level of sustainability in the SC in sampled companies in Lagos. The study however was based only on Lagos Megacity. Diba (2019) researched on SSS in Vitalik milk. The results indicated sustainability had been adopted in the Vitalik milk firms and this sustainability is highly affected by the social and economic environment. The research was however based in Senegal and not supermarkets in Kenya.

Locally, Mwirigi (2016) in his study on the various hindrances faced in building a SSCMP among small firms. The study findings indicated that inadequate funds, inadequate resources, resistance from internal employees are some of the major challenges facing Faulu Kenya. The study however focused solely on Faulu Kenya as a microfinance

institute, its supplier and customer relationship and not large supermarkets in Nairobi County. Pembere, (2016) studied on GSCMP and SCP of firms listed at the NSE. From the results it was established that a positive correlation exists between implementation of GSCMP and SCMP in companies listed at the NSE. The study was however focused on green procurement management practices and performance and not sustainable SC as a whole. From the above studies, it is evident that a research gap exists based on the fact that no single study has been carried out on effect of SSCMP on OP of LSNC. Therefore, this study aimed at answering the following research questions: What is the extent of implementation of SSCMP adopted in LSNC and what is relationship between SSCMP on OP of LSNC.

1.3 Research Objectives

 To determine extent of implementation of SSCMPs adopted by large Supermarkets in Nairobi County.

To determine the relationship between SSCMPs and OP of large Supermarkets in Nairobi County.

1.4 Value of the Study

Output from the data analysis will be a great contribution to the knowledge bank of creating a better understanding of SSCMPs and their implementation in LSNC from how these practices affect their competitiveness and the challenges experienced in realizing its implementation.

Other firms will use this study finding in understanding the SSCMPs to be adopted by firms and the impact that it has on OP to facilitate the firm's ability to improve their performance

The results of this research are also of importance to scholars and researchers, as they will be used as reference data on other topics that could be related and it also serves as a source of reference to other academic students who might undertake studies on a similar topic.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the literature Review. It begins with theoretical literature review, existing literature on SSCMPs and their impacts on SCOP and ends up with conceptual framework.

2.2 Theoretical Literature Review

This section discusses various theories developed by different scholars relating to the topic of the study. It is made of not only principles and theories but also the various findings that were obtained. This study is guided by Resource based theory and transactional cost economics theories.

2.2.1 Resource Based View

The RBV emphasizes the organizations' both external and internal environment as major determinants of success (Barney, 1991; Thompson, 2001). Under this theory the level of profitability in the firms is determined by rent-producing resources. This is highly sustained by making resources scarce and difficult to trade in or substitute. Based on this theory, firm's performance is highly attributed to by The (RBV) theory states that, based on this theory organization's resources are unevenly located in a firm (Warnier, Weppe, & Lecocq, 2013).

The RBV theory is related to this on the concept of implementation of SSCMPs through sharing of resources by the firm and adherence to the right aspects in relation to do with planet, people and profit in various departments for adequate achievement of the firm's goals. All resources which can be in the form of information, assets among other aspects are controlled by the firms. There is need for the firm to ensure that they adequately manage the manner that they carry out their day to day activities to ensure that the resources available are made use of in the right manner thereof, (Lockett and Thompson, 2001). This facilitates value addition to the customers through aspects like cost reduction, timely deliveries and high levels of flexibility.

2.2.2 Transaction Cost Analysis

The transactional cost analysis theory (TCA) was developed in the early 1970s, by the mathematical economist, Williamson in 1974. It is used in the general equilibrium model where they came up with a TCA. According to Williamson (1981), firms are in a position to lower costs of transactions through carrying out integration vertically and horizontally at the same time increasing trust among the partners. Integration helps in cost cutting in the inventory management process of a firm and at the same time helps in the facilitation of higher levels of service to the customers both internal and external (Skjoett-Larsen (1999). Implementation of (TCA) helps facilitate the firm's ability to cut on all costs to a minimum level. Halldorsson et al (2007), states that (TCA) facilitates the firm's ability to minimize costs incurred in the SC.

This theory is related to this topic of study based on the fact that various managers in various firms are in a position to adopt various sustainability practices in their SC that are geared towards ensuring that the firms cut on costs and they are in a position to meet

customer requirements at all times. It is related to the topic of study since implementation of sustainability in SC is costly and hence their need for adequate cost management.

2.3 Sustainability Practices

Management of material information and capital along the SC is what is termed as SCM (Seuring and Muller, 2008). This occurs while making sure that all three dimensions of sustainable development, i.e., social, environmental and economic are taken account into. For firms to ensure that they are in a position to improve efficiency and effectiveness of the SC they need to adopt SSCM. According to Seuring (2008), Sustainability practices are as discussed below:

People dimensions entail the social line of a firm. These are the dimensions which form the social aspects that affect a community or a region. The social aspects include communities, education, ensuring that there is equitable allocation of resources among the communities and the customers at large (Dillky, 2002). In the social aspect of the three pillars of SSCMPs, there is the aspect of people which ensures that the community is well protected (Elkington, 2007). Through this pillar there is need for the firm to ensure that they provide adequate resources in form of giving back to the community. By provision of equal wages and health care this helps improve the firm's performance in the long run, (Dhiman, 2016). It focusses on how a firm interacts with the community and the firms. It not only addresses issues to do with firms and tackles issues to do with community involvement and fair wages (Laurin, 2017).

Planet also referred to as environmental dimension of a firm entails various practices that most at times are based on environmental factors that affect the firm. By use of planet a SCMPs, the firm is able to minimize on costs by ensuring that it uses energy efficient resources, it helps reduce the emissions from green houses, which in the long run helps improve the image of the firm by ensuring that the firm's operational costs are reduced etc. (Laurin, 2017). It represents measurements that represent natural resources and ensure they operate for a long time (Elkington, 2007).

Profit entails the economic line of a firm's framework. It entails the effect that a firm's business practices have on the economic system (Elkington, 2007). Moreover it entails the economy's ability to meet customer needs used as the sustainability of the firm in order to achieve improved performance and ensure continuity in the future (Laurin, 2017). Through this aspect of the economy, it not only ties the economic line but also the growth aspect of the firm. Through this aspect, it ensures that the firm is in a position to ensure that it has much capacity to operate in future too. These variables mostly deal with the profitability of a firm.

2.4 Operational Performance Measurement

A recurring subject in diverse zone of the academic literature is the focus of the conceptualization and assessment of performance of operations in an organization and measurement subject (Bayo-Moriones and Cerio, 2012). For instance, the Van Wassenhove's and Corbett model deliberates on scopes of operation performance, which includes efficiency or cost, time and quality. However, OP in the various sectors is generally evaluated using four dimensions: efficiency (cost), quality, speed and flexibility.

According to (Madi and Munapo, 2016) all parts of process operations reduction uncertainty and variability within the operational system are due to the vital guides that leads to simultaneous enhancement in cost, quickness of delivery, delivery reliability and quality consistency. Responsiveness, flexibility and quality are examples of OP measures. Operational management helps in stability maintenance in operation of services enabling alterations scale, scope, service level and design (Kungu, 2014).

Efficiency entails the rise in the percentage of production hours regarding the total number of hours of the workforce 'direct presence. Efficiency is also the greatest conceivable use of all resources that are present so as to make output as big as possible (Madi and Munapo, 2016). It reveals competence and waste productive system and recognizes fruitless time as a result of organizational difficulties (Bayo-Moriones and Cerio, 2001). Quality competitiveness improves significantly reaction to the reliability of the customer's needs and operational efficiency. Service firms can evade amplified costs of service production by increasing the likelihood of doing same work again or delay of services caused by failure of services. This is accomplished by the acquisition of a certain level of quality capability, (Cho, 2014). Time shows the enhancement in the fraction of dates of supply satisfied. This classic punctuality scheme of measurement, and is well thought out as a simple feature of customer service (Bayo-Moriones and Cerio, 2012). Deliveries on time may have a substantial bearing on the satisfaction of the customer; hence an issue to seriously take into considerations in management of operations (Madi and Munapo, 2016). When sustaining shifting demands and varied requests from customer's firms can increase response and the flexibility of the process would improve the quality capabilities of service firms (Cho, 2014). An extremely flexible course would lower speed of production, while in the service

industry, bearing in mind the remarkably many service encounters, various customer complaints and need rise and hasty solutions are in numerous (Cho, 2014). A systematic performance measurement system should be in place in order to achieve operational excellence.

2.5 Empirical Literature Review

The study used descriptive statistics. The study ascertained that to a large extent the wheat firms had adopted sustainable SC in their operations and this improved performance. The study was based in Australia and hence the findings would not be applicable in Kenyan context

Morgan (2017) in his study on strategies for SSCMP in Sweden majorly focused on supplier interaction devices. From the results of the research, adoption of SSCMP in a firm's SC require that there is need for adequate communication of what the SSCMP are, the strategies that need to be adopted, in the implementation of SSCMP.

(Raimi, Gainyi and Yusuf 2018) researched on the effect of (CSR) and SSCMP of wastes and effluents (SMWE) in Lagos Megacity. The study findings indicated that implementation of CSR helps improves the level of sustainability in the SC in sampled companies in Lagos. The study however was based only on Lagos Megacity. Diba (2019) researched on SSS for Vitalait Milk Company. The results indicated sustainability had been adopted in the Vitalik milk firms and this sustainability is highly affected by the social and economic environment. The study was however based in Senegal and not supermarkets in Kenya.

Locally, Mwirigi (2016) in his study on the various hindrances faced in building a SSCMP among small firms. The study findings indicated that inadequate funds, inadequate resources, resistance from internal employees are some of the major challenges facing Faulu Kenya. Descriptive statistics was used in research methodology. The study however focused solely on Faulu Kenya as a microfinance institute, its supplier and customer relationship and not LSNC.

Pembere, (2016) studied on green procurement practices and SCP of companies listed at the NSE. From the results it was established that a positive correlation exists between implementation of GPMP and SCMP in companies listed at the NSE. The study was however focused on green procurement management practices and performance and not sustainable SC as a whole.

2.6 Summary of Literature Review

A summary of the literature review as given in table 2.2 below. The table provides the scholar, study, objectives, methodology, major findings and research gaps.

Table 2.2 Summary of Literature Review

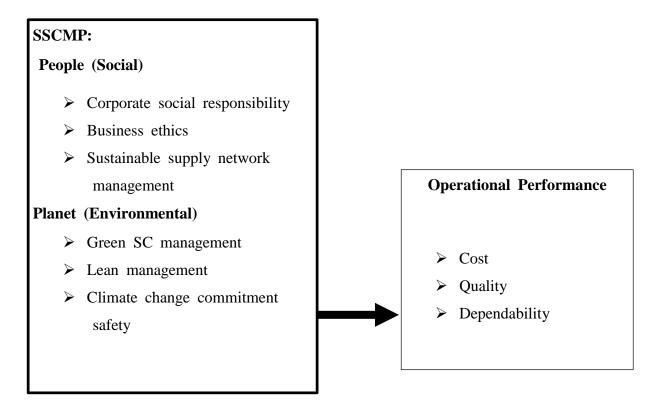
Scholar	Study	Objectives	Methodology	Major findings	Research gaps
Salmona (2015)	Sustainable SC in wheat SC in Australia.	To establish the SSCM adopted in the wheat firms and their impact on performance	Descriptive statistics.	The study ascertained that to a large extent the wheat firms had adopted SSCMP in their operations and this improved performance	The study was based in Australia and the results would not be applicable in the Kenyan context.
Mogina, (2015)	GSCMP in large manufacturing firms in Nairobi, Kenya.	To establish GSCMP in large manufacturing firms in Nairobi, Kenya.	descriptive statistics	The study ascertained that there was positive effect on SCP caused by the adoption of green SC management practices	The study was however based on manufacturing firms and not the LSNC
Pembere, (2016)	GPMP and SCP of companies listed at the NSE	To establish GPMP and SCP of companies listed at the NSE	Descriptive statistics	The study ascertained that there was a positive effect was felt by the adoption of GPMP In companies listed in NSE	It however was no longer based on the effect of SSCMPs on OP of LSNC
Morgan (2017)	Strategies adopted in attaining SSC in Sweden.	To establish the strategies adopted in attaining SSC.	The study adopted use of descriptive statistics.	The findings of the study indicate in the firm's quest to implement sustainability, there is need for clear and straight forward goals needed in the achievement of sustainability	The study however. Focused on strategies alone
Laurin (2017)	SSCMP: a case study at IKEA	To establish the extent of adoption of SSCM by IKEA and the impact it has on performance.	Descriptive statistics.	A positive correlation between adoption of SSCM and performance exists	This study was however a case study of IKEA Canada and not applicable in Kenyan context
Wangoi (2018)	Green SC management practices in large manufacturing firms in Nairobi, Kenya.	To establish the impact that GSCMP has on OP of large scale food and beverage manufacturing firms in Nairobi.	Descriptive research design	The study ascertained that there was a positive impact on SC performance by the adoption of green SC management practices	It however did not focus on the effect of SSCMPs on OP of LSNC
Diba (2019)	SSS for Satrec Vitalait Milk Company in Senegal	To evaluate, analyze and select the best suppliers for Satrec Vitalait Milk	Descriptive statistics	The selected supplier have adopted SSCMP The set criteria are key in the attainment of socio-cultural factors of a firm	The study was however based in Senegal and not LSNC

2.7 Conceptual Framework

The independent variables in this study are SSCMP and the dependent variables are OP.

Figure 2.1: Conceptual Framework

Independent Variables



Source: Researcher (2019)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Here the methodology and the methods that aided in the process of research are outlined. It starts with the research design and ends with the data analysis.

3.2 Research Design

This study adopted a descriptive research design. This research design aids the collection of data through observing, describing and recording, analysis and reporting the surrounding as they currently are by a population, (Cooper and Schindler, 2006). According to Mugenda & Mugenda (2003), describes the descriptive design to be one that assists in describing the feature, the conduct, the attitudes as well as principles of the concept under study. It ensures that the study gets information on the effect of SSCMPs on OP of LSNC.

3.3 Population of the Study

The population of the study is LSNC which are 40 in number (Appendix II).

3.4 Data Collection

The study will use data that was raw from the source. This raw data from the source is usually collected using self-administered questionnaires. The respondents of the study were the SC managers of the 40 LSNC or the equivalent. The heads of the SCM are the key persons to provide accurate information because they

oversee the procurement activities in the counties. The research tool was structured into four sections. Section A contained background information, Section B comprised of the first objective on the extent of implementation of SSCM and section C contained questions on the relationship between SSCMPs and OP of LSNC.

3.5 Data Analysis

Data for the first objective the extent of implementation of SSCMPs in LSNC was analyzed using descriptive statistics, whereas that for second objective on relationship between SSCMPs and OP in LSNC was analyzed using correlation and regression analysis. Regression analysis:

$$Y_1 = \beta 0 + \beta 1 X_1 + \beta 2 X_2 + \beta 3 X_3 + \varepsilon + \beta 4 X_4 + \beta 5 X_5 + \beta 6 X_{6+} \varepsilon$$

$$Y_2 \,=\, \beta 0 \,+\, \beta 1 X_1 \,+\, \beta \,\, 2 X_2 \,+\, \beta \,\, 3 X_3 + \in \,+\, \beta \,\, 4 X_4 + \beta \,\, 5 X_5 +\, \beta \,\, 6 X_{6+} \in$$

$$Y_3 = \beta 0 + \beta 1 X_1 + \beta 2 X_2 + \beta 3 X_3 + \varepsilon + \beta 4 X_4 + \beta 5 X_5 + \beta 6 X_{6+} \varepsilon$$

Where:

Y = OP which is measured by:

 Y_1 =Quality, Y_2 = Cost, Y_3 = Dependability

X1= Green SC management

X 2= Lean management

X3= Climate change commitment Safety

X4 Corporate social responsibility

X4= business ethics

X6= Sustainable supply network management

€=error term

 $\beta_{ij} \ \text{=} \text{Regression Coefficients}$

Table 3.1: Summary of Data Collection and Analysis methods

Objective	Questionnaire	Data Analysis
General Information	Section A	Descriptive Statistics
Extent of implementation of SSCMPs in	Section B	Descriptive Statistics
LSNC		
Relationship between SSCMPs and OP of	Section D	Correlation analysis
LSNC.		and regression analysis

Source: Researcher (2019)

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This chapter is made up of data analysis and findings. It represents findings on the data sought on the extent to which SSCMPs has been implemented in LSNC and the relationship of SSCMPs on OP of LSNC. The research's target population was the SC managers, procurement officers, quality managers and inventory managers.

4.1.1. Response rate

A total of forty questionnaires which represented the study population were issued. Thirty three out of forty questionnaires distributed were received and deemed fit for data analysis. This translates to a response rate of 83%. Based on Mugenda and Mugenda, (2003) a 70% and above response rate is considered very good and adequate for comprehensive data analysis. Thus this response rate was adequate for data analysis.

4.2 Demographic Information

Background information is key in research for valid conclusions on the research hence this study wanted to have knowledge of the information of the respondents that is very basic of all the employees working in the supermarkets. The information gathered under background information is as discussed below:

4.2.1 Gender

Based on the respondent's responses' on gender: Table 4.1 below represents information on the responses.

Table 4.1 Gender

Gender	Frequency	Percent
Male	15	45
Female	17	55
Total	33	100.0

Source: Research data (2019)

As shown in table 4.1, 45% of the target population were male while 55% were female. The difference is small and hence it can be concluded that there is no gender bias in the study.

4.2.2 Education

Based on education, the respondent's responses are as shown in the table 4.2.

Table 4.2 Education

Experience	Frequency	Percent
College	3	9
Undergraduate	10	30
Masters	20	61
Total	33	100.0

Source: Research data (2019)

From table 4.2, it can be seen that 9 % of the respondents had technical level education, 30% of the respondents had undergraduate level of education while 61% of the respondents had a master's degree level of education. This is an indicator that all the respondents had adequate relevant education and were in a position to provide information sought by the researcher.

4.2.3 Experience

Based on experience the responses given by respondents are as shown in table 4.3.

Table 4.3 Experience

Experience	Frequency	Percent	
under 2 years	3	9	
2-5 years	10	30	
6-10 years	11	33	
over 10 years	9	28	
Total	33	100.0	

Source: Research data, (2019)

The findings in table 4.3 indicated that 9% of the respondents had less than two years' experience, 30% of the respondents had 2-5years working experience while 33% of the respondents had experience of between 6-10 years and finally 28% of the respondents had an experience of over 10 years. This replicates that all the respondents had adequate experience sought by the researcher.

4.3. Implementation of Sustainable SC Management Practices

To establish the extent to which SSCMPs has been implemented by LSNC. To ascertain this, descriptive statistics were used. A scale of 0-100 was administered, where 0-no extent at all and 100-very great extent.

Table 4.3.1: Implementation of SSCMPsThe table below replicates the SSCMP, mean and standard deviation

Sustainable SC Management Practices	Mean	Std. Deviation
Green SC management	72.71	13.331
Corporate social responsibility	71.84	13.042
Lean management	71.73	13.231
Business ethics	71.44	13.324
Sustainable supply network management	68.07	14.854
Climate change commitment safety	65.08	15.568

Source: Research data (2019)

The study results indicated that all the SSCMPs have been implemented by LSNC as indicated green SC management indicated a mean of 72.71, CSR indicated a mean value of 71.84 lean management indicated a mean value of 71.73, Business ethics indicated a mean value of 71.44, sustainable supply network management indicated a mean value 68.07 while climate change commitment safety indicated a mean of 65.08. Hence SSCMPs has been implemented to a large extent in LSNC. This replicates that they are in a position to minimize on wastes by adopting the environmental factors and they are able to focus social factors affecting them.

4.4 Effect of Sustainable SC Management Practices on Cost as a SCOP

The second purpose of the research was to ascertain the impact of implementation of SSCMPs on cost as OP measure in LSNC. The research used multiple regressions on all the SCOP measures, the results on cost are as indicated below:

4.4.1 Coefficients

Measure

Coefficients^a

		Unstandardized Standardized Coefficients Coefficients			
Model	В	Std. Error	Beta	Т	Sig.
(Constant)	.149	.652		2.229	.021
Green SC	.241	.104	.226	2.310	.029
Corporate social responsibility	.787	.099	.797	7.950	.000
Lean management	.005	.081	.005	.060	.953
Business Ethics	.127	.118	.108	1.077	.291
Sustainable supply network management	.787	.099	.797	7.950	.000
Climate change commitment safety	.101	.090	.112	1.120	.273

a. Constant: Cost

From table 4.4.1 it can be seen that, GSCMP and cost not only significant but positively correlated too (z=2.310, p=0.029) Replicates that when the level of implementation of GSCMP is increased by one unit, it results to related decrease in the cost of products and services offered by 0.241. Besides GSCMP had p=0.029 value replicates that it is statistically significant since it is less than 0.05. Besides,

b. Predictors: (Constants) GSCM, CSR, lean management, business ethics, sustainable supply network management and climate change commitment safety.

Z value is greater than 1.96 hence significant. CSR and cost not only significant but positively correlated too (z=7.950, p=0.000) which replicates that when of CSR is implemented by one unit, results in lowering cost of goods and services by 0.787. Besides, p= 0.000 is less than 0.05 and hence it is statistically significant. Besides, z value is more than 1.96 hence significant. Lean management and cost are positively and insignificantly related, (z=0.60, p=0.953) which replicates that lean management when adopted, leads to lower cost of goods and services by 0.005. The significant level attained was 0.953 which replicates that lean management as a SSCMP is statistically insignificant since it is more than the critical p value of 0.05 at 95% confidence level. Besides, z value is less than 1.96 hence insignificant. Business ethics and cost are not only positively related but also and insignificantly related, (z=1.077, p=0.291) replicates that a unit increase in the implementation of business ethics results in a related lowering of cost of goods and services by 0.127, and the related p-value is 0.291 which replicates that business ethics as a SSCMP is significant since it is below 0.05. Hence implementation of SSCMPs has lowered cost of goods in LSNC.

Besides, Z value is less than 1.96 hence insignificant. Sustainable SC network and cost are positively and significantly related, (z=7.950, p=0.000) replicates that a unit increase in the implementation of sustainable SC network results in a related decrease in cost of goods and services by 0.787 and the related p-value is 0.000 which is replicates that sustainable SC network as an SSCMP is significant since it is lower than 0.05 at 95% confidence. Besides, z value is more than 1.96 hence significant. Climate change commitment safety and cost of goods and services are

not only significant but positively correlated too, (z=1.120, p=0.273) which replicates that an unit increase in the implementation of climate change commitment safety results in a related decrease in cost of goods and services by 0.101, and the related p-value is 0.273 which replicates that as a practice is significant since it is below 0.05 at 95% confidence level hence implementation of SSCMP has improved cost of goods and services in LSNC. Besides, Z value is less than 1.96 hence insignificant.

4.4.2 Model Summary

Model Summary

Model	R	R square	Adjusted R Square	Std. Error of the Estimate
1	.925ª	.856	.822	.278

- a. Constant: Cost
- b. Predictors: (Constants) GSCM, CSR, lean management, business ethics, sustainable supply network management and climate change commitment safety.

The results indicate R squared value of 86%. This means that, 86% of the variations in cost is explained by the variation in the independent variables: GSCM, CSR, lean management, business ethics, sustainable supply network management and climate change commitment safety. Unexplained variables which are factors that not in the model and occur by pure chances which are only 14 % thus indicating that this is a very good model.

4.4.3 Anova

ANOVA^a

Mode	el	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.867	6	1.978	25.562	.000 ^b
	Residual	2.012	26	.077		
	Total	13.879	32			

a. Constant: Cost

b. Predictors: (Constants): GSCM, CSR, lean management, business ethics, sustainable supply network management, and climate change commitment safety.

Based on the findings in table 4.4.3, the overall model indicated a significance value of 0.000 hence it is significant since it is below 5%. This was supported by the reported p value (0.000) which was less than 5%. The results further indicate that the F-critical (2.61) is less than F-calculated (25.562) hence the overall model is significant.

4.5 Relationship between SSCMPs and Quality as an OP Measure

The second purpose of the study was to ascertain the relationship between implementation of SSCMPs on quality as OP measure in LSNC. The study adopted use of multiple regression on all the SSCMPs as indicated below:

4.5.1 Coefficients

Coefficients^a

Model		ndardized efficients	Standardized Coefficients	Z	Sig.
	В	Std. Error	Beta		
(Constant)	.076	.830		6. 928	.048
Green SC management	.892	.097	.904	9.224	.000
Corporate social responsibility	.018	.087	.008	.092	.927
Lean management	.058	.097	.064	.594	.557
Business ethics	.081	.128	.069	.638	.529
Sustainable supply network management	.070	.083	.074	.838	.410
Climate change commitment safety	.045	.087	.047	.521	.607

- a. Dependent Variable: Quality
- b. Predictors: (Constants) GSCM, CSR, lean management, business ethics, sustainable supply network management and climate change commitment safety.

From table 4.5.1, it can be seen that, GSCMP and quality are not only significant but positively correlated too (Z=9.224, p=0.00). This replicates that when implementation of GSCMP is improved, results to related increase in the quality of products and services offered by 0.892. Besides GSCMP had p=0.000 value replicates that it is statistically. Besides, Z value is greater than 1.96 hence significant. CSR and quality are not only significant but positively correlated too (z=0.092, p=0.927) which is replicates that an increase in the implementation of CSR results to improved quality by 0.018 all other factors held constant. Besides, p= 0.927 is greater than 0.05 and hence it is statistically insignificant. Besides, z

value is less than 1.96 hence insignificant. Lean management and quality are not only significant but positively correlated too (z=0.594, p=0.557) which replicates that implementation of lean management leads to an improvement in quality of goods and services by 0.058. The p-value associated with lean management was 0.057 which is replicates that lean management as an SSCMP is statistically insignificant since it is more than the critical p value of 0.05. Besides, Z value is less than 1.96 hence insignificant. Business ethics and quality are not only significant but positively correlated too, (z=0.638, p=0.529) replicates that a unit increase in the implementation of business ethics results in a related increase in quality of goods and services by 0.081, and the related p-value is 0.529 which is replicates that business ethics as an SSCMP is insignificant since it is below 0.05. Hence implementation of business ethics as SSCMP has improved the quality of goods LSNC.

Besides, Z value is less than 1.96 hence insignificant. Sustainable supply network management and quality are not only significant but positively correlated too, (z=0.838, p=0.410) replicates that a unit increase in the implementation of sustainable supply network management results in a related increase in quality of goods and services by 0.070, and the related p-value is 0.410 which is replicates that sustainable supply network management as a SSCMP is insignificant since it is higher than 0.05. Z value is less than 1.96 hence insignificant. Climate change commitment safety and quality are not only significant but positively correlated too (z=0.521, p=0.607) replicates that a unit increase in the implementation of climate change commitment safety results in a related increase in quality of goods and

services by 0.045, and the related p-value is 0.607 which is replicates that climate change commitment safety as a SSCMP is insignificant since it is higher than 0.05 at 95% confidence level, hence implementation of SSCMPs has improved the quality of goods LSNC. Besides, Z value is less than 1.96 hence insignificant.

4.5.2 Model Summary

Model Summary

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.908ª	.825	.785	.305

- a. Dependent Variable: Quality
- b. Predictors: (Constants) GSCM, CSR, lean management, business ethics, sustainable supply network management and climate change commitment safety.

The R squared value is 83%. This means that 83% of the variations in quality are explained by the variation in the independent variables: GSCM, CSR, lean management, business ethics, sustainable supply network management, and climate change commitment safety. Unexplained variables which are factors that not in the model and occur by pure chances which are only 17 % thus indicating that this is a very good model.

4.5.3 Anova

ANOVA^a

		Sum of		Mean		
Model		Squares	Df	Square	F	Sig.
1	Regression	11.455	6	1.909	20.481	.000 ^b
	Residual	2.424	26	.093		
	Total	13.879	32			

- a. Dependent Variable: Quality
- b. Predictors :(Constants) GSCM, CSR, lean management, business ethics, sustainable supply network management and climate change commitment safety.

Based on the findings above, the overall model indicated a significance value of 0.000 hence it is significant since it is below 5%. This was supported by the reported p value (0.000) which was less than 5%. The results further indicate that the F-critical (2.61) is less than F-calculated (20.481) hence the overall model is significant.

4.6 Effect of Sustainability SC Management Practices on Dependability as an OP Measure

4.6.1 Coefficients

Coefficients^a

	Unstand	lardized	Standardized		
	Coeff	icients	Coefficients		
		Std.			
Model	В	Error	Beta	Z	Sig.
(Constant)	.820	.095	.831	8.627	.000
GSCM	.228	.110	.214	2.070	.049
CSR	.002	.083	.003	.029	.977
Lean management	.052	.101	.044	.515	.611
Business ethics	.760	.085	.831	5.627	.035
Sustainable supply network management	.016	.070	.020	.225	.824
Climate change commitment safety	.030	.082	.030	.372	.713

a. Constant: Dependability

b. Predictors: (Constants) GSCM, CSR, lean management, business ethics, sustainable supply network management and climate change commitment safety.

The results show that GSCM and dependability are not only significant but positively correlated too (z=2.070, p=0.049). This replicates that when implementation of GSCM is improved it results to related increase in the operations dependability by 0.228. Besides GSCM had 0.049 p- value replicates that GSCM is statistically significant because less than 0.05. Besides, Z value is greater than 1.96 hence significant. CSR and flexibility are not only significant but positively correlated too (z=0.029, p=0.1), replicates that when CSR is improved,

results in a related increase in dependability in operations by 0.002 The Z value attained was 0.029. The p-value of 0.1 is greater than 0.05 and hence CSR is statistically insignificant. The Z value is less than 1.96 hence insignificant. Lean management and flexibility are not only but positively correlated too (z=0.515, p=0.611) which replicates that implementation of lean management significant leads to an improvement in dependability of goods and services by 0.52 the p-value associated with lean management, p= 0.611 which is replicates that lean management as a SSCMP is statistically insignificant since it is above the critical p=0.05. The Z value is less than 1.96 hence insignificant. Business ethics and flexibility are not only significant but positively correlated too (z= 5.627, p= 0.035) replicates that a unit increase in the implementation of business ethics causes an increase in dependability of goods and services by 0.76, and the related p-value is 0.035 which is replicates that business ethics as a SSCMP is statistically significant. Besides, Z value is greater than 1.96 hence significant.

4.6.2 Model Summary

Model Summary

				Std. Error of the
Model	R	R Square	Adjusted R Square	Estimate
1	.921a	.849	.814	.284

- a. (Constant), Dependability
- b. Predictors: (Constant) GSCM, CSR, lean management, business ethics, sustainable supply network management and climate change commitment safety.

The results indicate R squared value is 85%. This means that 85% of the variations in dependability is explained by the variation in the independent variables GSCM, CSR, lean management, business ethics, sustainable supply network management and climate change commitment safety. Unexplained variables which are factors that not in the model and occur by pure chances which are only 15 % indicate that this is a fair model.

4.6.3 Anova

ANOVA^a

Mod	lel	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.780	6	1.963	24.316	.000 ^b
	Residual	2.099	26	.081		
	Total	13.879	32			

- a) Dependent Variable: Dependability
- b. Predictors: (Constant) GSCM, CSR, lean management, business ethics, sustainable supply network management and climate change commitment safety.

Based on the findings above, the overall model indicated a significance value of 0.000 hence it is significant since it is below 5%. This was supported by the reported p value (0.000) which was less than 5%. The results further indicate that the F-critical (2.61) is less than F-calculated (24.316) hence the overall model is significant.

This study is in line with a study carried out by Diba (2019) who researched on SSS for Satrec Vitalait Milk Company in Senegal. A study by Mogina, (2015) GSCMP in large manufacturing firms in Nairobi, Kenya where the research ascertained that there was a positive impact on SC performance by the adoption of GSCMP.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter includes the summary, conclusions, recommendations, limitations of the study and suggestions for further researchers. The study objectives were to determine the extent of implementation of SSCMPs adopted by LSNC, to ascertain the relationship between SSCMPs on OP of LSNC.

5.2 Conclusion

To achieve dependability in delivery of goods and services to the customers at the lowest and at affordable prices, there is need for implementation of SSCMPs. It helps in high cost savings, through timely deliveries of goods and services to the customers hence meeting the time and place utility in SC. SSCMPs helps firms focus on social and environmental factors that affect the operations of a firms. It facilitates improvement of the profit levels of a firm, it helps minimize on costs, facilitates firm's ability to minimize on pollution effects on the environment and focuses on the social effects of the firms on the environment.

Hence to moderate extent, SSCMPs have been adopted by LSNC. This facilitates their ability to manage flow of goods timely and in a cost efficient way. This was indicated by findings from descriptive statistics which indicated to a large extent all the practices had been implemented and hence the inventory management of goods and services in the LSNC is done in a cost efficient manner. Cost, Quality and

dependability as OP measures were affected by a high margin by implementation of SSCMPs from the multiple regression findings

5.3 Recommendations for Policy and Practice

LSNC have been key in provision of goods to customers. To achieve this there is need for ensuring that they manage social and environmental factors that affect their OP. This helps them meet social needs of customers and cut on operational costs. From the study findings some large supermarkets had implemented the SSCMPs to a moderate extent while others had implemented them to a large extent. To achieve full implementation, there is need for firms to implement adequate on-job training on use of SSCMPs to facilitate achieving best out of them.

There is need for availing adequate resources to facilitate implementation of SSCMPs to a large extent. There is need for collaborations with relevant stakeholders to avail adequate funds to facilitate adequate implementation of SSCMPs to the fullest. There is need for inclusion of SSCMPs into their system in order to improve their OP. Based on the impact of SSCMPs on OP, the results indicated that the impact of SSCMPs on OP was not felt to the fullest in the LSNC. Future researchers need to include other variables in such a study that were not included in this study to achieve full effect.

5.5 Limitations of the Study

The aim of this study was to determine the extent of implementation of SSCMPs in LSNC, their impact on OP and to determine the relationship between SSCMPs and OP of LSNC. The major limitation of the study was on data collection whereby the respondents were unwilling to fill out the questionnaires based on fear of job security and that they were working under strict guidelines and would not participate in the study. The study was based on LSNC; this was a narrow focus for a study of this base in terms of scope based on the fact that the study was solely based on the LSNC and no other sectors other than the large supermarkets like education sectors, manufacturing firms among others.

The study needed to have focused on other large supermarkets in the country other than those in Nairobi County. There was need for a cross-sectional study of the retail sector generally other than the LSNC. The study needed to focus on SC management practices as a whole other than SSCMPs. The study failed to bring out the benefits sought from implementation of SSCMPs.

5.6 Suggestions For further Research

The study was based on SSCMPs and their impact on OP. There is need for further research to be conducted to establish the relationship of SSCMPs and organizational performance. Irrespective of the research attaining its objective, the study concludes was based on SSCMPs. Based on the various indicators used for OP there were unexplained variances in the six model summary on timeliness, quality, costs and flexibility.

There is need for further studies on what the unexplained variables are and how they can be managed in a firm to ensure improved OP in LSNC. A further research needs to be done on other SSCMPs not included in the study. Further studies need to be carried out in other areas other than LSNC. There is need for further research on other SSCMPs other than those that have been specified in this study. There is need for a holistic view of the impact that SC management practices on SC performance in the large supermarkets other than the SSCMPs.

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APPENDICES

APPENDIX I: COVER LETTER

Julia Nge'ndo Njoroge

P.O. Box 3778- 00100,

Nairobi.

August, 2019

Dear Respondent,

RE: RESEARCH PROJECT QUESTIONNAIRE

This questionnaire (attached) is designed to gather information on the SSCMPs and operational performance of LSNC. This study is being carried out for a management project paper as a requirement in partial fulfillment for award the Degree of the Master of Business Administration (MBA), University of Nairobi.

Please note that this is strictly an academic exercise towards the attainment of the above purpose. You are hereby assured that the information will be treated with the strict confidence. Your co-operation will be highly appreciated.

Thank you for your anticipated kind response.

Yours Sincerely,

Julia Nge'ndo Njoroge

APPENDIX II: RESEARCH QUESTIONNAIRE

This questionnaire seeks to collect data on the SSCMPs and operation performance of LSNC. Kindly fill in the questionnaire. Any information availed will be treated with utmost confidentiality and shall be used for academic purposes only. Your identity shall not be revealed.

SECTION A: GENERAL INFORMATION (Tick where appropriately)

1.	Gender		
	Male []	Female	[]
2.	Age Bracket in years		
	20-25 [] []	26-30	
	31-35 [] 36	5-40 []	
	41 -50 [] 51	and Above []	
3.	Highest level of education		
	O Level [] A Level	[
Level	College Level []	Graduate	[
	Post Graduate Lev	vel []	
4.	What position do you hold in	this your firm?	
	a) Procurement Manager	[]	
	b) Assistant Procurement I	Manager []	
	c) Operations Manager		[]
	d) Others Positions (please	specify)	
5.	How long have you been in the	his position?	
	Less than 1 year []	1 - 5 years	[]
	6 – 10 years [] Above 10 y	vears []

SECTION B: EXTENT OF IMPLEMENTATION OF SUSTAINABLE SC MANAGEMENT PRACTICES (Tick where appropriate)

Has	your	company	adopted	sustainable	SC	practices?	a)	Yes (()) b) No	())
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The following are some of the practices adopted by organizations that are committed to sustainability. Please indicate the extent to which the following Sustainable SC Practices have been adopted in your organization. Please rank in a scale of 1-5; (where: 1- to a very small extent, 2- to a small extent, 3- to medium extent, 4- to a large extent and 5- to very large extent). Tick as appropriate.

Sustainable SC Practices Ranking	1	2	3	4	5
Good working conditions for employees					
Employee health and safety					
Decent Employee wages and salaries					
Sustainable supply network management					
Suppliers ISO- 14000 certification					
Ensuring suppliers have a sustainability policy					
Ethical sourcing, production & distribution					
Buying from local suppliers					
Having a Diverse supplier network					
Managing product returns					
Recycling, reduce and reuse of materials					
Managing waste disposal ISO-14000 certifications					
Corporate social Responsibility					
Sustainability labeling schemes					
Life cycle assessment					
Stakeholder engagement					
Climate change commitment safety					
Companywide Environmental audits					

Others	(Please	Specify)	 	 	 	

SECTION C: PERFORMANCE OUTCOMES OF IMPLEMENTING SUSTAINABLE SC PRACTICES (Tick where appropriately)

The following are some of the performance outcomes which are experienced by organizations which are committed and have implemented Sustainable SC Practices. Please indicate the extent to which the following outcomes are experienced in your organization. Please rank in a scale of 1-5, (where: 1- strongly disagree, 2- disagree, 3- not sure, 4- agree, 5- strongly agree). Tick as appropriate.

Performance Outcomes Ranking	1	2	3	4	5
Cost savings					
Enhance employee motivation					
Increase in Profitability					
New market opportunities					
Increased efficiency					
Product quality improvement					
Reduction in carbon footprint					
ISO certifications					
Increased competitive advantage					
Reduced material costs					
Production efficiency					
Lower occupational safety expenses					
Improved corporate image					
Efficient allocation of resources					
Efficient use and management of natural resources					
Higher returns on investment					
Better management of risk					

Others	(Pleas	se Spe	ecify)	 		

SECTION D: RELATIONSHIP OF SUSTAINABLE SC MANAGEMENT PRACTICES AND OPERATIONAL PERFORMANCE (Tick where appropriately)

To what extent has SSCMP relate to the following measures of operational performance?: - Where 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree

Operational performance indicators	1	2	3	4	5
Cost reduction					
Quality					
Dependability					

APPENDIX III: LIST OF LARGE SUPERMARKETS IN NAIROBI COUNTY

The table below shows the list of supermarkets in Nairobi County

- 1. Tusky's Supermarkets
- 2. Naivas Supermarkets
- 3. Carrefour Supermarkets
- 4. The Game Stores
- 5. Shoprite Supermarket
- 6. Choppies Enterprise Ltd
- 7. Quickmart Supermarket
- 8. Village Supermarket
- 9. Nakumatt Supermarkets
- 10. Uchumi Supermarkets
- 11. Eastmatt Supermarkets
- 12. Spur Supermarket
- 13. Chandarana Supermarkets
- 14. Cleanshelf Supermarkets
- 15. G-Mart Supermarkets
- 16. Jaharis Supermarkets
- 17. Kassmart Supermarkets
- 18. Maguna Andu Supermarkets
- 19. Maathai Supermarkets
- 20. Rikana Supermarkets

- 21. Selfridges Supermarket
- 22. StageMatt Supermarket
- 23. Tumaini Supermarkets
- 24. Karrymatt Supermarkets
- 25. Continental Supermarket Ltd
- 26. Eagle Supermarket
- 27. Ebrahim and Co ltd Supermarkets
- 28. Deepak Cash and Carry Limited Supermarket
- 29. Housewives Delight Ltd
- 30. Jawas Supermarket
- 31. K and A Selection Stores Ltd
- 32. Muthaiga Mini Market Ltd
- 33. Mid City Services Centre
- 34. Budget Supermarket
- 35. Safe Way Hypermarket Ltd
- 36. Clean Way Supermarket
- 37. Select N Pay Supermarket Ltd
- 38. Metro Cash and Carry Limited Supermarket
- 39. Supervalue Supermarket
- 40. Amana Eastleigh Supermarket

Source: Researcher (2019)