KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY BUSINESS SCHOOL

DEPARTMENT OF SUPPLY CHAIN AND INFORMATION SYSTEMS.



ASSESSING THE ADOPTION OF SUSTAINABLE PROCUREMENT IN MANUFACTURING FIRMS IN GHANA, A CASE OF WILMAR AFRICA LIMITED

BY

EBENEZER OBODAI BERDAH

STUDENT NUMBER: 20818826

JULY, 2022

DECLARATION

We hereby declare that this submission is our work towards the bachelor of science in business administration degree and that to our knowledge it contains no material that has previously been published by anyone else nor has it been submitted for any other degree of this university, except where due acknowledgement has been made in text.

EBENEZER OBODAI BERDAH		
(STUDENT,)	SIGNATURE	DATE
CERTIFIED BY:		
DR STEPHEN OKYERE		
(SUPERVISOR)	SIGNATURE	DATE
Called		
CERTIFIED BY:	3	[3]
PROF. DAVID ASAMOAH		
(HEAD OF DEPARTMENT)	SIGNATURE	DATE

DEDICATION

I dedicate this project to the Almighty God for his immense guidance and all my families.

Thank you.



ACKNOWLEDGEMENT

Firstly, I thank God for bringing me this far. I would like to express my heartfelt gratitude and thanks to my advisor, Dr Stephen Okyere for his guidance and support during the course of this thesis. Mr. Adejobi Olelekan Prince (CEO of Prince Car Limited) for his constant encouragement and patience has been invaluable during this period. Finally, I'd want to express my gratitude to my family, particularly my parents, as well Mrs Jessica Nana Akosua Haizel and Mrs. Grace Tibboh, for their unwavering support throughout the time it took me to accomplish my Bachelor's degree.



ABSTRACT

The study examines the adoption of sustainable procurement practices in manufacturing firms in Ghana, a case of Wilmar Africa Limited. It specifically explored sustainable procurement practices, the impact on sustainable procurement practices on the performance, and the drivers for implementation of successful procurement practices. The descriptive research was considered suitable for the study. The quantitative approach is also considered for the study. The population of the study entails employees in manufacturing firms in Ghana. However, employees in Wilmar Africa Limited were the target population. This population was considered due to easy access of data. The convenience sampling techniques was utilized to select ninety-one (91) respondents for the study. The data was personally solicited data from respondents, utilizing a structured questionnaire. Data was coded into statistical package for social science, and analyzed. The descriptive statistics and inferential statistics (regression) were utilized to analyze data. The study pointed out that the studied organization has adopted some sustainable procurement practices. These practices include; green purchasing, ethical sourcing, and supplier involvement. Further, sustainable procurement practices were found to exert positive impact on organizational performance. Several drivers were highlighted by the study to influence the successful implementation of sustainable procurement practices. Some of these drivers include; adequate fund, less cost of implementing sustainable practices in purchasing process, availability of sustainable suppliers, proper environmental regulation, and strong relationship between suppliers. The study suggested organization should perceive sustainable procurement as strategic in value. The need for constant and regular workshops to improve the knowledge based and capacity of staff was also suggested. It

was recommended management should proactively sensitize the general employees on befits of sustainable practices and specifically in regard to procurement function in order to create green culture with consequential performance benefits.



TABLE OF CONTENTS

DECLARATION	i
ABSTRACT	ii
ACKNOWLEDGEMENT	Error! Bookmark not defined.
DEDICATION	Error! Bookmark not defined.
TABLE OF CONTENTS	
LIST OF TABLES	X
LIST OF FIGURES	xi
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the study	1
1.2 Statement of Problem	
1.3 Objective of the study	5
1.4 Research Questions	6
1.5 Significance of the study	6
1.6 Scope of the study	7
1.7 Brief Methodology	7
1.8 Organisation of the study	8
CHAP <mark>TER TWO</mark>	9
LITERATURE REVIEW	9
2.1 Introduction	9
2.2 Conceptual Review	9
2.2.1 The Concept of Procurement	

2.2.2 The Concept of Sustainable Procurement	11
2.2.3 Sustainable Procurement Dimension	14
2.2.4 Supplier Procurement Practices	17
2.2.5 Sustainable Procurement in the Private Sector	21
2.2.6 Sustainable Procurement in Developing Countries	22
2.2.7 Implementing Sustainable Procurement	22
2.2.8 Drivers for Sustainable Procurement	26
2.2.8.1 Internal Drivers	
2.2.8.2 External Drivers	30
2.2.9 Challenges Associated with Promoting Sustainable Public Pr	ocurement
Practices in Ghana	32
2.3 Empirical Review	34
2.3.1 The Impact of Sustainable Procurement Practices on Org	anizational
Performance	
2.4 Theoretical Review	
2.4.1 Stakeholder Theory	37
2.4.2 Principal Agency Theory	40
2.5 Conceptual Framework	43
CHAPTER THREE	45
RESEARCH METHODOLOGY AND ORGANISATIONAL PROFILE	45
3.0 Introduction	45
3.2 Research Design	45
3.3 Population of the study	46

3.4 Sample size and Sampling Techniques	46
3.5 Sources of Data	47
3.5.1 Secondary Source of Data	47
3.5.2 Primary Source of Data	48
3.5.2.1 Validity and Reliability	50
3.6 Data Collection Process	
3.7 Data Analysis	49
3.8 Ethical Consideration	51
CHAPTER FOUR	52
RESEARCH RESULTS AND DISCUSSIONERROR! BOOKMARK NOT DEFI	NED
4.1 Introduction	52
4.2 Background of Respondents	52
4.3 Sustainable procurement Practices	
4.3.1 Green Purchasing	
4.3.2 Ethical Sourcing	55
4.3.3 Supplier Involvement	56
Table 4.2 Sustainable Procurement Practices	57
4.4 The Impact of Sustainable Procurement Practices on Organizational Performance	nce59
4.5 Drivers for Implementation of Successful Procurement Practices	
CHAPTER FIVE	63
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS	63
5.1 Introduction	63
5.2 Summary of the study	63

5.3 Summary of Key Findings	54
5.3.1 Sustainable Procurement Practices	54
5.3.2 The Impact on Sustainable Procurement Practices on the Performance 6	55
5.3.3 Drivers for Implementation of Successful Procurement Practices	56
5.4 Conclusion	56
5.5 Recommendations of the study	
5.5.1 Recommendations for future studies 6	58
REFERENCES	′0
APPENDIX7	19



LIST OF TABLES

Table 4.1 Background of Respondents	53
Table 4.3 Summary of Regression Result on the Impact of Sustainable	Procurement
Practices on Organizational Performance	59
Table 4.4 Drivers for Implementation of Successful Procurement Practices	62



LIST OF FIGURES

Figure 2.1 Stakeholder Model of the Corporation	38
---	----



CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The subject of sustainability has become more essential for a number of stakeholders in the business community, as a result of the increasing environmental degradation as well as concerns about the rights of human. Sustainable is about meeting the needs of the present generation and also taken the future generation into consideration (Alzubi and Akkerman, 2022). This development has influence on supply chain activities or practices such as procurement. Procurement is the process by which firms acquire raw materials, components, products, service or other resources to execute their operations (Tiwari et al., 2019).

Traditionally, the key aim of procurement activities were centered on quality, cost, and development. Sustainable procurement is an approach to attain sustainability as it takes into consideration environmental factor in supply chain management decision (Yook et al., 2017). Tiwari et al (2019) clearly highlighted that sustainable procurement is also referred to as environmentally-conscious purchasing practice that minimizes sources of waste and promotes recycling as well as reclamation of purchased material without adversely affecting performance requirement of such materials. Mcobrein and Ackah (2019) explained sustainable procurement as the acquisition of products and services with smaller-than-average environmental footprints. Sustainable procurement has been explained as a solution to integrate environmental and social considerations in all steps of procurement

process, in order to minimize impacts on human health, environment, and human right (Mello et al., 2017).

The purchase, use and disposal of products and services each have an effect on both the natural and business environment. Whereas individual consumers purchase, firms across all sectors procure goods and services, which exert influence on the economy and society (Grob and Benn, 2014). Grob and Benn (2014) added that firms, individually and collectively are in a commanding position to contribute towards the sustainable use of resources via their choice of procurement. This is because the amount of spending allocated to organisational procurement as well as governments is substantial (Callender and Matthew, 2003 cited in Tiwari, Grob and Benn, 2014).

In fact, Sustainable procurement has received attention from business people and academics, owing to the need to the need to protect the environment. Researchers have attempted to evolve procurement practice within the context of sustainable development to examine sustainable procurement (Tseng et al., 2015). Sustainable procurement captures the objectives of green or environmental supply chain management as well as corporate social responsibility to help organisations attain their performance at the triple bottom line: social, economic, and environmental dimension (Baig et al., 2020).

Sustainable procurement is a holistic approach as it entails organisation, people, processes and technology. It is based on the belief that firms can simultaneously benefit from elements of environment, economic and society (Mcobrein and Ackah, 2019). Kennard (2006) added that sustainable procurement is the process whereby economic development, social development as well as environmental protection are balanced against the needs of business. Mcobrein and Ackah (2019) outlined the benefits adopting a sustainable

procurement as enhanced internal and external standards via performance assessment, cost control, and compliance with environmental and social legislation. Mello et al (2017) mentioned that business activities without environmental consideration can result in increase water, air, soil pollution, leading to a climate change, among other environmental impact.

Despite the benefits of sustainable procurement to organisation and society, procurement practices in developing economies are under-developed (Esfahbodl et al., 2016; Moneim, 2016). According to Silvestre (2015), the low adoption is emerging and developing countries supply chain relatively more sustainability barriers than those who operate in developed economies. Firms face diverse challenges and opportunities in the adoption of environment-friendly procedures and social practices, which makes it essential to understand the ways for integrating sustainability into firms' supply chain by mitigating risks (Freise and Seuring, 2015).

In order to implement the concept of sustainable development in firms, it is important to involve the various units or departments within the firm (Mello et al., 2017). Tate et al (2010) have mentioned that the area of procurement can contribute to the implementation of the sustainability concept in the business environment primarily due to the position of the procurement process as it is the genesis of the flow of the materials and services for a firm (Mello et al., 2017). Each firm is as sustainable as its supply chain (Krause et al., 2009). Firms that have goal to be sustainable must first involve their suppliers and established environmental as well as social performance standards for these suppliers.

The discussion so far shows that sustainable procurement is very crucial to firm success, and it is important for all firms to embrace it. This is because its adoption is not only

beneficial to the firm but the environment in which the firm is located. Therefore, examining the adoption of sustainable procurement of firms in developing economies like Ghana, where adoption of sustainable procurement practices is at its infancy stage is crucial. This current study will look at the adoption of procurement practices in manufacturing firms in Ghana, a case of Wilmar Africa Limited.

1.2 Statement of Problem

In industrialized economies, sustainable supply chain management have received in-depth attention; however, little is known about studies in developing and emerging economies (Mitra and Datta, 2014). Businesses in emerging markets like Ghana have an impact on the environment. According to the UNEP (2013), the environmental cost to Ghanaian industrial companies was almost 10% of GDP. According to UNEP (2013), Ghana's manufacturing sector is the main source of greenhouse gas emissions. Because of this, it is crucial for Ghanaian manufacturing companies to connect their supply chain activities such as procurement to sustainability. Ghanaian manufacturing companies should embrace green manufacturing techniques to reduce this environmental cost more significantly while also enhancing environmental performance.

Without the cooperation of crucial upstream supply chain partners, organizations' choice to adopt sustainable procurement practices initiatives can have the least impact (customer integration). For instance, an organization can request or purchase eco-inputs or raw materials to increase industrial efficiencies through supplier integration (Sunram et al., 2018). Additionally, by integrating their customers, manufacturing companies can use their suggestions and input to create eco-friendly products.

According to Aum et al. (2020), small and medium manufacturing enterprises have not given environmental practices the necessary attention. This is in line with the findings of Jamian et al. (2012), who noted that, in contrast to the majority of manufacturing companies in poor economies, large enterprises hardly ever use sustainable procurement practice since the term is vaguely understood. According to Zhan et al. (2018), the majority of small and medium-sized businesses in developing nations view the sustainable supply chain (such as sustainable procurement) as nebulous and challenging to implement.

It is prudent to welcome more studies in this direction to vividly have an insight into the connection between procurement and sustainability in light of the relatively few studies (such as studies by Rehman et al., 2016; Abdul-Rashi et al., 2017; Zhan et al., 2018), and absence of studies done using Wilmar Africa Limited, located in Ghana. The majority of the studies analyzed were conducted in advanced economies. As a result, there is a dearth of research in the Ghanaian environment, where the adoption of sustainable procurement is in its infancy. By examining the adoption of sustainable procurement in manufacturing firm like Wilmar Africa Limited, this study aimed to close a research gap.

1.3 Objective of the study

The objective of the study is to examine the adoption of sustainable procurement practices in manufacturing firms in Ghana, a case of Wilmar Africa Limited. The following are the specific objectives.

- 1. To explore sustainable procurement practices in Wilmar Africa Limited
- To assess the impact on sustainable procurement practices on the performance of Wilmar Africa Limited
- 3. To investigate the drivers for implementation of successful procurement practices

1.4 Research Questions

- 1. What are the sustainable procurement practices adopted by Wilmar Africa Limited?
- 2. To what extent do sustainable procurement practices influence the performance of Wilmar Africa Limited?
- 3. What are the drivers for successful implementation of sustainable procurement practices?

1.5 Significance of the study

The results of a study on sustainable procurement methods will reveal whether the company under investigation has used sustainable procurement practice or not. In other words, the current study will make it possible for the company being studied to understand the status of its current sustainable procurement practice. This will give them the information they need to decide whether to keep up their environmental practices or make improvements to the ones they have already implemented to address environmental sustainability challenges.

The study will add up to other research to help shed light on how sustainable procurement practices and organizational success are related. Also, Wilmar Africa Limited was not the subject of any studies. This study concentrated on this company to reveal its green purchasing habits. It will also serve as a stepping-stone for academics and researchers interested in researching the firm's procurement activities.

The study will also educate the government and other organizations on the need of paying close attention to manufacturing companies' activities. This is due to the fact that the activities these businesses engage have impact on sustainability. With knowledge of how

the company being researched operates, the government can create regulations to force the company to conform its operations to environmental concerns. In order to help these businesses go green or implement sustainable procurement practices for the improvement of the environment, governmental and non-governmental organizations may also step in to assist.

Finally, recommendations based largely on the study's findings will aid in influencing the investigated firm and their sister firms to dance to the sustainable procurement tune. The recommendations will identify actions that management and staff members should do to comply with the government's concerns about sustainability and other international standards.

1.6 Scope of the study

Though there are many areas the study would have captured, it narrowed itself to exploring the adoption of sustainable procurement practices in manufacturing firm. The study considered sustainable procurement practices, the impact on sustainable procurement practices on the performance of Wilmar Africa Limited and the challenges with the implementation of successful procurement. Wilmar Africa Limited is used as a case study. All employees were the focus of the study, and so both management and non-management staff were included in the study.

1.7 Brief Methodology

Looking at the research topic, the descriptive research is considered suitable for the study. This is because the focus of the study is to describe the adoption of sustainable procurement practices. The quantitative approach is also considered for the study. The population of the

study entails employees in manufacturing firms in Ghana. However, employees in Wilmar Africa Limited are the target population. This population was considered due to easy access of data. The convenience sampling techniques will be utilised to select respondents for the study. The data will be personally solicited from respondents utilising a structured questionnaire. The use of questionnaire saves time. Data will be coded into statistical package for social science, and analysis will take place using this tool. The descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (regression) will be utilised to analyse data.

1.8 Organisation of the study

The study is summarized under five chapters. This was done in accordance with the school of graduate guideline. The chapter one captures the introduction of the study. The background of the study, statement of problem, research objective, and research questions are also present in chapter one. The significance of the study, and scope of the study, and brief methodology are not left out in the chapter one. The second chapter covers review of related literature. The conceptual review, empirical review, and theoretical review are present in chapter two. The conceptual framework was present in chapter two. The methodological processes followed ascertained authentic data are captured in chapter three. The design of the study. Population of the study, sample size, sampling technique, and data collection instrument are not left out in the chapter three. Data collection procedure, data analysis, and ethical concerns are all themes under chapter three. The results and discussion of the study are in chapter four. The chapter five covers the summary, conclusion, and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The presents review of literature on the research topic. The literature reviewed under this chapter enabled the researcher to have a general overview of the influence of sustainable procurement. This guided the researcher to choose appropriate methodology for the study. Issues discussed under this chapter were captured under conceptual review, empirical review, theoretical review, and conceptual review.

2.2 Conceptual Review

2.2.1 The Concept of Procurement

Over time, the procurement function has changed from being a back-office support to a function that crosses strategic boundaries and has a wider scope (Reilly et al. 2020). Organizations need an effective and efficient procurement process to be successful in the modern global business climate (Aktin & Gergin, 2016). In terms of corporate sustainability, the procurement function has become a crucial strategic enabler of sustainability practices and initiatives, not just within individual organizations but also throughout supply chains (Zailani et al., 2012; Reilly et al., 2020).

According to the Chartered Institute of Procurement and Supply (CIPS), procurement is the business management function in charge of finding, acquiring, and managing the outside resources that a company requires or might need to achieve its strategic goals (CIPS, 2009). Although there may be slight differences between these and related topics, the terms procurement, purchasing and supply, and sourcing are frequently used

interchangeably (Munch 2014). While procurement is typically used to refer to the acquisition process in the public sector, purchasing is frequently used to refer to the process of acquisition of goods and services in manufacturing organizations in the private sector (Arlbjrn & Freytag 2012).

Some academics believe that the purchasing function, which is in charge of acquisition and supply activities, is a subset of the procurement function, whereas the procurement function as a whole encompasses both the purchasing and supplier management responsibilities (Munch 2014). Best value for money, fairness, integrity, transparency, effective competition, and the best interests of all stakeholders are some of the fundamental traditional concepts that guide the procurement function's operations (United Nations Office for Project Services (UNOPS), 2013).

In both public and private sector organizations, the procurement function has significant financial and other resource control (Carter, 2005; Hawkins et al. 2011; Walker & Brammer 2009). Over 15% of the Gross Domestic Product (GDP) of most nations is thought to be used alone for public procurement (Agaba & Shipman 2006; Harland et al. 2019). The world's largest commercial sector has frequently been referred to as the procurement function (Grandia 2016; Hawkins et al. 2011). Due to the tremendous purchasing power involved, procurement activities are a strategically potent weapon for fostering a variety of projects, including those that are tied to sustainability (Erdmenger 2003; Gunasekaran & Spalanzani 2012; McCrudden 2004; Nijaki & Worrel 2012). Additionally, the procurement function is a particularly effective strategic tool for achieving sustainability goals due to its influence across boundaries (Harland et al. 2019; Meehan & Bryde 2015; Reilly et al. 2020). The notion of sustainable procurement is

discussed in more detail in the next section as a result of the use of the procurement function to accomplish sustainability goals.

2.2.2 The Concept of Sustainable Procurement

The companies that transform raw materials into finished products and transport them to their final location—that is, until the consumer takes control of and uses the products—make up the supply chain. Several times during this process, procurement operations take place, improving the cost composition and lowering waste across the supply chain (Mello et al., 2017).

The strategic importance of the procurement activities has become clear in businesses in an increasingly dynamic environment, regardless of the size and nature of the business (Carter & Narasimhan, 1996; Weele, 2010). Since operational costs, product/service quality, and delivery times are all important factors in any company's operation strategy, the procurement department is therefore crucial to attaining the strategic goals of the organization (Gaither & Frazier, 2001). According to Carr & Smeltzer (1999), the role of strategic procurement is to focus operations on short- and long-term goals that will offer the firm a competitive edge.

There is currently agreement among researchers that the concept of sustainability has to be thoroughly examined because it is a complicated problem with numerous potential solutions. A company's supply chain and the sustainability performance of every link in the network, including both first- and second-tier suppliers, have a significant impact on the company's reputation in terms of its economic, environmental, and social conduct (Xie, 2016). The Triple Bottom Line is a set of three dimensions that includes economic viability, ecological responsibility, and social fairness. Environmental protection is concerned with

the effects on social and natural systems, whereas social inclusion deals with issues connected to the unequal distribution of wealth, opportunity, and health. Economic development refers to the creation of wealth. The investigation of the organization's effects on its constituents—employees, partners, suppliers, customers, the community, and society at large—addresses social performance (Karna et al., 2003).

Environmental sustainability, according to Andrade et al. (2000), is the examination and review of operations from the perspective of the company's ecology, driven by a shift in the values of the corporate culture from dominance to partnership and from the ideology of economic growth to the ideology of environmental sustainability. In a nutshell, environmental sustainability refers to exploiting the potential of various ecosystems to improve the planet's capacity while ensuring that these ecosystems degrade as little as possible.

Industrialization accelerated structural change, spread capital and technology, and produced more market failures and policy distortions than it did economic development. Industrialization thereby increased environmental harm while ignoring social concerns. Economic sustainability thus encompasses all potential economic interactions between a company and its stakeholders, including the financial results traditionally reported in financial statements (profitability indicators), but more importantly, the indicators that will enable an assessment of how the company's operations affect its stakeholders.

Corporate sustainability is one of the topics surrounding sustainable development that is currently being addressed because of its connection to gaining a competitive advantage. Companies are attempting to implement the Triple Bottom Line in their business strategy and management, which entails pursuing market continuity, organizational growth based

on its economic feasibility, peaceful coexistence with the environment, and coexistence with society (Porter & Kramer, 2006). As a result, a new idea of business emerges that is focused on sustainability practices and whose key attribute is an effort to minimize its effects on the environment and society through the adaption of its organizational structures, processes, and products. Businesses must conduct their operations in a manner that respects the environment (Schaltegger et al., 2003).

Ruparathna and Hewage (2015) assert that the numerous shortcomings in conventional procurement procedures should be eliminated by fostering sustainable development through procurement. In order to minimize negative effects on people's health, the environment, and their rights, sustainable procurement involves integrating social and environmental factors into all phases of the procurement and contracting process.

According to BCSD Portugal (2008), sustainable procurement has a number of advantages for both society and businesses. For businesses: (a) benefits in results (lower operating costs, lessened energy and water use, etc.); (b) Risk reduction (reduced risk of accidents, lower direct and indirect costs); and (c) Strengthening the image (organization's commitment to a sustainability and social responsibility policy, improved working conditions for employees). For businesses, sustainable practices result in a stronger economy (which helps the market develop for sustainable goods and services, lowers energy and material costs, and makes more money available for other uses); a healthier environment (which reduces waste and makes better use of raw materials); and a rise in social welfare (promotes the development of local suppliers, support to suppliers who have a strong commitment to local communities and great social and environmental responsibility).

2.2.3 Sustainable Procurement Dimension

The three components of sustainable procurement, according to the Government of Western Australia, are social, economic, and environmental (Islam & Siwar, 2013). Willard (2012) argues that the economic, social, and environmental dimensions are like a three-legged stool, and if one leg is weak, the sustainability would become unstable.

Social Dimension

Every purchasing decision has social repercussions, and the idea of sustainable procurement might be utilized to inspire social change. Bofinger et al (2015) state that taking into account social activities during the procurement process entails taking human health and safety into account, supporting small and local businesses by helping them grow, hiring and training members of the underprivileged group in society, and supporting and implementing regulatory requirements.

Sustainable buying practices guarantee that social obligations are met. Additionally, it will enhance organizational reputations in terms of sustainable procurements and present a positive picture of organizations with sustainable practices. Sustainable consumption and market development are also facilitated by sustainable procurement. It results in an improvement in the local economy. It makes ensuring that organizational objectives and practices are better aligned. It brings in and keeps employees while also giving them a chance to set an example.

Government support for supplier solicitation is made possible through sustainable procurement, which gives access to ethical and socially responsible businesses. It encourages the growth of new and small enterprises. It focuses on the socially

disadvantaged groups by giving them job and training opportunities and ensuring that all legal, health, and safety requirements are met.

Environmental Dimension

Every product created or service provided has an environmental impact on society that has to be carefully examined, starting with the manufacturing process and continuing through consumption and disposal. Meehan and Bryde (2011) state that in order to minimize material toxicity or the quantity of packaging used on the products, companies looking to enhance sustainability in the environment must collaborate with the suppliers. A path to full sustainability may be provided by concentrating on the environmental sustainability component of procurement. In an effort to protect the environment, many businesses are now using green buying practices (D'souza et al., 2007). There are several approaches to identify green procurement. By lessening the procurement's impact on the environment, green products must demonstrate some level of success. It could also cover techniques for employing less harmful materials, reusing recycled materials, and producing goods with little packaging.

Green procurement, according to the Chartered Institute of Purchasing and Suppliers, is a method of taking the environmental, social, and economic effects of a production process, consumption, and disposal into account (Chari & Chiriseri, 2012). Green procurement, according to the Japan Ministry of Environment, is a strategy for ensuring that all procurement-related actions, such as the acquisition of goods and services, have a minimal negative impact on the environment. According to this theory, the importance arises from the fact that businesses make sure to adopt green procurement as a component of their value chain management (VCM). Therefore, the goal of VCM is to lessen the impact on

the environment and support the advancement of values across the whole company life cycle, above and beyond the sourcing of raw materials and suppliers in the sourcing sectors, as well as the use and disposal of products.

Therefore, the idea of "green procurement" is based on the idea that businesses might gain advantages from all three pillars, namely economically, socially, and ecologically (Bofinger et al., 2015). It also relates to the ability to limit the negative environmental effects of government actions and uphold environmental sustainability goals by incorporating environmental considerations into the procurement process as part of the government's commitment to enhancing both the environment and the standard of living for citizens in society (OECD, 2007).

Economic Dimension

In addition to the original purchase price, the term "economic" also refers to the costs associated with goods, their upkeep, and their eventual disposal. A product must be economically sustainable in order to benefit the community or society (Adjei, 2010). The upfront cost of purchasing a good or service is one element of the total cost of ownership, according to Asare (2016). Setting out the smallest amount of a product is necessary to make considerable financial savings that will guarantee long-term value for money. When purchasing a good or service, the cost of acquisition, consumption, upkeep, and disposal should be considered. In several other circumstances, sustainable production techniques lower the initial costs of goods (Berry, 2011). Alejandre et al. (2010) claim that the growth of new product markets, as well as enhancing enterprise competitiveness and their concerns of environmental performance, were all aided by sustainable procurement.

Despite the fact that certain items have greater startup costs or upfront purchase costs, their overall life cycle costs—which include operation and maintenance costs—are cheaper. Other financial advantages of sustainable procurement are also present employment prospects in sustainable procurement through the utilization of local suppliers, green technologies, and the development of markets for recycled goods. In order to get value for money, it results in cost savings and a decrease in the costs associated with the entire life cycle. Sustainable purchasing fosters competition among possible suppliers and supports small and medium-sized enterprises. It efficiently enhances the supply chain while ensuring company continuity.

2.2.4 Supplier Procurement Practices

This section presents the sustainable procurement practices adopted by organisations.

These include: green purchasing, ethical sourcing purchasing social responsibility, and supplier involvement.

Green Purchasing

Green buying refers to procedures that are environmentally sensitive and decrease waste while promoting recycling and reusing of products without impairing their ability to operate as intended (Min & Galle 2001). When compared to similar competitive items or services, it is the purchasing of goods and services that have little to no impact on human health and the environment (University of California 2016).

Green supply chain management, environmental supply chain management, green purchasing, and ecologically responsible procurement are some other names for this practice. Recycling, eco-design practices, eco-labelling, binding suppliers to waste reduction criteria, assessing the lifetime environmental friendliness of items before

purchase, and reverse logistics are just a few examples of techniques that fall under the category of "green purchasing" (Carter & Jennings 2004; Srivastava 2007; Zhu, Tian, et al. 2012). Challenges including environmental pollution, resource depletion, greenhouse gas emissions, and contamination of land and water bodies are addressed through green purchasing (Green Jr et al. 2012). Benefits of green purchasing include improved business image, less environmental hazards, financial savings through waste reduction, efficient material usage, and energy conservation measures (Eltayeb et al. 2011). Green buying has a smaller sustainability focus than SP. Green purchasing solely tackles the environmental sustainability factor, while sustainable production concentrates on all three. Green supply chain-related concerns appear to be the dominant area of research in this discipline (Yawar and Seuring, 2017).

Ethical Sourcing

The act or procedure by which a business assumes accountability for the social and environmental performance at earlier levels of the supply chain is known as ethical sourcing (Blowfield, 2003). It comprises handling all procedures for obtaining goods and services from vendors in an honest and socially conscious way (Kim et al. 2018). Socially responsible sourcing, socially responsible buying, and ethical trading are other phrases used to describe it (Kim et al. 2018). To ensure that goods and services are produced and delivered responsibly and ethically, ethical sourcing covers issues including fair trade, sweatshop and child labor abuses, bribery and corruption, fair pricing items, and environmental destruction (Glass and Achour, 2012). Due to the serious reputational harm that may result from unethical neglect in purchasing and supply transactions, ethical

sourcing has significant ramifications for businesses and whole supply chains (Chen and Slotnick 2015; Kim et al., 2018).

In order to adopt and execute ethical sourcing, codes of conduct are essential (Kim et al. 2018; Roberts 2003). In terms of the triple bottom line perspective, ethical sourcing and the first are comparable to SP. However, the two ideas are distinct from one another in that ethical sourcing seems to lay a larger focus on moral considerations than SP. Additionally, the functional scope of ethical sourcing appears to be greater than that of SP in that, while the former includes responsibility for other supply chain stages, the latter is only in charge of purchasing-related concerns (Chen and Slotnick, 2015).

Purchasing Social Responsibility

Purchasing social responsibility (PSR) is defined by Carter and Jennings (2004) as "purchasing actions that fulfill the ethical and discretionary duties demanded by society" (p. 151). It entails the five aspects of safety, human rights, philanthropy, environment, and diversity, and involves the use of the buying function to meet a firm's CSR goals (Carter 2005; Carter and Jennings 2004).

Environmental purchasing, buying from minority-owned suppliers, checking the safety of suppliers' operational locations, ensuring that no sweatshop labor was used in the creation and supply of sourced goods and services, and giving to charitable organizations are all examples of PSR actions (Carter 2005; Carter & Jennings 2004). One of the most used tools for assessing SP and associated activities is a scale created by Carter and Jennings (2004) for measuring PSR. This measure is known as the PSR scale (Brammer & Walker 2011; McMurray et al. 2014). Conceptually, PSR and SP are conceptually similar; the main

distinction is that PSR is more commonly used in private sector businesses whereas SP is frequently used in both public and private sector organizations.

Supplier Selection

The supplier selection process is one way to incorporate environmental concerns in green buying. According to Murray and Cupples (2001), good green supplier assessment should evaluate the provider rather than the product since purchasing should be centered on the selection of quality suppliers. There are specific performance criteria, for instance, that businesses may take into account when choosing environmentally friendly suppliers, as well as advice on how to choose providers wisely. According to Shen, Olfat, Govindan, Khodaverdi, and Diabat (2013) as quoted in Mcobrein and Ackah's strategy to evaluating green suppliers from 2018, (the fuzzy approach uses mathematical strengths to resolve uncertainties of human cognition during the appraisal process.). Multi-criteria decision support technologies have been developed as a result of the extensive selection of practices and approaches an organization has access to. Often, a company must first identify its unique requirements before deciding to build or adopt a supplier assessment and selection procedure. Therefore, it is essential that there be a variety of applications and selection techniques to pick from since they may each cater to distinct needs (Wu et al., 2010; Govindan et al., 2013).

In Murray and Cupples' estimation (2001). Cost-effective selection of the sorts of purchases that are most suited for supplier evaluation may be done using the Kraljic matrix. Kraljic's methodology, according to Murray and Cupples (2001), enables buyers (or buying managers) to readily approach green purchasing from a comfortable vantage point. They created two models that buyers may use to choose where and how to focus their attention

in the first place, and to teach them how to approach evaluating green suppliers in the second. All contracts do not necessarily need to use a green supplier evaluation. The cost of executing the procedure must be taken into account when determining which contracts, it would apply to. These expenses include the opportunity costs of buying, the price of gathering and analyzing data, and the cost of traveling to the supplier's location.

2.2.5 Sustainable Procurement in the Private Sector

Various terminology is used to refer to sustainable procurement in the private sector, including sustainable sourcing (Pagell et al. 2010), purchasing social responsibility (Carter & Jennings 2004), and sustainable supply chain management (Seuring & Müller 2008). The use of the purchase and supply function to solve sustainability challenges, however, is the key characteristic at the heart of all these designations (Seuring & Müller 2008).

Environmental practices have been the primary focus of sustainable buying in the private sector (Ho & Taylor 2007). Similar to this, related research has generally concentrated on environmental challenges, while the social aspect of sustainability has received less attention (Huq & Stevenson 2020; Yawar & Seuring 2017). A number of positive corporate outcomes are linked to private sector SP practice, such as improved corporate reputation, effective and efficient use of organizational resources, decreased health and safety costs, lower recruitment and labor turnover costs, shorter lead times, improved product quality, improved environmental outcomes, and competitive economic advantage (Carter & Rogers, 2008; Green Jr et al. 2012; Hollos et al., 2012)

2.2.6 Sustainable Procurement in Developing Countries

Little is known about developing nations' sustainable procurement practices because there hasn't been much study done on such topics in the literature up to this point (Mani et al. 2018; McMurray et al. 2014; Silvestre 2015; Walker et al. 2012). It is difficult to grasp significant information from a more nuanced and global viewpoint since theoretical reflections on the SP idea and pertinent empirical insights have mostly been understood from the perspectives of the Western economies (Huq & Stevenson 2020; Silvestre 2015). Numerous sustainability issues face developing countries, which are frequently characterized as having a less developed industrial base and a low human development index (O'Sullivan & Sheffrin 2003). (De Lange et al. 2010). These issues include significant balance of payments deficits, unmanageable foreign debt, acute poverty, infant mortality, hunger, political upheaval, desertification, and water shortages (Lange et al. 2010). This makes sustainability programs like SP extremely relevant to addressing the sustainability issues facing these countries (Kopp 2011; Zaidi et al. 2019).

2.2.7 Implementing Sustainable Procurement

Given the variety of approaches and information sources available, it can be challenging for a company to select how to include sustainability criteria into its procurement procedures. According to the European Commission (2011), which Mcobrein and Ackah (2019) mention, the organization should begin small and grow gradually. For instance, an organization can start with the purchase of office paper that has a 10% recycled content and raise the amount with each purchase cycle in 10%–20% increments until they reach their ultimate target of 100% recycled content.

Additionally, care should be taken to ensure that any environmental standards employed in the selection process do not disadvantage potential bidders. For instance, requiring the suppliers to obtain a rare environmental certificate that may be region-specific would prevent international vendors from being able to compete (Palmujokki, Parikka-Alhola and Ekroos, 2010). Additionally, it's crucial to make sure the item you buy is of high quality. In light of this, the life-cycle costs should be the primary consideration when determining the cost of the acquisition during the procurement process (or total cost of ownership). Life-cycle costs cover every expense incurred during a product's life cycle, from production costs to end-of-life expenses.

During the procurement process, taking into account the product's purchase price, future extra costs (like shipping and installation costs), operational costs (which include energy and fuel consumption and maintenance costs), and end-of-life costs is one straightforward method of determining the life-cycle costs of a product (Environmental Protection Agency EPTA, 2007). However, a lot of buying managers find it simpler to just concentrate on the purchase's price. By going with the less costly choice, they could think they are saving money, but by doing so, they might end up with a product that is of low quality and costs more to maintain and dispose of. Given how challenging environmental costs are, this concept is especially important when discussing such costs.

One must first take into account the nature of the contract's content and the type of work that would be done in accordance with the contract in order to assess the likelihood that environmental considerations would be included in the contract. For example, purchasing authorities may ensure that service contracts be fulfilled in an ecologically friendly manner

in the procurement agreements. Authorities may, for instance, mandate the use of lowemission cars in public transportation (Barth and Fischer, 2003).

Environmental criteria can be incorporated in the tender papers during a procurement cycle in accordance with the provisions of Directives on Public Procurement (Directive 2004/18/EC and Directive 2004/17/EC), which were both issued in 2004. The contract's subject, the technical details of the good, service, or work, the supplier selection criteria, the contract award criteria, and the contract performance clause are among these sections (Clement et al., 2007). The contract's topic specifies what will be bought, if the procurement process will take environmental factors into account. According to Clement et al. (2007), the subject matter should make this clear.

Although the environmental standards will be further described in the technical specifications, including them in the subject matter promotes total transparency and lets potential suppliers know that the contracting authority wants to make "green" purchases. A contracting authority can specify that it wants to buy "energy-efficient computers" or that it needs "recycled paper for writing, printing, and copying functions" (Clement et al., 2007). Technical requirements for green procurement may be based on environmental technical standards.

Environmental criteria can also be based on the components of a product that should or shouldn't be utilized, as well as the production and processing techniques (Clement et al., 2007). The contracting authority may request "variants" from suppliers if they are uncertain about the quality or pricing of the requested goods, services, or works, or if they are unsure about their availability on the market. When the award criterion is the most economically

advantageous offer (award criteria other than price are taken into consideration, such as life-cycle costs), the use of variants is a helpful tool that enables contracting authorities to compare goods that meet various sets of technical specifications with the same evaluation criteria.

By "defining the minimal (non-environmental) requirements of the product/service to be purchased," contracting authorities can employ variations. (Clement et al., 2007) and expanding the "environmental" offer's basic standards to include environmental parameters. When the bids are opened, the contracting authorities have the chance to evaluate conventional and environmentally friendly solutions based on the same set of award criteria. Offers that satisfy the basic standards are chosen (Clement et al., 2007). The most economically advantageous offer or the lowest price is often used to award contracts. Environmental criteria cannot be considered if the final purchase choice is made entirely on the basis of bid prices. As a result, a contracting authority should make sure environmental requirements were written into the technical requirements. Quality, environmental factors, technical features, maintenance costs, and other costs after the sale are taken into account if the ultimate purchase choice is made based on the most economically beneficial offer (Clement et al., 2007, Parikka-Alhola et al., 2006).

Contract performance provisions are another approach to add further environmental criteria

to a contract after it has been formed. The contracting authority may stipulate, for instance, how the purchases are to be delivered (for instance, that the packaging be recyclable) as well as the mode of transportation and to make sure that the suppliers collect and recycle their packaging (European Commission, 2004). All bidders should, in theory, be able to obey the contract provisions as they should not be used to determine which bidder receives

the contract (for instance, by having clauses that are so detailed that only a select few bids can fulfill them) (Palmujoki et al., 2010). It is feasible to adopt green purchasing broadly across a nation without requiring environmental education for every buyer. Cooperation, simplicity, and knowledge are used to accomplish this. Cooperation is the networking of eco-friendly buyers. In the case of public procurement, networking may occur on a local or national level. In order to simplify, only environmentally friendly products that have a significant impact on society must be required to be used in the procurement process. Therefore, a set of rules that concentrate on one to three "key" characteristics are required. Information is the availability of the knowledge required for environmentally friendly purchase. The information on the appropriate procedures have to be accessible in a variety of languages and should be simple to find online (as well as through other media) (Erdmenger, 2003).

2.2.8 Drivers for Sustainable Procurement

The section describes the internal and external factors that have influenced the adoption of sustainable procurement. Drivers are anything that pushes organizations to embrace sustainable procurement practices, according to this study. Internal drivers are those that originate from within the organization, whereas external drivers are those that come from the outside environment.

2.2.8.1 Internal Drivers

Management Support and Commitment

Managerial support facilitates the adoption of sustainable procurement methods (Ferri et al., 2016; Susanty et al., 2019). As a result, the emphasis is mostly on getting support from SME owners or important decision-makers, who most usually are members of the

organization's senior management. The senior management of an organization, as indicated by Ramakrishnan et al. (2015), may both encourage and assist workers in adopting sustainable procurement by giving them training and giving them incentives or prizes. Quinn and Dalton (2009) emphasize the significance of training as a component of developing fundamental management systems, such as ISO 140011, and to build employees' attitudes and beliefs.

De Clercq et al. (2015) highlight the impact of key decision-makers' values, who are either senior management or SME owners, on strategic decisions relating to the sustainable orientation of procurement operations. The supply chain of a SME that is oriented toward sustainability is often greatly influenced by the top management's perspective on environmental concerns and the existence of any championing initiatives (Lee & Klassen, 2008).

Financial Motives and Expected Cost Saving

Financial considerations represent a key driver for SMEs to embrace sustainable buying methods (Upstill-Goddard et al., 2016; Susanty et al., 2019). Cost-effectiveness and financial motivations were mentioned by Lamming and Hampson (1996), who were referenced by Hinrichs and Wettlin (2019), as potential driving reasons. They also included the proactive avoidance of consumer boycotts and unfavorable media coverage. Lessening pollution, reducing waste from raw materials, conserving energy, and recycling may all save costs (Huang et al., 2015). The multiple case study by Upstill-Goddard et al. (2016) on businesses in the construction sector even emphasizes that because of the low profit margins and low entry barriers in the industry, sustainability in any form would only be taken into consideration, if it has a significant positive impact on business opportunities.

Companies frequently only regard environmental issues as costs, according to Bowen et al. (2001), but this perception will shift as soon as the operational and financial benefits are realized. This necessitates a shift in how people view cost-cutting (Haanaes et al., 2013). To increase the effectiveness of the overall system, they perceive a need to make initial investments in the system as a whole rather than in each individual component.

Altruistic Values

Institutional ideals and moral principles are what motivate the internal adoption of sustainable procurement methods (Frumkin & Galaskiewicz, 2004). Although SMEs typically have fewer resources than large businesses, some of them go above and beyond the requirements of the law to demonstrate that they are good citizens and willing to speed up change; however, this attitude varies between SMEs in different countries, so it must not be generalized (Habisch et al., 2011). In this context, Röhrich et al. (2017) discovered that businesses in Europe are primarily driving forward sustainability activities.

Due to their higher humanitarian motivation than huge corporations, many organizations pursue sustainable practices even when they are more expensive. Jenkins (2006), cited in Hinrichs and Wettin (2019), asserted that SMEs are typically owner-managed, increasing the likelihood that a company will place a greater emphasis on sustainability because the founder is in charge of making strategic decisions, such as the implementation of corporate social responsibility.

According to Baden et al. (2009), who were referenced by Hinrichs and Wettin (2019), 85% of the firms that took part in their survey identified personal values and beliefs as the reason for engaging in environmental initiatives. They concur with Birkin et al. (2009), who discovered that upholding moral principles is a key factor in the adoption of

sustainable business practices. These individuals are sometimes referred to as "environmental champions" due to their capacity to drastically alter the company's sustainability philosophy. They may transform environmental challenges into new, creative ways to solve them (Anderson & Bateman, 2000 cited in Hinrichs and Wettin, 2019). These leaders may build a bridge between important internal decision-makers and external stakeholders (Lee & Klassen, 2008 cited in Hinrichs & Wettin, 2019).

Motivation and Pressure from Employees

Apart from senior management, another factor influencing the adoption of sustainable buying in SMEs is staff motivation and pressure (Susanty et al., 2019). This drive and pressure may result from one's own convictions as well as from corporate social responsibility training tailored to a particular function (Ferri et al., 2016). The buying manager's perspective on environmental concerns is significantly influenced by training, which increases the likelihood that sustainable procurement methods will be adopted (Hinrichs & Wettin, 2019).

Additionally, as employees are already more familiar with the subject of sustainability, existing sustainability standards inside a company may have an impact on their attitude toward the implementation of sustainable buying (Upstill-Goddard et al., 2016). Due to their extensive understanding of the local environment in which they operate, SMEs' employees frequently lead campaigns for sustainable procurement that favor local over international purchasing (De Clercq et al., 2015). The increased knowledge of taking a more active position in the idea of responsible corporate citizenship also has an impact on the employees' motivation (Walker et al., 2008).

2.2.8.2 External Drivers

Regulations from the Government

According to Luthra et al. (2011), laws create the ground rules, and businesses must abide by international, national, and regional laws as well as client demands. Sathiendrakumar (2003) claims that the onset of extreme global warming and climate change has compelled governments to create legislation on the environmental and social repercussions of businesses with the aim of reducing pollution and repairing environmental harm.

The United Nations Framework Convention on Climate Change (UNFCCC), which was held in Rio de Janeiro in 1992, and the Kyoto Protocol, which was held in Japan in December 1997, are the two standout instances of international meetings that were convened and resulted in legislation on climate change (Lenssen et al., 2008). These laws and agreements mandate extensive sustainability reporting, auditing of pollutants, and emission reduction, and they encourage businesses to integrate sustainability into their basic operational procedures.

Government, laws, and legislation, according to Jaffe et al. (2005), are external driving forces that motivate organizations to cut back on the use of non-renewable resources and minimize greenhouse gas emissions. In their study on "Design of sustainable supply chains under the emission trading scheme" in Canada, Chaabane et al. (2012) noted that the current Emission Trading Schemes (ETS) and legislation must be strengthened and coordinated in order to have a significant impact on environmental strategy at the global level.

Lack of Alternatives

According to Ferri et al. (2016), the scarcity of market-based alternatives to traditional suppliers deters certain organizations from implementing sustainable procurement practices. They emphasized that the lack of acceptable business partners prevented certain German enterprises from being able to respect and promote sustainability. In this regard, Ferri et al. (2016) emphasize that the case firms found it challenging to discover and approve new suppliers as a result of their stringent sustainability criteria and broad sustainability policies. Walker et al. (2008) noted that several of the firms who took part in their study expressed dissatisfaction with the study's relatively few providers and the limited level of competition among them. Due to less complex management and governance systems and their integration into local procurement processes, organizations frequently lack the ability to communicate with partners that are located farther away, according to research by Russo and Tencat1 (2009).

Power Imbalance Along the Supply Chain

Power disparities along the SC are a key external factor influencing the implementation of sustainable buying methods in organization. Larger purchasers are imposing social and environmental standards on their suppliers in situations when there is strong buyer dominance in the SC (Marshall et al., 2019). Because smaller suppliers frequently have little option but to cooperate, this abusive exercise of power is quite successful (Huang, 2013). Numerous researchers saw dominating companies acting opportunistically and choosing what was best for them rather than for their suppliers (Hinrichs & Wettlin, 2019). Power imbalances in these situations might be detrimental to the SC, making the use of coercive authority "long-term self-defeating" (Hinrichs & Wettlin, 2019). The suppliers

become resistant to such one-sided relationship management, which frequently leads to animosity and the suppliers getting closer to one another. Furthermore, because suppliers are more concerned with economic considerations and pricing in these buyer-dominant situations, the total participation in sustainability is much lower (Touboulic et al., 2014).

Pressures from Customers

The bottom line of the business is directly influenced by the attitudes of the consumers, hence Walker et al. (2008) claims that the more reputable the organization, the more sensitive it becomes to customer pressure. Therefore, the company's incompetence or unwillingness to adopt an environmentally responsible policy might immediately harm its reputation. The four most important and common driving forces for pressuring businesses toward sustainable supply chain management were identified and ranked by Brammer & Walker (2011) in their study titled "Managing Sustainable Global Supply Chains." These forces are consumer pressure, government regulation and legislation, pressure from the public, and pressure from NGOs. According to Giunipero et al. (2012), who were quoted by Balda and Singh (2022), the end-users' pressure and demand for environmentally friendly product design and manufacture have a significant impact on businesses' decisions to make sustainable purchases.

2.2.9 Challenges Associated with Promoting Sustainable Public Procurement Practices in Ghana

The study found some interesting things about the difficulties of mainstreaming sustainable public procurement in Ghana, including the main barriers being an inadequate legal framework, stakeholders with limited capacity, inadequate monitoring and inspection systems, a lack of political will and financial constraints, and excessive bureaucracy. This

supports the conclusions of Adjei (2010). Although the Public Procurement Amendment Act 2016 (Act 914) revised the Public Procurement Act 2003 (Act 663) to encourage sustainability in public procurement, the Act (GoG, 2016) does not clearly lay out the steps to take in order to achieve this. There is no explicit manual directing and/or obliging procurement entities to take environmental and social requirements into account in their procurement practices, with the exception of sections 2 and 22 of the amendment Act (GoG, 2016), which acknowledge sustainability in Ghana's procurement practice (Adjei-Bamfo, 2017).

The Persons with Disability Act, 2006 (Act 715), the Labor Act, 2003 (Act 651), and the Environmental Protection Agency Act, 1994 (Act 490), which again supports Adjei, are among isolated legislation that procurement firms are therefore free to follow or not (2010). Legal framework was cited by Adjei (2010) as a barrier to modern governance in Ghana using sustainable public procurement. Although the majority of these needs are not covered by a specific statute, he contended that there exist separate restrictions on them. In other circumstances, these organizations are also required to comply with donor requirements and make purchases sustainably.

The inability of significant parties to fully support the sustainable public procurement policy has also hindered efforts. A critical examination of the PPA's 2014 annual report reveals that only 570 procurement practitioners from just six regions—the Upper-West, Northern, Central, Eastern, Greater Accra, and the Western Region—participated in the training program the oversight organization (PPA) organized to educate stakeholders (procurement officers) on sustainable public procurement (PPA, 2014). As a result, during data collection, a sizable number of participants showed little understanding of the

sustainable public procurement concept. It will be a fruitless path if we don't comprehend the need for, what to, and how to incorporate sustainable public procurement standards into public procurement.

Excessive bureaucracy was found to be a barrier to the mainstreaming of sustainable public procurement, in addition to the absence of a thorough legislative framework and the inadequate competence of important players. Although organizational process structure is important, excessive amounts of it, along with administrative and legal laxity, cause delays and corruption in public procurement, which impedes national growth, as previously shown by Myint (2000), Wilson (2004), and Lio (2011).

2.3 Empirical Review

This section contains review of empirical studies on organizational performance.

2.3.1 The Impact of Sustainable Procurement Practices on Organizational Performance

The impact of sustainable procurement methods on the efficiency of procurement in food and beverage manufacturing companies in Nairobi County, Kenya, was investigated in research by Wanja et al. (2020). One hundred and eight companies were sampled strategically from two hundred and seventeen food and beverage manufacturing companies registered members of Kenya Association of Manufacturers under Nairobi County as part of the study's descriptive cross-sectional survey research design. The observational unit chosen was procurement managers. Primary data were gathered via a structured questionnaire. Reverse logistics, green specifications, green inventory management, and

green tenders are all used by manufacturing companies in Nairobi County, according to the report.

Reverse logistics, green specifications, green inventory management, and green tenders are four sustainable procurement methods that, according to the study, have a considerable beneficial impact on procurement performance through cost savings, environmental protection, and improved supply quality. According to the study's findings, using sustainable procurement considerably improves procurement performance, thereby improving business performance. In order to control their operational costs, adhere to environmental regulatory authority requirements, and improve supply quality, the study advised manufacturing firms to institutionalize sustainable procurement practices through the formulation and implementation of green procurement policies and procedures. According to the research, management should aggressively educate all workers about the advantages of sustainable practices, particularly with regard to the procurement function, in order to foster a culture of sustainability that would improve performance. The report also suggested that in order to preserve the environment and sustainably manage natural resources to meet the demands of the population in the future, the government should take intentional action through policy interventions to encourage businesses to go green.

Kiswili and Ismail (2016) looked at the impact of sustainable buying methods on the efficiency of the supply chain in a different research. A case study research approach was used in the study. The employees of the East African Portland Cement Company made up the study's target demographic. Using a questionnaire, respondents were asked for primary data. According to the study, the supply chain performance of the organization under investigation was impacted by procurement preferences and reservations, green

procurement practices, supplier involvement, and electronic procurement. According to the report, businesses must immediately begin to see the strategic advantage of sustainable procurement. The study came to the conclusion that the performance of the supply chain and sustainable procurement practices are positively correlated.

Singh and Chan (2022) looked at the expansion of e-procurement usage and identified the connections between e-procurement technology and green procurement practices across various industries of Malaysian businesses that have achieved ISO 14001 certification. It was demonstrated that there is a strong positive correlation between green procurement and the E-procurement technology used by ISO 14001 companies. The use of E-procurement technology will improve business sustainability, it was claimed. It was mentioned that a standard for ISO businesses will be created, emphasizing the significance of e-procurement technology in enhancing supply chain effectiveness and green procurement. The study suggested that technology-based purchases could boost demand for environmentally friendly goods and services, resulting in a greener supply chain.

A research on the performance of the supply chains for firms listed at the Nairobi Securities Exchange was conducted by Pembere (2016). The quantitative method was used in the investigation. Sixty-four (64) respondents were chosen for the study. Data from respondents was gathered via a questionnaire. According to the report, supply chain performance is improved by sustainable purchasing methods. Customer service was enhanced, ordering costs were kept to a minimum, and inventory stock levels were decreased as a result of the increased performance.

In 2017, Sarhaye and Marendi conducted research on the impact of sustainable procurement on the organizational performance of Kenyan manufacturing enterprises.

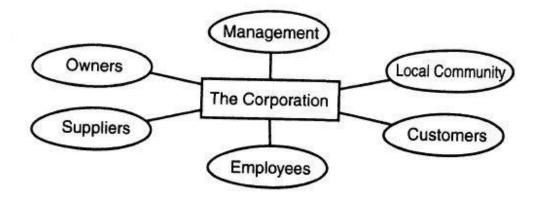
A descriptive research design was used, and 643 respondents representing all levels of Coca-Cola employees participated in the study. Respondents' answers to a questionnaire were used to gather data. It was discovered that cost has an impact on an organization's performance and that sustainable procurement enhances organizational performance.

2.4. Stakeholder Theory

The stakeholder hypothesis is based on the idea that specific individuals and parties interested in an organization's activities may be affected positively or negatively by its actions or policies. Stakeholders are those individuals or groups who are involved in the organization's affairs. The major proponent of this idea, Freeman (1984), recommends in his book Strategic Management: A Stakeholder Approach that various stakeholders should work together in the long run with an eye toward mutual gains. A stakeholder is typically described as "any group of people who may impact or is affected by the attainment of the organization's objectives" by Freeman (1984, p. 46). Freeman (2004) described stakeholders as people or groups whose efforts are essential to an organization's success or survival after acknowledging the considerable contributions stakeholders may make to its success. Despite the fact that the notion originated with corporate shareholders, stakeholders are concerned with a wider range of interests that need to be managed by management of the aforementioned organizations in order for them to succeed.

SAPS

FIGURE 2.1 STAKEHOLDER MODEL OF THE CORPORATION



Source: Freeman (2001)

Employees are the people management employs to carry out a variety of specific tasks towards achieving general organizational objectives and aims, as seen in Figure 2.1. While management is responsible for working on behalf of the corporation in responding to and balancing the multiple claims of all the conflicting stakeholders. The social contexts in which the organization is situated are also referred to as the local community in Figure 2.1 above. While local communities provide the organizations with the raw materials and social approval they need to run efficiently, they also have unique requirements of their own that businesses must address via management.

Adherence to social standards and infrastructure improvements might be some of these demands. When management and ownership are distinct, as in the case of limited liability corporations, owners have a vested interest in the expansion and success of their businesses since it increases their wealth. The company also buys goods, services, and raw materials from suppliers, who must always be dependable and fulfill the company's demands, including during emergencies. To suit the demands of the clients that the company is in business to serve, these raw resources are subsequently processed, produced into items, or

utilized for services. The long-term benefits of the positive connections built provide the organization a competitive edge when it is able to successfully address the conflicting interests of all these groups (Jensen, 2001).

The stakeholder hypothesis appears to have gained popularity recently as a result of worries about the sustainability of an organizations, whether public or private, capacity to achieve its goals or outcomes. Therefore, it must be noted that politicians, business, media, and non-governmental organizations (NGOs) have all adopted the idea and attempted to put its ideas into practice in one way or another. For instance, Ahenkan et al. (2013) utilize the theory to evaluate several ways that local engagement in financial management and planning of local government agencies in Ghana may be improved. However, they found, among other things, that the majority of community members lack understanding of the process and are not invited to community hearings supposed to gather their comments after classifying stakeholders into mandatory and permissive (interest advocates and interest wielders). Therefore, they advise allowing enough time for local participation and providing justification before the Ghanaian Finance Ministry approves district budgets.

To support their claim that the majority of research on stakeholder theory are corporate social responsibility (CSR) oriented, Donaldson and Preston (1995) further divide the stakeholder theory literature into descriptive, normative, and instrumental methods. They assert that the stakeholder theory focuses on defining how businesses recognize and manage the cooperation of their conflicting stakeholders when it comes to the descriptive approach (Donaldson & Preston, 1995). They can use this information to choose the best management practices or tactics to use. Additionally, they claim that the normative thesis focuses on an organization's moral obligations, whereas the instrumental thesis links

economic profitability and growth maximization with stakeholder management style. Is the company obligated to treat a stakeholder fairly or with integrity in addition to maximizing their wealth or value?

According to the report, Ghana is an organization that is working to enhance public procurement, a crucial component of providing public goods and services, but in a sustainable way. The stakeholder theory is chosen to address the first and third objectives of this study even though it has primarily been used to analyze the strategic management approaches of for-profit organizations (Friedman and Miles, 2006). This is because it will help identify which groups should be taken into account when implementing sustainable public procurement in Ghana, while the agency theory defines their implied or explicit responsibilities.

2.4.2 Principal Agency Theory

The connection between a person (principal) who has hired another person (agent) to carry out a task on his or her behalf expressly or implicitly includes delegated authority to make a choice (s), according to the principal agency theory, also known as Agency Theory (Ross, 1973 cited in Hill and Jones, 1992: 132). The primary presumption of the theory is the divergence of interest between the principal and his or her agent, as highlighted by Hill and Jones (1992) in their study that integrates agency theory with stakeholder theory. As a result, they advise that in order to increase the welfare of the principal, it is necessary to implement suitable monitoring and reward measures in order to divert the agent from opportunistic activities (Hill and Jones, 1992). Other presumptions of the theory are described by Keil (2005) as follows:

- a) In accordance with the concepts of contract freedom and private property, both the agent and principal act rationally in accordance with their expectations;
- b) The wellbeing of the principal is indirectly affected by the agent's activities;
- c) The agency problem arises when the agency unfairly exploits the superior information, which is caused by the asymmetric information giving the agent discretionary flexibility. Therefore, if the principal has little control over the agent's actions, the cost of monitoring must be borne by the principle in the form of rewards or supervision;
- d) There are conflicting interests. Despite the fact that each party has their own interests, the agent is more likely to behave opportunistically to further his or her own interests than those of the principal. These three varieties of opportunistic behavior are divided by Keil (2005) into hidden intention (goals and interests), hidden characteristics (unknown talents and abilities), and hidden actions (limited control over his/her actions).

To explain the interaction between managers and investors, managers and workers, and other relationships, the theory has mostly been applied in business and profit-oriented circles (Jensen and Meckling, 1976). But this goes beyond business and includes public administration (Zalyevska, 2015). For instance, Leruth and Paul (2006) utilized the principle agency theory to examine public spending management systems in developing nations and then suggested the Ministry of Finance of the country in question select an audit regime with the lowest agency cost. Natural selection mechanisms favor governance arrangements that reduce agency expenses (Fama and Jensen, 1983).

The idea has mostly been utilized in commercial and profit-oriented circles to describe the connection between managers and investors, managers and employees, and other interactions (Jensen and Meckling, 1976). But this also pertains to government

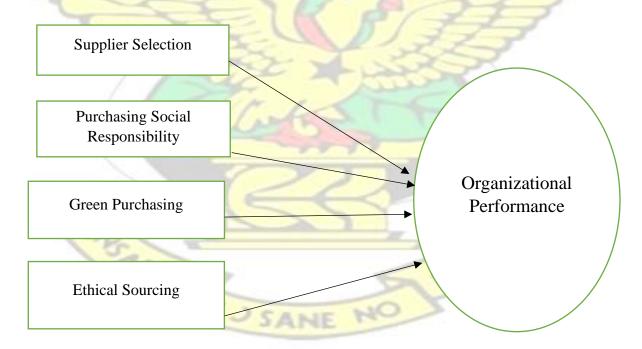
management, not just business (Zalyevska, 2015). For instance, Leruth and Paul (2006) examined public expenditure management systems in developing countries using the principle agency theory and then recommended the Ministry of Finance of the country in question choose an auditing procedure with the lowest agency cost. Natural selection processes favor regulatory frameworks that lower agency costs (Fama and Jensen, 1983).

The government (the executive arm) is defined in this research using the principal agency theory (PAT) as the agent who has been appointed by elections to look out for the welfare of its population (the principal), over a period of time. All national development initiatives, programs, and infrastructure that the government funds through purchase or in collaboration with the private sector are included in this definition of welfare (third party and agent to the government). The Principal Agency Theory alone will not be sufficient to utilize as a theoretical framework for the procurement practice and its sustainability emphasis, however, since this study focuses on evaluating the potential contribution of egovernment to the implementation of sustainable public procurement. It requires several other groups or parties with their own competing interests and responsibilities along the supply chain which must be managed to successfully realize the policy. Hence, the need for a fusion with the stakeholder theory as was done by Hill and Jones (1992 cited in Adjei-Bamfo, 2017).

SAPS WY SANE

2.5 Conceptual Framework

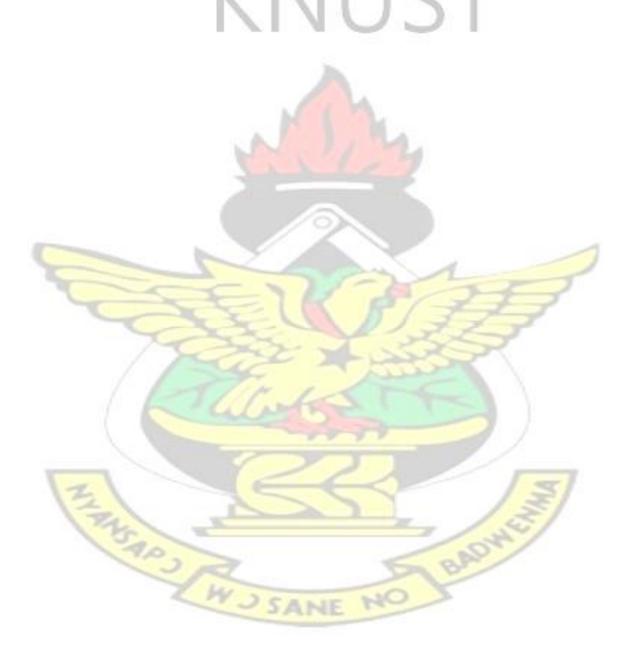
Bogdan and Biklen (2003), as mentioned in Chelangat et al. (2015), define a conceptual Framework as a fundamental framework made up of a few abstract building pieces that stand in for the observable, experiencing, and analytical/synthetic parts of a process or system under consideration. It is a collection of overarching concepts and guiding ideas drawn from pertinent disciplines of study and utilized to organize a subsequent presentation. These building elements work together to fulfill the desired results of the framework. A variable is a quantifiable trait that takes on various values depending on the subject. Organizational performance is the dependent variable, while the independent factors are supplier selection, green purchasing, purchasing social responsibility, and ethical sourcing. The figure 2.2 shows that the independent variables have effect on organizational performance.



Source: Researcher's Construct 2022

2.6 Theoretical Review

This study adopted two theories to guide the study in the achievement of the objectives of the study. The two theories considered include the stakeholder theory, and the principal theory.



CHAPTER THREE

RESEARCH METHODOLOGY AND ORGANISATIONAL PROFILE

3.0 Introduction

This section of the research presents the methods and techniques used to collect information to evaluate the effect of SCM procedures on organizational results. The research design, survey population, sample size and sampling processes, information collection tool, information collection process, and data analysis were also discussed. This section also presents ethical considerations.

3.2 Research Design

A research design has been explained as a conceived plan and structures of study that aids a researcher to find or obtain answers to research question (Kerlinger, 1986 as cited in Yeboah, 2015). Thus, a research design enables a study to obtain to initial research question as unambiguous as possible (Jones et al., 2004).

Among the various types of research design, the descriptive case study was adopted for the study. This design was adopted to obtain various responses that will enable the researcher draw a comprehensive analysis to the study. Also, the design is a non-experimental, which focuses on the relationship between non-manipulated variable in a natural setting. The goal in this survey to the researcher was to select the areas in the organisation that are directly linked with sustainable procurement management practices.

Creswell (2013) has identified three approaches to research: quantitative, qualitative, and mixed approach. The quantitative approach to research was adopted. The quantitative design is perceived as an objective approach. This is because it seeks precise measurement

and analysis of target concepts. The quantitative approach is also credited as less time consuming, and also interested in collection of quantitative data. Questionnaire is mostly used in quantitative approach, and so this study adopted the quantitative approach (where questionnaire is used).

It was against the above advantages of the approach that the researcher embraced the research design and the quantitative approach.

3.3 Population of the study

A population of the investigation discusses to the whole number of individuals in a particular geographical area, organization, department, or section which a sample is selected. Neumann (2007) defined a population as all the cases of individuals, institutions or organization interested to the researcher. The population targeted was employees working Wilmar Africa Limited in Tema. This organization has a staff strength of one hundred and eleven.

3.4 Sample size and Sampling Techniques

Sampling is very crucial to most researches that study large population. This is because, sometimes, the entire population cannot be studied. A researcher has to make inference from a portion of a population and generalize it findings. Thus, the objective of sampling is to obtain a minor gathering of elements or cases from which a researcher can analyze and ensures that a result obtained is a good reflection of an entire population (Neumann, 2006).

Selecting the small units or portion of a population is a complex exercise that in most cases involves qualitative (non-probability) and quantitative (probability) procedures (Saunders

et al., 2009). This study instead of involving the entire population of the studied company adopted the convenient sampling procedure and the intended sampling procedure to choose participants for the investigation.

The convenient sampling was used to seventy-five (75) non-management staff of the company. Workers who were accessible and enthusiastic to participate in the investigation throughout the questionnaire administration were used for the study. This technique enables the researcher to save time by balancing academic and research work so as to meet the deadline for submitting the thesis.

The purposive sampling technique was used on sixteen (16) management staff of the firms. This was done because management staff (which are made up of Logistics and Supply Department) was found to hold key information in relation to sustainable procurement management practices in the company. In short, the intended sampling technique was utilized to gain vital information from respondents. This enabled the researcher to have casual interview with management staff. In all, ninety-one (91) respondents were used for the investigation.

3.5 Data Collection Instrument

The researcher made use of primary and secondary source of information collection.

3.5.1 Secondary Source of Data

Secondary data has been defined by Saunders et al (2009) as data used for a study that was originally gathered for some other purpose. In this study, textbooks, journal articles, and internet were used to gather secondary data.

The secondary data enabled the researcher in retrieving information for literature review on the research topic. Also, it helped to identify how other scholars have defined and measured key concepts and also how findings of the study relate to other findings.

3.5.2 Primary Source of Data

Primary data refers to data that is gathered personally or by research assistants through interview, questionnaire, focus-group discussion, mail, telephone or observation. It can also be obtained through clinical trials, and experiments. That is, the primary source of data collection gives first-hand information (Barker, 2012).

In this study, questionnaire was used as the main instrument for collecting primary data. The questionnaire was split into four parts. Section A includes questions about participants' socio-demographic features, Section B comprises of question items on sustainable procurement practices, Section C also contains question items on organizational performance, while Section D also comprises of question items drivers to successful implementation of sustainable procurement management practices. Participants responded to question items utilizing a five-point Likert's scale from strongly disagree to strongly agree. Questionnaire was adopted because it consumes less time, and also, it can bring the exact information required for specific purpose of a study.

3.6 Data Collection Process

Copies of the questionnaire were administered to employees in the various departments of these selected firms/organizations. Even though, the objective of the study and instructions on how to answer question items were provided on the questionnaire, the researcher also took time to explained the question items to respondents. The reason behind this was to

help responds to understand the purpose of the research, and to do away with any suspicions, partialities, as well as to provide respondents' independent view on question items. After about three weeks, the researcher went back to collect answered questionnaires.

3.7 Data Analysis

Unless raw data is transformed into information for decision-making purpose, it will remain meaningless. To make the data meaningful, it has to be analyzed. The analysis entailed developing summaries and application of statistical inferences.

In order to guarantee consistency across participants, data gathered from respondents were first analyzed to identify and correct potential mistakes and omissions that were probable to happen. After that, information was coded to allow a restricted amount of classifications to respondents' answers. The statistical package for social science (SPSS) which contains several statistical tests enabled the researcher to analyze data.

Both the descriptive and inferential statistics found in SPSS were specifically used for analyzing the collected data. The Mean and Standard Deviation were used as descriptive statistics tools to analyze, while the Linear Regression was used as inferential statistics tool to evaluate the influence of sustainable procurement management practices on organizational performance.

WUSANE

3.8 Validity and Reliability

These two elements cannot be eliminated from social science researches. They are crucial in determining how authentic a research instrument is. Validity has been explained as the accuracy and meaningfulness of inference, which were based on research outcomes (Mugenda and Mugenda, 1999). The validity of the research instrument used in this study was ascertained using face validity. The instrument was given to the researcher's supervisor to assess whether the question items posed on the interview guide can enable the researcher to achieve the objective of the study. The healthy comments from the supervisor were taken into consideration before the final draft of the interview guide. Also, the instrument was designed out of the literature reviewed. This was done to ensure content validity.

Reliability of a research instrument has also been explained as a measure of the findings and suggests the truthfulness of the collected data. The researcher utilized questionnaire to improve the reliability of instrument. The question items on the interview guide were used to design a questionnaire. A pilot study was carried out with twenty respondents. The Cronbach alpha was used to check the reliability of the instrument after data have been coded into statistical package for social science (SPSS). The instrument was found to be reliable. This was because the reliable co-efficient was found to be greater than 0.7 (which the acceptable reliability co-efficient).

3.8 Ethical Consideration

The investigator in conducting the study sought to it that ethical principles were observed. The researcher first sought to it that participants were knowledgeable on the purpose of the investigation. Respondents' consents to participate in the study were also devoid of coercion, inducement, pretense, and deception. Data from respondents were also handled with confidentiality, and data was primarily used for academic purpose. Respondents' anonymity was protected and all information used other than those used were acknowledged.

3.9 Company Profile

Wilmar Africa Limited is a manufacturing firm founded privately in 2009 in Tema and which focuses on providing superior quality product, enriching lives and ensuring social good.

Wilmar Africa is focused at making our cherished consumers happy and delighting their homes with our brands.

Wilmar Africa is a subsidiary of Wilmar international, which is the world's leading integrated multinational Agribusiness group with its head office in Singapore. It operates 850 factories in 35 countries across 50 continents. Wilmar International generates in excess USD 40 Billion annual turnover.

In Ghana, Wilmar operates an integrated business model, with holding interest in Benso Oil Palm Plantation, which is listed on the stock exchange of Ghana. Wilmar Africa Limited, which is the manufacturing arm, is one of the largest manufacturing business entities and the producers of Frytol cooking oil and importers of fortune rice brands, fortune margarine, Frytol seasoning varieties, among others. In addition is the Ghana

Specialty Fats Industries Limited (GSFIL), focusing on the crushing and exportation of shea. Again as a business entity is Africa Consumer products Ghana Limited (ACPGL), which focuses on the production of several soap and detergent variants.

Wilmar Africa limited incorporated six (6) values which are Integrity, Excellence, Passion, Innovation, Teamwork and Safety & Sustainability. We operate a merit-based business, which acknowledges effort and reward performance. We believe in the talents employees brings board and focus on reshaping them to take charge of the future.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter of the study presents results data solicited from respondents the adoption of sustainable procurement practices in manufacturing firms in Ghana. Data were gathered on the background of respondents, sustainable procurement practices, organizational performance, and drivers for successful implementation of sustainable procurement practices. Results are presented based on the specific objectives of the study.

4.2 Background of Respondents

The data solicited on background of respondents include gender, age, and position in the company, and the number of years in organization. Data on respondents' educational level were also solicited. Data on these variables were considered as the researcher perceived they can influence the outcome of the study. The reason for inclusion of each variable is justified in the discussion.

Results in Table 4.1 showed that 69.2% of the respondents were males and the remaining 30.8% were females. It is clear males occupy the majority. The fact that both genders were included in the study suggested that the data collected were not gender-bias.

Concerning the age of respondents, the statistics showed that 19.8% of the respondents were less than 30 years, 30.8% of them were between 30 to 40 years, while 37.4% were between 41 to 50 years. The remaining 12.0% were more than 50 years. It evident that the collected data was not age-specific. Also, respondents were matured enough to provide relevant data for the study.

Data were gathered on the number of years respondents have spent with their present organization. It was found that 14.3% had worked for less than 5 years, 42.9% had worked between 6 to 10 years, while 18.7% were between 11 to 15 years. The remaining 24.1% had worked between 16 to 20 years. From the statistics, majority of respondents had enough experience to provide relevant data to attain the objective of the study.

The statistics on respondents' educational level showed that 12.1% were holders of SSSCE/WASSCE, 27.5% were Diploma holder. While 45.1% of them were First Degree holders. The remaining 15.3% were postgraduate degree holder. The educational level of respondents enabled speed rate of data collection, as the researcher spent no time explaining question items or guiding respondents to respond to question items.

Table 4.1 Background of Respondents

	Variable	Frequency	Percentage
Gender			
Males		63	69.2
Females		28	30.8

Age		
Less than 30 years	18	19.8
30 to 40 years	28	30.8
41 to 50 years	34	37.4
More than 50 years	11 (12.0
Number of Years in	/////	
Organisation	40.	
Less than 5 years	13	14.3
6 to 10 years	39	42.9
11 to 15 years	17	18.7
16 to 20 years	22	24.1
Level of Education		
SSSCE/WASSCE	11	12.1
Diploma	25	27.5
First Degree	41	45.1
Postgraduate	14	15.3

Field Data, 2022

4.3 Sustainable procurement Practices

Data were also solicited on the sustainable procurement practices. This was done to achieve the first specific objective of the study. Respondents were asked to respond to set of question items relating to sustainable procurement practices, using a five-point Likert's scale from strongly disagree to strongly agree. The mean and the standard deviation were then employed to summarize data. The mean was used to indicate similarity in the respondents' responses. The standard deviation was utilized to assess the variation in the responses of respondents.

4.3.1 Green Purchasing

The statistics on green purchasing showed that the mean scores ranged from 3.43 to 3.78 The question item, "My organization ensures efficient use of energy", and "My organization is ensuring decreased consumption of harmful/toxic material during production" had the highest mean score, while the question item, "My organization has developed waste reduction plan to help us become environmentally responsible" had the lowest mean score. It is evident that the mean scores of all the question items were above the midpoint scale. This suggested that majority of respondents agreed to the question items. It was concluded that green purchasing is a sustainable procurement practice adopted by studied organization

The above conclusion was made as majority of the respondents indicated the organization purchase only raw material which are environmentally friendly, emphasizes on environmentally friendly product during its product design stage, ensures decreased consumption of harmful/toxic material during production, and has observed decreased liquid and solid waste generations in its production processes. Majority of them also held that the organization deals with supplier who provide sustainable material, ensures efficient use of energy, and has developed waste reduction plan to help us become environmentally responsible.

4.3.2 Ethical Sourcing

The result on ethical sourcing showed that the mean scores of the question items ranged from 3.01 to 3.75. The question item with the highest mean score was "My organization has established a unit which handles all ethical issues", while the one with the lowest mean score is, "When purchases become competitive, awards go to the lowest responsive and

responsible bidder in my organization". The mean scores of the question items are above the midpoint scale (Mean = 2.5). This suggests that majority of respondents agreed to the question items. This made it clear to concluded that there is existence of ethical sourcing in the studied organization.

Majority of the respondents agreed that the organisation ensures that sustainable standard are met in every order, all procurement transactions and processes are subjected to scrutiny or proper checks in my organisation, and the adheres to all environmental and social standard during production and transportation of its products to customer. They also held that their organisation has implemented and constantly follows the safety aspects and government laws concerning their operations, all employees are held responsible for their procurement activities in the organisation, and the organisation has established a unit which handles all ethical issues. Majority of them also revealed that there are established ethical codes of conduct which guide the activities of their employees and suppliers, and when purchases become competitive, awards go to the lowest responsive and responsible bidder in my organisation.

4.3.3 Supplier Involvement

The statistics showed that the mean score of the question items measuring supplier involvement ranged from 3.55 to 4.16. The question item with the highest mean score is, "My organisation ensures that its suppliers eliminate or reduce the use of harmful substances during storage and transportation of raw materials" and the one with lowest mean score is, "My organisation trains its key suppliers on its core values and rules of conduct." The mean scores of the question items is above the midpoint scale (Mean = 2.5).

This suggests that majority of respondents agreed to the question items. A conclusion was drawn that supplier involvement is also a sustainable procurement practice.

Majority of respondents shared a common view that the organisation collaborates with its supplier to develop policies, processes and product which are environmentally friendly, ensures direct involvement of suppliers during planning and forecasting decisions, and trains its key suppliers on its core values and rules of conduct. They agreed that the organisation establishes contract with only suppliers who are sustainability certified and complaint, ensures effective dialogues and feedback with suppliers, ensures that its suppliers eliminate or reduce the use of harmful substances during storage and transportation of raw materials, and has development sustainable policy with suppliers. Finally, they held that the organisation monitors and evaluate the activities of their suppliers to ensure that they adhere to the required sustainability policies.

Table 4.2 Sustainable Procurement Practices

Sustainable Procurement Practices	Min	Max	Mean	Std Dev.
Green Purchasing	. 1	1		1
My organisation purchase only raw material which are environmentally friendly	1	5	3.66	1.10
My organisation emphasizes on environmentally friendly product during its product design stage		5	3.75	1.02
My organisation is ensuring decreased consumption of harmful/toxic material during production	5	5	3.78	.854
My organisation has observed decreased liquid and solid waste generations in its production processes	NO	5	3.69	1.08
My organisation deal with supplier who provide sustainable material	1	5	3.73	1.14
My organisation ensures efficient use of energy	1	5	3.78	.940

My organisation has developed waste reduction plan to help us become environmentally responsible	1	5	3.43	1.23
Ethical Sourcing				
My organisation ensure that sustainable standard are met in every order	1	5 _	3.02	1.17
All procurement transactions and processes are subjected to scrutiny or proper checks in my organization	٦,	5	3.54	1.12
My organisation adheres to all environmental and social standard during production and transportation of its products to customer.	1	5	3.13	1.15
My organisation has implemented and constantly follows the safety aspects and government laws concerning their operations		5	3.35	1.13
When purchases become competitive, awards go to the lowest responsive and responsible bidder in my organisation	1	5	3.01	1.04
All employees are held responsible for their procurement activities in the organization	1	5	3.46	1.11
There are established ethical codes of conduct which guide the activities of their employees and suppliers	1	5	3.16	1.18
My organisation has established a unit which handles all ethical issues Supplier Involvement		5	3.75	.961
My aganization collaborates with its symplicate		5	3.77	.961
My organisation collaborates with its supplier to develop policies, processes and product which are environmentally friendly		5		.901
My organisation ensure direct involvement of suppliers during planning and forecasting decisions	1	5	3.57	1.23
My organisation trains its key suppliers on its core values and rules of conduct	1	5	3.55	1.03
My organisation establishes contract with only suppliers who are sustainability certified and complaint	1	5	3.65	.899
My organisation ensures effective dialogues and feedback with suppliers	NO	5	4.07	.987
My organisation ensures that its suppliers eliminate or reduce the use of harmful substances during storage and transportation of raw materials	1	5	4.16	1.01

My organisation has development sustainable	1	5	3.92	1.02
policy with suppliers				
My organisation monitors and evaluate the	1	5	4.12	.964
activities of their suppliers to ensure that they				
adhere to the required sustainability policies				

Field Data, 2022

4.4 The Impact of Sustainable Procurement Practices on Organizational Performance

The regression analysis was employed to assess the impact of sustainable procurement practices on organizational performance. This was done to achieve the research specific objective two. The Beta score, R^2 score, and Adjusted R^2 are presented in Table 4.3.

The statistics showed that sustainable procurement practices has impact on organizational performance. The Beta score indicates an association exist between sustainable procurement practices and organizational performance (Beta = .855). The R^2 and the Adjusted R^2 (R^2 = .731; Adjusted R^2 = .728) suggested the impact was positive. Also, the impact was found to be significant. Overall, sustainable procurement practices explained 73.1% of the variation in organizational performance. It can there be concluded that there exist a significant positive impact of sustainable procurement practices on organizational performance.

The effect of each dimension of the sustainable procurement practice on organizational performance was analyzed. Using the R², he statistics showed that green purchasing explained 57.5% of the variation in organizational performance, while Ethical sourcing explained 49.0%% of the variation. Supplier involvement explained 61.5% of the variation in organizational performance.

Table 4.3 Summary of Regression Result on the Impact of Sustainable Procurement Practices on Organizational Performance

SPP	(Green	Ethical	Supplier	Overall	
]	Purchasing	sourcing	Involvement		
Beta		.758	.700	.784	.855	
\mathbb{R}^2		.575	.490	.615	.731	
Adjusted R ²		.569	.484	.611	.855	
Sig.		0.000	.000	.000	.000	
No.	of	91	91	91	91	
Respondents						

Field Data, 2022

4.5 Drivers for Implementation of Successful Procurement Practices

To achieve the third specific objective of the study, respondents were asked to indicate their agreement or disagreement to question items relating to drivers for implementation of successful procurement practices. Respondents responded to question items using a five point Likert's scale from strongly disagree to strongly agree. The mean score and the standard deviation scores were used to derive meaning from the coded data. The mean was used to assess similarity in respondents' responses and the standard deviation was used to assess variation in responses.

The mean scores of the question items were found to range from 3.19. to 3.92. The mean scores of all the question items were found to be above the midpoint scale (Mean = 2.5). The scores suggested respondents' agreement to the question items. It was concluded there exist several drivers for implementation of successful procurement practices.

The drivers identified by respondents to influence the successful implementation of procurement practices include; adequate fund, less cost of implementing sustainable practices in purchasing process, availability of sustainable suppliers, proper environmental regulation, and strong relationship between suppliers. Effective government regulation and enforcement, no or less resistance from suppliers, top management support, and expertise and training were some drivers identified by respondents to influence the successful implementation of sustainable procurement practices.



Table 4.4 Drivers for Implementation of Successful Procurement Practices

Drivers	Min	Max	Mean	Std Dev.
Adequate Funding	1	5	3.80	.969
Less cost of implementing sustainable practices	1	5	3.71	.934
in purchasing process	J,	\supset		
Availability of sustainable suppliers	1	5	3.92	.934
Proper environmental regulation	1	5	3.68	1.11
Strong relationship between suppliers	1	5	3.65	.959
Effective government regulation and	1	5	3.54	1.11
enforcement				
No or less resistance from suppliers	1	5	3.19	1.25
Clear procurement laws	1	5	3.26	1.17
Top Management Support	J.	5	3.71	1.11
Expertise and Training	1	5	3.30	1.16

Field Data, 2022

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter ends the study by presenting the summary, conclusion and summary of the study. The chapter is in five sections: introduction, summary of the study, summary of key finding, conclusion, and recommendations from the study. Recommendations for further studies is presented under the last section.

5.2 Summary of the study

The study examine the adoption of sustainable procurement practices in manufacturing firms in Ghana, a case of Wilmar Africa Limited. It specifically explored sustainable procurement practices, the impact on sustainable procurement practices on the performance, and the drivers for implementation of successful procurement practices. The descriptive research was considered suitable for the study. The quantitative approach is also considered for the study. The population of the study entails employees in manufacturing firms in Ghana. However, employees in Wilmar Africa Limited were the target population. This population was considered due to easy access of data. The convenience sampling techniques will be utilized to select respondents for the study. The data was personally solicited data from respondents, utilizing a structured questionnaire. Data was coded into statistical package for social science, and analyzed. The descriptive statistics and inferential statistics (regression) were utilized to analyze data. Result will help improve sustainable procurement practices in firms.

5.3 Summary of Key Findings

The summary was done based on the three specific objective of the study.

5.3.1 Sustainable Procurement Practices

The study revealed that majority of the respondents indicated the organization purchase only raw material which are environmentally friendly, emphasizes on environmentally friendly product during its product design stage, ensures decreased consumption of harmful/toxic material during production, and has observed decreased liquid and solid waste generations in its production processes. Majority of them also held that the organization deals with supplier who provide sustainable material, ensures efficient use of energy, and has developed waste reduction plan to help us become environmentally responsible.

The study concluded that there is existence of ethical sourcing in the studied organisation. Majority of the respondents agreed that the organisation ensures that sustainable standard are met in every order, all procurement transactions and processes are subjected to scrutiny or proper checks in my organisation, and the adheres to all environmental and social standard during production and transportation of its products to customer. They also held that their organisation has implemented and constantly follows the safety aspects and government laws concerning their operations, all employees are held responsible for their procurement activities in the organisation, and the organisation has established a unit which handles all ethical issues. Majority of them also revealed that there are established ethical codes of conduct which guide the activates of their employees and suppliers, and when purchases become competitive, awards go to the lowest responsive and responsible bidder in my organisation.

The study revealed supplier involvement as a sustainable procurement practice. Majority of respondents shared a common view that the organisation collaborates with its supplier to develop policies, processes and product which are environmentally friendly, ensures direct involvement of suppliers during planning and forecasting decisions, and trains its key suppliers on its core values and rules of conduct. They agreed that the organization establishes contract with only suppliers who are sustainability certified and complaint, ensures effective dialogues and feedback with suppliers, ensures that its suppliers eliminate or reduce the use of harmful substances during storage and transportation of raw materials, and has development sustainable policy with suppliers. Finally, they held that the organisation monitors and evaluate the activities of their suppliers to ensure that they adhere to the required sustainability policies.

5.3.2 The Impact on Sustainable Procurement Practices on the Performance

The statistics showed that sustainable procurement practices has impact on organizational performance. An association was found to exist between sustainable procurement practices and organizational performance. Overall, sustainable procurement practices explained % of the variation in organizational performance. The study concluded that concluded that there exist a significant positive impact of sustainable procurement practices on organizational performance.

The statistics showed that green purchasing explained % of the variation in organization, while Ethical sourcing explained % of the variation. Supplier involvement explained % of the variation in organizational performance.

5.3.3 Drivers for Implementation of Successful Procurement Practices

The drivers identified by respondents to influence the successful implementation of procurement practices include; adequate fund, less cost of implementing sustainable practices in purchasing process, availability of sustainable suppliers, proper environmental regulation, and strong relationship between suppliers. Effective government regulation and enforcement, no or less resistance from suppliers, top management support, and expertise and training were some drivers identified by respondents to influence the successful implementation of sustainable procurement practices.

5.4 Conclusion

The study looked at the adoption of sustainable procurement practices in manufacturing firms in Ghana, a case of Wilmar Africa Limited. The study pointed out that the studied organization has adopted some sustainable procurement practices. These practices include; green purchasing, ethical sourcing, and supplier involvement. Further, sustainable procurement practices were found to exert positive impact on organizational performance. Several drivers were highlighted by the study to influence the successful implementation of sustainable procurement practices. It is prudent for organizations to pay critical attention to these drivers in order to implement sound sustainable procurement practices. This to a large extent will enhance firm performance. It should also be pointed out that the mere implementation of sustainable procurement practices do not yield results, but a conducive atmosphere for successful implementation matters a lot. This is to say that the necessary structures must be put in place to enable the organisation achieve results from implementing sustainable procurement practices.

5.5 Recommendations of the study

The following recommendations are made based on the outcome of the study.

Given the impact that sustainable procurement practices have on organizational performance, it is critical that businesses begin to see the strategic value of sustainable procurement, which will not only change the course of their businesses but also have positive effects on the environment and society as a whole. All manufacturing companies should be encouraged to adopt sustainable procurement practices because they will help them achieve some level of competitiveness in addition to fulfilling their social and environmental obligations. This is because the study found that sustainable procurement practices have an impact on organizational performance.

Significant obstacles to building capacity include the issue of inadequate training and accountability, as well as a lack of understanding of sustainable procurement. As a result of procurers' limited understanding of the advantages and merits of sustainable procurement, management should regularly organize workshops to increase staff/procurers' knowledge and capacity and prepare them to make wise financial decisions while upholding social and environmental standards.

In order to control their operational costs, adhere to environmental regulatory authority requirements, and improve supply quality, the study advises manufacturing firms to institutionalize sustainable procurement practices through the formulation and implementation of green procurement policies and procedures.

In order to promote a green culture that will have a positive impact on performance, management should proactively educate all employees on the advantages of sustainable practices, particularly with regard to the procurement function. In addition, the government

should make a concerted effort through policy interventions to encourage businesses to go green in order to protect the environment and manage natural resources sustainably in order to meet the demands of her population in the future. This will have a multiplier impact, boosting business performance and transforming them into vision catalysts.

Because green procurement has a part to play in waste control, the examined organization must include green procurement practices into all of its operations and activities. It must have a transparent green purchasing policy. An organization could purchase more environmentally friendly goods and methods with the use of a green procurement policy. In order to purchase more eco-friendly goods, the organization must establish strong relationships with suppliers.

Organizations need a significant cultural shift to address sustainability issues, one that recognizes that by managing and working to improve environmental, social, and economic performance throughout supply chains, businesses act in their own interests as well as the interests of their stakeholders and society at large. Engaging with suppliers is ultimately intended to provide a common perspective on sustainability challenges, increase supplier ownership of their sustainability vision, strategy, and performance, and foster closer working relationships with suppliers that have similar interests.

5.5.1 Recommendations for future studies

This study was by no means comprehensive, so more research on a different economic sector, such as the retail, service, government, or health sectors for comparison, is advised. This is so because sustainable procurement management is a rich and developing area of research. It is further recommended that a study with more variables be taken into consideration in order to provide a thorough grasp of the idea of sustainable procurement

and take any intervening variables into account. To make a comparison, a comparable study should be carried out utilizing a longitudinal research approach.



REFERENCES

- Adjei, A. . (2010). Sustainable Public Procurement: A New Approach To Good Governance. *Towards Frontiers in Public Procurement*.
- Agaba, E. & Shipman, N. (2006). Public procurement reform in developing countries: the
- Ugandan experience', in G Piga & K Thai (eds.), *Advancing public procurement:*practices, innovations and knowledge-sharing, PrAcademics Press, Boca Raton
 pp. 373-391.
- Aktin, T. & Gergin, Z. (2016). Mathematical modelling of sustainable procurement strategies: three case studies', *Journal of Cleaner Production*, 113, 767-780.
- Alejandre, E., Traspaderne, A., & Elgea, A. O. de. (2010). Best practice on green or sustainable public procurement and new guidelines. *Journal Economics and Bussiness*, 2(1), 34–56.
- Alzubo, E. & Akkerman, R. (2022). Sustainable supply chain management practices in developing countries: An empirical study of Jordanian manufacturing companies.

 Cleaner Production Letters 2, 1-15.
- Andrecka, M. (2017). Corporate social responsibility and sustainability in Danish public procurement', Eur. Procurement & Pub. Private Partnership L. Rev., 12, 333-345.
- Arlbjørn, S. & Freytag, P. (2012). Public procurement vs private purchasing: is there any foundation for comparing and learning across the sectors?. *International Journal of Public Sector Management*, 25 (3), 203-220.
- Asare, C. (2016). The Role and Effect of the Entity Tender Committee in Sustainable

 Procurement Practices in Public Hospitals in Ghana. Kwame Nkrumah University of
 Science and Technology. Ghana.

- Baig, A. S., Abrar, M., Batool, A., Hashim, M. & Shabbir, R. (2020). Barriers to the adoption of sustainable supply chain management practices: Moderating role of firm size. *Cogent Business & Management*, 7 (1), 1841525.
- BCSD Portugal Conselho Empresarial para o Desenvolvimento Sustentável. (2008).

 *Procurement sustentável: guia prático de implementação. Retrieved in 3rd June 2022, fromhttp://www.bcsdportugal.org/wp-content/uploads/2013/11/YMT-2008-Procurement-sustentavel.pdf
- Blowfield, M. (2003). Ethical Supply Chains in the Cocoa, Coffee and Tea Industries.

 Greener Management International, 43, 15-24.
- Bofinger, A. C. R. B., Ketikidis, P. H., Koh, S. C. L., & Cullen, J. (2015). Role of "green knowledge" in the environmental transformation of the supply chain: the case of Greek manufacturing. *International Journal of Knowledge-Based Development*, 2(1), 107.
- Brammer, S. & Walker, H. (2011). Sustainable procurement in the public sector: an international comparative study. *International Journal of Operations & Production Management*, 31 (4), 452-476.
- Carr, A. S., & Smeltzer, L. R. (1999). The relationship of strategic purchasing to supply chain management. *European of Purchasing & Supply Management*, 5(1), 43-51.
- Carter, R. (2005). 'Purchasing social responsibility and firm performance: The key mediating roles of organizational learning and supplier performance. *International Journal of Physical Distribution & Logistics Management*, 35 (3), 177-194.
- Carter, R & Jennings, M. (2004). 'The role of purchasing in corporate social responsibility: a structural equation analysis. *Journal of Business Logistics*, 25 (1), 145-186.
- Carter, J. R., & Narasimhan, R. (1996). Is purchasing really strategic? *International Journal of Purchasing and Materials Management*, 32(4), 20-28.

- Chari, F., & Chiriseri, L. (2014). Barriers to Sustainable Procurement in Zimbabwe. Greener Journal of Business and Management Studies, 4(1), 14-018.
- Chen, J.Y. & Slotnick, S. A. (2015). Supply chain disclosure and ethical sourcing', International Journal of Production Economics, 161, 17-30.
- CIPS (2009). Sustainable procurement CIPS, London, 11 May 2022,
- https://www.cips.org/Documents/Resources/Knowledge%20Summary/Sustainable%20
 Procurement.pdf>.
- De Lange, W., Wise, R. & Nahman, A. (2010). Securing a sustainable future through a new global contract between rich and poor. *Sustainable Development*, 18, 374-384.
- D'Souza, C., Taghian, M., & Khosla, R. (2007). Examination of environmental beliefs and its impact on the influence of price, quality and demographic characteristics with respect to green purchase intention. *Journal of Targeting, Measurement and Analysis for Marketing*, 15(2), 69–78.
- Eltayeb, T.K., Zailani, S. & Jayaraman, K. (2010). The examination on the drivers for GP adoption among EMS 14001 certified companies in Malaysia. *Journal of Manufacturing Technology Management*, 21 (2), 206-225.
- Esfahbodi, A., Zhang, Y., Watson, G. & Zhang, T. (2017). Governance pressures and performance outcomes of sustainable supply chain management—An empirical analysis of UK manufacturing industry. *Journal of Cleaner Production*, 155, 66–78.
- Feng, M., Yu, W., Wang, X., Wong, C.Y., Xu, M., Xiao, Z., 2018. Green supply chain management and financial performance: the mediating roles of operational and environmental performance. *Bus. Strat. Environ.* 27 (7), 811–824.
- Ferri, L. M., Oelze, N., Habisch, A. & Molteni, M. (2016). 'Implementation of responsible

- Procurement Management: An Institutional Perspective. Business Strategy and the Environment, 25 (4), 261-276.
- Freise, M. & Seuring, S. (2015). Social and environmental risk management in supply chains: A survey in the clothing industry. *Logistics Research*, 8(1), 2.
- Grandia, J. (2016). Finding the missing link: examining the mediating role of sustainable public procurement behaviour. *Journal of Cleaner Production*, 124, 183-190.
- Gunasekaran, A. & Spalanzani, A. (2012). Sustainability of manufacturing and services:
- Investigations for research and applications. *International Journal of Production Economics*, 140 (1), 35-47.
- Harland, C, Telgen, J, Callender, G, Grimm, R & Patrucco, A. (2019). Implementing Government Policy in Supply Chains: An International Coproduction Study of Public Procurement', *Journal of Supply Chain Management*, 55 (2), 6-25.
- Hawkins, T. G., Gravier, M. J. & Powley, E. H. (2011). 'Public Versus Private Sector Procurement Ethics and Strategy: What Each Sector can Learn from the Other. *Journal of Business Ethics*, 103 (4), 567-586.
- Ho, L & Taylor, M. (2007). An empirical analysis of triple bottom-line reporting and its determinants: evidence from the United States and Japan. *Journal of International Financial Management and Accounting*, 18 (2), 123-149.
- Hollos, D, Blome, C. & Foerstl, K. (2012). Does sustainable supplier co-operation affect performance? Examining implications for the triple bottom line. *International Journal of Production Research*, vol. 50 (11), 2968-2986.

- Huq, F. & Stevenson, M. (2020). Implementing Socially Sustainable Practices in
 Challenging Institutional Contexts: Building Theory from Seven Developing
 Country Supplier Cases. *Journal of Business Ethics*, 161 (2), 415-442.
- Islam, M. M., & Siwar, C. (2013), A comparative study of public sector sustainable procurement practices, opportunities and barriers. *International Review of Business Research Papers*, 9(3), 62-84.
- Gaither, N. & Frazier, G. (2001). *Administração da produção e operações*. São Paulo: Pioneira Thomson Learning.
- Glass, J. & Achour, N. (2012) Engaging small firms in sustainable supply chains: responsible sourcing practices in the UK construction industry. *International Journal of Agile Systems and Management*, 5 (1), 29-58.
- Karna, J., Hansen, E., & Juslin, K. (2003). Social responsibility in environmental marketing planning. *European Journal of Marketing*. *Bradford*, 37(5-6).
- Kim, S, Colicchia, C. & Menachof, D. (2018). Ethical Sourcing: An Analysis of the Literature and Implications for Future Research. *Journal of Business Ethics*, 152 (4), 1033-1052.
- Kiswili, E. N. & Ismail, N. S. (2016). Role of sustainable procurement practices on supply chain performance of manufacturing sector in Kenya: a case study of East African Portland Cement Company. *European Journal of Logistics, Purchasing and Supply Chain Management*, 4 (3), 1-13.
- Larson, B. (2019). Controlling social desirability bias. *International Journal of Market Research*, 61 (5), 534-547.

- Mani, V., Gunasekaran, A. & Delgado, C. (2018). 'Enhancing supply chain performance through supplier social sustainability: An emerging economy perspective. *International Journal of Production Economics*, 195, 259-272.
- McMurray, A., Islam, M. M, Siwar, C. & Fien, J. (2014). 'Sustainable procurement in Malaysian organizations: Practices, barriers and opportunities. *Journal of Purchasing and Supply Management*, 20 (3), 195-207.
- Mcobrein, V. A. & Ackah, R. A. M. (2019). Green Procurement in an Organization: A Case Study of Unilever Ghana Limited. *African Journal of Procurement, Logistics* & Supply Chain Management, 1 (3), 1-17.
- Meehan, J., & Bryde, D. J. (2015). A field-level examination of the adoption of sustainable procurement in the social housing sector. *International Journal of Operations & Production Management*, 35(7), 982 1004.
- Mello, T. M., Eckhardt, D. & Leiras, A. (2017). Sustainable procurement portfolio management: a case study in a mining company. *Production*, 27, 1 15.
- Mitra, S. & Datta, P. P. (2014). Adoption of green supply chain management practices and their impact on performance: an exploratory study of Indian manufacturing firms.

 International Journal of Production Research, 52 (7), 2085–2107.
- Min, H & Galle, P (2001). Green purchasing practices of US firms', *International Journal of Operations & Production Management*, 21 (9), 1222-1238.
- Munch, O. (2014), First time right procurement: substitution of the paradox purchasing savings through first-time-right-procurement (FTRP), Springer, Munster.
- Murray, C. E. (2009). 'Diffusion of innovation theory: a bridge for the research-practice gap in counseling', *Journal of Counseling & Development*, 87 (1), 108-116.
- Nijaki, L. & Worrel, G. (2012). 'Procurement for sustainable local economic development',

- International Journal of Public Sector Management, 25 (2), 133-153.
- OECD. (2007). Transparency in Government Procurement: The Benefits of Efficient Governance. *Journal of Supply Chain Management*. 31 (11), 12–23.
- O'Sullivan, A. & Sheffrin, S. (2003). *Economics: principles in action*, Pearson, New Jersey.
- Porter, M. E., & Kramer, M. (2006). Strategy and society: the link between competitive advantage and corporate social responsibility. Harvard: Harvard Business Review.

 Retrieved in 3 June 2022, from https://hbr.org/2006/12/strategy-and-society-the-link-between-competitive-advantage-and-corporate-social-responsibility
- UNOPS (2017). Procurement manual, United Nations, Copenhagen.
- Rehman, M. A. A., Aneyrao, T. A. & Shrivastava, R. L. (2015). Identification of critical success factors in Indian automobile industry: A GSCM approach. *International Journal of Process Management and Benchmarking*, 5(2), 229–245.
- Reilly, T, Saini, A & Skiba, J. (2020). Ethical Purchasing Dissonance: Antecedents and Coping
- Behaviors. Journal of Business Ethics, 163 (3), 577-597.
- Ruparathna, R., & Hewage, K. (2015). Sustainable procurement in the Canadian construction industry: current practices, drivers and opportunities. *Journal of Cleaner Production*, 109, 305-314.
- Sancha, C., Longoni, A. & Giménez, C. (2015). Sustainable supplier development practices: Drivers and enablers in a global context. *Journal of Purchasing and Supply Management*, 21(2), 95–102.

- Seuring, S & Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. *Journal of Cleaner Production*, 16 (15), 1699-1710.
- Tseng, M., Lim, M., & Wong, W. P. (2015). Sustainable supply chain management: A closed-loop network hierarchical approach. *Industrial Management & Data Systems*, 115(3), 436–461.
- Tiwari, S., Wei, S. C. & Nor, M. N. (2019). Factors Influencing Sustainable Procurement Practices In The Malaysian Manufacturing Firm. *International Conference on Operations*
- UNEP (2013). Sustainable public procurement: a global review, UNEP, Paris.

and Supply Chain Management, 1-12.

- Walker, H. & Brammer, S. (2009). Sustainable procurement in the United Kingdom public sector', Supply Chain Management: An International Journal, 14 (2), 128-137.
- University of California (2016), *Green procurement guide*, viewed 16 May 2022, https://financial.ucsc.edu/pages/purchasing_greenpurchasing.aspx.
- Weele, A. V. (2010). Purchasing and Supply Chain Management: analysis, strategy, planning and practiced. Hampshire: Cengage Learning EMEA.
- Xie, G. (2016). Cooperative strategies for sustainability in a decentralized supply chain with competing suppliers. *Journal of Cleaner Production*, 113, 807-821.
- Yawar, S. A. & Seuring, S. (2017). 'Management of Social Issues in Supply Chains: A Literature
- Review Exploring Social Issues, Actions and Performance Outcomes. *Journal of Business Ethics*, *141* (3), 621-643.
- Yook, K.H., Choi, J.H. and Suresh, N.C. (2017). Linking green purchasing capabilities to

- environmental and economic performance: the moderating role of firm size, *Journal of Purchasing and Supply Management, Forthcoming*, 5, 1-10.
- Zailani, S, Jeyaraman, K, Vengadasan, G. & Premkumar, R. (2012). Sustainable supply chain management (SSCM) in Malaysia: A survey. *International Journal of Production Economics*, 140 (1), 330-340.
- Zhang, M., Tse, Y. K., Doherty, B., Li, S. & Akhtar, P. (2018). Sustainable supply chain management: Confirmation of a higher-order model. *Resources, Conservation and Recycling*, 128, 206–221.
- Zhu, Q, Tian, Y & Sarkis, J. (2012). Diffusion of selected green supply chain management practices: an assessment of Chinese enterprises. *Production Planning & Control*, 23 (10-11), 837-850.
- Zaidi, S.A.H., Mirza, F. M., Hou, F. & Ashraf, R. U. (2019). 'Addressing the sustainable development through sustainable procurement: What factors resist the implementation of sustainable procurement in Pakistan?', *Socio-Economic Planning Sciences*, 68,100671.

BADWY

PRSAD WY SANE

APPENDIX

QUESTIONNAIRE

Thank you very much for accepting to be part of the study. The purpose of this study is to collect and collate information on adoption of sustainable procurement practices in manufacturing firms in Ghana, a case of Wilmar Africa Limited. The study is however for academic purposes, as such the researcher would like to assure you that your responses would not be used for any other intention other than contributing to knowledge building and offering suggestions for the growth of the cocoa industry.

If you need clarification on any item on the instrument, kindly draw the researcher attention. Objective responses offered will be much appreciated.

Section A: Background of the Respondent

Instruction (Please tick ($\sqrt{}$) where appropriate)

Gender	Tick
Male	
Female	
Age	Tick
Less than 30 years	
31 – 40 years	
41 – 50 years	-7
More than 50 years	2/
Position in Company	Tick
Senior Management	
Middle Management	
Junior Management level	
Number of years in the Organisation	Tick
Less than 5 years	
6 – 10 years	
11 - 15 years	
16-20 years	
More than 20 years	

Level of Education	Tick
SSSCE/WASSCE	
Diploma/HND	
First Degree	
Postgraduate	
Professional Qualification (CIPS, ACCA)	

Section B: Sustainable Procurement Practices

The following are the statements relating to sustainable procurement practices in your organisation. Please indicate the extent to which your organisation has adopted these practices, using a scale of; SD =Strongly disagree; D = Disagree; NS = Not sure; A = Agree; and SA = strongly agree.

Sustainable Procurement Practices	SD	D	NS	A	SA
Green Purchasing					
My organisation purchases only raw material which are		1			
environmentally friendly	h				7
My organisation emphasizes on environmentally	1	×	7	-	
friendly products during its product design stage		1	/		
My organisation is ensuring decreased consumption of	يرر	<u> </u>	7		
harmful/toxic material during production	ì				
My organisation has observed decreased liquid and	7		7		
solid waste generations in its production processes					
My organisation deals with supplier who provide			-9		
sustainable material			0		
My organisation ensures efficient use of energy					
My organisation has developed waste reduction plan to			- 1		
help us become environmentally responsible				-33	
Ethical Sourcing			1		10
My organisation ensures that sustainable standard are	<i>H</i>		1		
met in every order			000		
All procurement transactions and processes are	5	Bh			
subjected to scrutiny or proper checks in my		-			
organization	9				
My organisation adheres to all environmental and					
social standards during production and transportation					
of its products to customers					

My organisation has implemented and constantly follows the safety aspects and governmental laws concerning their operations When purchases become competitive, awards go to the lowest responsive and responsible bidder in my organization All employees are held responsible for their	
procurement activities in the organization	
There are established ethical codes of conduct which guide the activities of their employees and suppliers	J
My organisation has established a unit which handles all ethical issues	
Supplier Involvement	
My organisation collaborates with its supplier to develop policies, processes and products which are environmentally friendly	0
My organisation ensures direct involvement of suppliers during planning and forecasting decisions	
My organisation trains its key suppliers on its core values and rules of conduct	
My organisation establishes contracts with only suppliers who are sustainability certified and compliant	
My organisation ensures effective dialogue and feedback with suppliers	N 333
My organisation ensures that its suppliers eliminate or reduce the use of harmful substances during storage and transportation of raw materials	
My organisation has development sustainable policy with suppliers	
My organisation monitors and evaluate the activities of their suppliers to ensure that they adhere to the required sustainability policies	

SECTION C: ORGANISATIONAL PERFORMANCE

The statements below relate to organizational performance in relation to the adoption of sustainable procurement practices. Kindly indicate how you agree or disagree to them in connection with your organization performance, using a scale of; 1 = strongly disagree; 2 = disagree, 3 = neutral; 4 = agree; 5 = strongly agree

STATEMENTS	1	2	3	4	5
Market Share					
The market share of my firm has increased					
We quickly respond to varied customers' needs/market needs	C	Т			
We have continuous sales promotion activities to increase our market share as against our competitors					
Returns On Investment (ROI)					
There is improvement in my firm's resource utilization					
My organization has reduced cost of production	L				
My organization charges premium prices by offering premium brands products or high quality products to the market.	2				
The Growth of Sales (GS)					_
My firm has experienced increased sales volume		1	5		1
My firm is flexible in service delivery processes	/	Z	Z.	1	
My firm is able to identify new customers and then increase sales	3	X	7		
Profit Margin on Sales (PMS)	4			V	
The profit level of my firm has increased			1	A	
My firm has reduced the time it takes to serve customers				-	7
My firm has reduced operational waste			1	3	

SECTION D: DRIVERS FOR SUCCESSFUL IMPLEMENTATION OF SUSTAINABLE PROCUREMENT PRACTICES

The following are the statements relating to driver of implementing sustainable procurement practices in your organisation. Please indicate the extent to which you agree or disagree, using a scale of; SD =Strongly disagree; D = Disagree; NS = Not sure; A = Agree; and SA = strongly agree.

Drivers	SD	D	NS	A	SA
Adequate funding					
Less cost of implementing sustainable practices in					
purchasing process					
Availability sustainable suppliers					
Proper Environmental regulation					
Strong relationship between suppliers					
Effective government regulation and enforcement	J. J. W				-
High Prices of Green Products	1	Ĭ.			
No or less Resistance from Suppliers	Ę	-			3
Clear Procurement Laws	1	1	7		
Top management support	/-	3	7	7	
Expertise and Training	' >2		-		

