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GHANA**

Assessing Public Sector's Implementation of Sustainable Procurement in Ghana

By

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MASTER OF SCIENCE

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DECLARATION

I hereby declare that this submission is my own work towards the MSc Procurement Management and that, to the best of my knowledge, it contains no material previously published by another person, nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

Sustainable procurement simply means the application of sustainable development principles in procurement processes. The system through which public procurement is conducted is vital to the advancement of developing nations and therefore more effort should be put in making the best use of public resources to avoid waste. The study aimed at assessing the public sector's implementation of sustainable procurement in Ghana. The objectives of the study were; first to identify sustainable procurement practices, second, to identify drivers of effective sustainable procurement in the public sector, and third to identify barriers to effective sustainable procurement in the public sector. Both primary as well as secondary sources of data were used to gather data for the study. A total number of 45 questionnaires were administered and 40 were retrieved representing a response rate of 88.9%. Relative Importance Index rankings was the main tool used for analysis. The findings of the research have shown some sustainable practices to include procurement of eco-friendly product, promoting labor right. reduction in waste generation, working conditions and human rights, promoting sustainable products and so forth. National policies, increasing pressure for corporate accountability, and competing necessities and priorities were the main drivers of effective sustainable procurement in the public sector. However, the main barriers to effective sustainable procurement in the public sector were also revealed as lack of knowledge about sustainability, lack of political support, and poor cultural integration. A recommendation was made that government should provide a national policy that tackles the implementation of sustainable procurement.

Keywords: Implementation, Sustainability, Sustainable procurement, Public sector, Ghana

DEDICATION

I would like to dedicate this work to my Husband, George Macclean Kpodo, the family and colleagues at the Public Procurement Authority as a token of my appreciation and love for all their prayers and support at a time when I needed them most.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

According to the Ministry of Finance (2001) Act 663 that is the Public Procurement Act 2003 was passed to enhance and to regulate procurement practices in the public sector. The purpose of the Act was to carefully secure efficient and economical use of state resources and to ensure that public procurement is conducted clearly, impartial and unbiased. To this effect the government of Ghana in collaboration with its advance allies made a discussion on the importance of public procurement and the need to pay attention in such area. It was recognized that this area need crucial courtesy due to the extensive awareness of immoral practices as well as inadequacies in other to establish confidence in the procurement system. However, about 50-70% of the country budget is related to procurement related (World Bank, 2003). Hence, public procurement system that is efficient could guarantee value for money in the expenditure of government, which is vital to a nation facing huge growing difficulties.

However, Hall (2010) indicated that public sector expenditure has risen to a high level of 40% of gross domestic product in OECD countries, with 49.1% of GDP in 27 European countries (Eurostat, 2012) and rising in developing countries. Government is therefore progressively playing a role of being an active participant in the market itself, procuring public works, supplies as well as services. In line with the relevance of public sector expenditures, Islam and Siwar (2013) opined that initiatives on sustainable public procurement have flourished from the beginning of the 20th century. According to Fletcher et al. (2009), public procurement in developing countries is considered a very significant activity because findings from a number of studies done in 106 developing countries

indicated that government procurement is responsible for about 5.1% of their national outputs. Kamann (2007) highlighted that it is an indication that opportunities exist for creating a market for sustainable products and services through public procurement.

Generally, sustainable procurement simply means the application of sustainable development principles in procurement processes. Walker and Brammer (2009) indicated that for procurement to be sustainable it should be compatible with the laid down principles such as respect for the environment and promoting good governance to promote healthy and just leaving environment. Public procurement hinges on the principles of transparency, accountability and value for tax payers money (Preuss 2009). Ordinarily, the government has the power to define how the private sector organizations must act. McCrudden (2004) stated that public procurement is the main tool to deliver extensively government objectives such as creating innovations in supply markets in order to use public funds to sustain the environment or to sustain domestic markets to achieve some social objectives. It is therefore to consider the public sectors' readiness to the incorporation of sustainable procurement.

1.2 PROBLEM STATEMENT

Kakabaj (2003) opine that the system through which public procurement is conducted is vital to the advancement of developing nations and therefore more effort should be put in making the best use of public resources to avoid waste. In like manner, Kakwezi and Nyeko (2010) postulate that the procurement departments are faced with problems like inadequate information with regards to procurement procedures, inputs, outputs and resource consumption. As a result of this the departments are unable to accurately determine the efficiency and effectiveness of the procurement systems. This therefore means that a clear procurement standard and regulations on performance standard must be set to guide procurement activities. This standard and regulations will aid in providing a platform based on which objective decision can be made.

Public agencies are those who spend the significant amount of the economy, for this reason their purchasing power can have influence on production and consumption levels which can have a considerable reductions of the impact on the environment(Lundberg et al., 2012). There is therefore the need to implement sustainable procurement into the procurement activities of public entities. However, available literature (Boomsma, 2009) indicates that there have been a few highlights on understanding sustainable procurement agenda from the viewpoints of practitioners. Furthermore, very little has been done on sustainable procurement in the public sector. It is therefore prudent to ascertain whether the public sector is indeed ready to implement sustainable procurement. It is based on this background that the study seeks to assess the public sector's readiness to sustainable procurement in Ghana.

1.3 RESEARCH QUESTIONS

The main research questions that would be used to facilitate the study are;

- What are sustainable procurement practices?
- What are the drivers of effective sustainable procurement in the public sector?
- What are the barriers to effective sustainable procurement in the public sector?

1.4 RESEARCH AIM AND OBJECTIVES

1.4.1 Aim

The aim of the study is to assess the public sector's implementation of sustainable procurement in Ghana.

1.4.2 Objectives

To satisfy the above research aim, the subsequent objectives are set:

- To identify sustainable procurement practices;
- To identify drivers of effective sustainable procurement in the public sector; and
- To identify barriers to effective sustainable procurement in the public sector.

1.5 SCOPE OF THE RESEARCH

The purpose of the study is to assess the public sector's implementation of sustainable procurement in Ghana. The research focuses on sustainable procurement practices, drivers and barriers of effective sustainable procurement in Ghana. Geographically, the study was carried out in the Greater Accra Region specifically in the Accra Metropolitan Assembly, Tema Metropolitan Assembly and Ashaiman Municipal Assembly. These Assemblies were chosen based on accessibility and proximity to the researcher making retrieval of questionnaire easy. The data was obtained from a sample selection of procurement professionals working with the selected Assemblies in the Greater Accra Region of Ghana.

1.6 RESEARCH METHODOLOGY

In this study, a quantitative method is chosen to assess the public sector's implementation of sustainable procurement in Ghana, and this quantitative information will be obtained using questionnaires. To the extent in which formation gathering is concerned, the study utilized two sources of information which incorporate primary and secondary sources. The sample size was determined using purposive sampling technique this aided in realizing a sample size that gave precise information since purposive sampling has an advantage of fetching out the right corresponding from the target population (Kumar, 1999).

The data was gathered through self-administered questionnaires to all the respondents. The respondents were likewise given the chance to contribute different factors outside the researcher's scope that relates to the public sectors' implementation of sustainable procurement. The data gathered was coded, sorted out and cleaned of any blunders and analyzed using Relative Importance Index (RII) ranking by way of the Statistical Package for Social Sciences (SPSS) and presented in tables.

1.7 SIGNIFICANCE OF STUDY

Governments of member countries who subscribe to the Sustainable Development Goals are known to spend about 8 to 25% of GDP to procure goods and services (OECD, 2007). With this Erdmenger (2003) argue that government can also bring the private sector on board and this will add a significant value to the overall GDP. This gesture could go a long way to enhance sustainability in the economy so that public sector purchases could fosters the growth in technology sector environment and thus give way for innovations in the national economy (Department for Environment Food and Rural Affairs, DEFRA, 2006). This study contributes to how the public sector can direct the private sector to adopt sustainable procurement in their dealings.

Moreover, Meehan and Bryde, (2011) argue that the external and internal pressure to adopt sustainability have been silence on sustainable procurement. The public sector have relatively little idea on sustainable procurement and its importance (Brammer and Walker, 2011), to buttress this Preuss (2009) explained that not much has been written on sustainable procurement with regards to academic literature. The research therefore seeks to provide an in-depth knowledge in sustainable procurement and also to bridge the knowledge gap through a consented provision, extensive as well as evidence-based sets of factors that are important for public institutions to address sustainability in their procurement activities.

Finally, the need for education for both the technical as well as managerial levels of procurement practitioners has become evident in this research. Principally, its findings will be applied by the Public Procurement Authority (PPA) with regards to initiating regulations framework and policies that will help in the operations of public procurement system and adopt a new procurement method that will help shape procurement practices in the country.

1.8 STRUCTURE OF REPORT

The outline of the study will be separated into five (5) chapters, and will follow the following structure. Chapter 1, 'Introduction' will show the research background, the aim of the research, research questions, objectives, the scope of the research. The second chapter which is caption as Chapter 2 will review literature on related subject. The literature will fully cover the public sectors' level of implementation of sustainable procurement. Chapter 3; focuses on the methodology which position it within its suitable jurisdiction. Extensive information would be provided on data collection and the analytical tools that would be used for the analysis. The forth chapter fully covered experiential analysis including discussions of result from the field which will help answer the research questions in other to achieve all the stated objectives of the study. The concluding chapter which is titled as Chapter 5 presents the conclusion, recommendations' and summary of the whole research endeavor by studying the core add-ups of the study to knowledge. Policy recommendations as well as restrictions of the research will also be delineated.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The preceding chapters covered background discussions on the public sector's readiness to adopt sustainable procurement, the chapters also covered information on the problem statement the scope of the study, aim and objectives of the research, the research questions as well as the method by which the research would be carry out. This chapter begins with an in-depth review of related literature on sustainable procurement. It delves into the public sector's level of incorporation of sustainable procurement, drivers and barriers to effective sustainable procurement in the public sector.

2.2 THE PROCUREMENT CONCEPT

Procurement process can be simply explained as the acquisition of goods, works and services from a third party. The Public Procurement Authority (2003) stated that this includes appraisal that may be optional but the critically “make or buy” decision that may provide goods and services in appropriate contest. The Ghana Integrity Initiative in 2009 defined procurement as the systematic approach of acquiring goods, works and services through a contract at the right cost, at the right place and in the right time which will benefit the government, the corporations or the individuals involved. In a nutshell procurement is simply buying of goods, works and service by public institutions. Ghana Integrity Initiative (2009) also opined that impacts directly on both the economy and the lives of people with time, since it is considered as a means of policies are implementation. Organizational procurement is considered as the means of creating the platform for buying or leasing or as just a legal means of acquiring equipment, materials, supplies and services through an undertaking to be used to meet the needs of others. Lyson (1996) stated that the overall interpretation of this purchasing

task is “to acquire materials, goods and services in their right state and quantity from the right place delivered at the right time for the right price in order to achieve organizational objective.

According to Uyarra and Flanagan (2010), public procurement is when the government or public sector organization purchase goods and services and it is considered as one of the major economic activities of government. Concerning this OECD (2009); Afonso et al. (2005) revealed that with regards to the scale of public procurement, Economic Co-operation and Development (OECD) spend between 8 and 25 per cent of its Gross Domestic Product (GDP) on purchasing of goods and services alone while the European Union (EU) spend about 16 per cent of its GDP on public procurement. Brulhart and Trionfetti (2004) highlighted that, notwithstanding the fact that matters of procurement have been in the public domain for quite a significant period, public procurement was just recently been considered for academic research. Earlier research findings were able to establish the difference in all the types of public procurement and have emphasized that procurement always outlines significant policies to assist achieve results that could be beneficial to the society which are also in consistence with the overall policy goals. Even though a quite number of issues have been addressed in public procurement researches, two major themes have originated in the fewer researches done. Brulhart and Trionfetti (2004) indicted that the first theme that looks at the role of public procurement its effect on economic activity in order to influence the procurement policies relatively in favor of local companies compared with foreign suppliers, in USA for example, the policies of “buy American” are institutionalized (Vagstad, 1995). Bovaird (2006) also looked at the supply relations between private and public sectors in considering the processes of tendering as well as contracting.

Secondly, the next theme of research studies the government’s function in procurement in stimulating innovative activity among companies at any point in time. Aho et al. (2006)

stated that public procurement in Europe as well as in some national context is always centered in discussions on innovation policy. The second theme is related to the research on the private sector that has consistently shown that value chain processes affect innovation. Prajogo et al. (2008) highlighted that within the value chain, procurement processes are linked with product quality and innovations. Aschhoff and Sofka (2008) stated research in public sector context has shown that government procurement is a key part of a demand-oriented innovation policy.

2.2.1 Nature of Public Procurement Systems before the Reforms in Ghana

Prior to the implementation of Public Procurement Act, 2003 (Act 663), both the Ghana National Procurement Agency (GNPA) and Ghana supply Company Limited (GSCL) were the sole agents of government that procured all public goods on behalf of the government because there were no laid down policies for procurement (Anvuur and Kumaraswamy, 2006). Their function was not regulated procurement but just to procure goods and services on behalf of public sectors. By the standards of Public Financial Management Reform Program (1996), the procurement in Ghana is affected by factors such as:

- (1) Lack of comprehensive policy to procure goods and services;
- (2) Lack of centralized body and technical expertise to supervise the right procurement practice;
- (3) Lack of comprehensive legal regime to ensure proper procurement processes;
- (4) Lack of well-defined responsibilities and well establish authorities for procurement bodies;
- (5) Lack of rules and regulation that will guide, direct and monitor the activities of procurement officials;
- (6) The role Supply Company Ltd and National Procurement Agency (NPA) play in procuring goods and service for the government;
- (7) Lack of independent legal body to help address the grievances of aggrieved tenderers;

- (8) The fact that there may be no authority in place to properly dispose off public assets; and
- (9) Lack of independent procurement body to audit and monitor procurements.

The fact that there was no comprehensive legal regime or no centralized body with technical expertise who would be charged with the responsibilities of harmonizing the activities within the procurement system in the country, the Ministry of Health (MOH) decided to put down some measures to assist them during procurement. World Bank also had procurement policies for their projects (World Bank, 1997). The Ministry of Water Resources, Works and Housing then administered traditional procurement methods that restricted suppliers and contractors to compulsory registration and classification. Nevertheless, these classifications have been recognized as too general and outdated and according to Eyiah and Cook, (2003) the registration criterion - contractor's lists and monetary thresholds are not regularly rationalized as done by the World Bank. Based on the procurement achievements of the Ministry of Health, the Ministry of Finance started developing national procurement code from 1999 to extensively regulate the activities of the procurement practice. Moreover, the Architectural and Engineering Service Limited (ASEL) were single handedly tasked to supervise all major contracts that were finance by the government (World Bank, 1996). As a result of lack of proper planning and regulation of these procurement methods that have led to poor procurement situations, there have been agitations to create reform in public procurement systems to instill trust and confidence in the entire procurement practice.

2.2.2 The Legal and Regulatory Framework of Public Procurement in Ghana

To be able to govern an organization or an activity, it is proper to have in place a legal framework that comprises of the laws, regulations and policies. Thai, (2009) opine that the legal framework in its entirety must cover scope of public procurement (PP), the various sections of procurement practices and must satisfy all specifications in the procurement process. Robert (2003) on the other hand indicated that a reliable PP legal framework thrive

on transparency and fair competition, impartiality and integrity. Thai, (2009) further explained that procurement laws and rules is one of the most important pillars procurement hinges on. The success or failure of these pillars depends on the efficiency of government and operational environment within which the system works.

With regards to Ghana's procurement system, the Public Procurement Act (Act 663) was established in 2003 to institutionalize a legal and a regulatory framework that will ensure fiscal transparency and accountability. The Act was established based on these five(5) major principles which include standardized procurement procedures, tender document, legal and institutional framework, proficient procurement staff and anti-corruption measures(World Bank, 2003). Act 663 was established for harmonization public procurement processes in the public sector to enforce judicious, economic and efficient use of public funds so procurement processes that go on in public sector will end up fair, transparent and nondiscriminatory. The legal framework of Act 663 takes care of the use of public funds, contracted loans, foreign aid and donor funds for acquisition of goods, works and services by the government. The Act 663 has enabled in establishment of the Public Procurement Authority, Entity Tender Committees (ETCs) and Tender Review Boards (TRBs). It states clearly the laws for establishing procurement methods and thresholds, procedures, appeals; and how to dispose of stores and resolve complaints that may arise. The Act also grants power for the issuance of intensified regulations, Guidelines, Standard Tender Documents (STDs) and Manual under the Act.

In 2016 another Act (Act 914) was created and this was to amend all the shortfalls in the Act 663 which was created in 2003. This was to auction public procurement into a secondary generation of reforms and to eradicate all bottlenecks completely from the system. The new provisions were as follows:

- Revising the thresholds approval;

- Changing the entity tender committee and establishing the new committee in the constitution;
- Dissolving the District and Ministerial Review Boards;
- Putting the entity tender committees under categories;
- Revising the threshold for procurement;
- Establishing new procurement structures for the Local Government Agencies.

The purpose of the amendment was not only to correct shortfalls but to also address other administrative challenges and to introduce new initiatives like sustainable procurement, framework procurement and electronic procurement. Again, room has been created to accommodate the decentralized form of procurement in consistence of the government's decentralization policy. The Act (Act, 914) became operational from July 2016 and it is to be used together with Act 663 (PPA, 2016).

2.2.3 The Swiss-Ghana Sustainable Public Procurement Project (SPP)

In order to create a sustainable procurement in Ghana this project was introduced. The project is a three-year project being funded by the Swiss government with an amount of \$ 2.7 million. This project is implemented by the public procurement authority with the aim of improving public procurement practice in the government sector.

Through the Marrakech Process, the introduction Sustainable Public Procurement in Ghana started ten years ago. Thus, Ghana is a key player in Sustainable Public Procurement (SPP) and part of the Marrakech Task Force (MTF) led by the Switzerland on Sustainable Public Procurement. This has made Ghana one of developing countries to practicing the SPP.

2.2.4 Ghana Task Force on Sustainable Public Procurement

The Ghana Task Force has been given the mandate to work in collaboration with the public procurement authority to oversee the design and implementation of sustainable procurement practices in the country. This action was taking to facilitate the implantation of the overall development goals of the country which include the National Programme on Sustainable Consumption and Production for Ghana, Sustainable Development Action Plan and also to help achieve the National climate change targets (International Institute for Sustainable Development, 2012). Specifically, although subject to review, the Ghana SPP Policy Task Force was formed to:

- Develop laws and policies on SPP
- Create awareness on programmes for public organizations, procurement officers and procurement boards on SPP
- Train all officials on SPP.
- Design new set of standard for tender document.
- Train the Private Sector on SPP.

2.2.5 The Role of Government in Sustainable Public Procurement Project

The provision of public goods and service is the sole responsibilities Government of Ghana and in order in order to play this role, Government must procure. Consequently, it is the duty of Government to build lorry stations and airports, roll out utility networks, build hospitals, schools, houses and road works and commission them. The public procurement body of the government also contract catering and landscaping services, buy paper, computers and furniture for public offices. These goods, services and works procured have impact on the economic, society and the environment. If the Government should factor in the environment and social risks, there will always be a difference in contributing to sustainable development

when buying goods and services that have been designed, produced and supplied (PPA, 2014).The Ghana Sustainable Public Procurement Policy is to:

- Ensure that social laws and environmental regulations are in compliance with public procurement.
- Allow procurement entities to design sustainable procurement action plans and implement them.
- Inculcate social, governance and environmental criteria in decision making process
- Clearly prioritize spending to provide room for incremental implementation.
- Increase the scale of operation for enterprises and businesses that do transaction with the government.
- Incorporate modern environmental and social criteria such as e-procurement and supplier diversity programs in the procurement systems.
- Create platform for SMEs development.

2.3 SUSTAINABLE DEVELOPMENT

Ramlogan (2011) stated that some UN initiative gave birth to the concept of sustainability as far as the 1970s and this was the time the evaluation for environmental and economic development issues started. Voigt (2009) highlighted that this era was considered a breakthrough for creating consciousness that the concept of development required “reforms”. When it was able to gain the necessary political support, the UN conveyed different international conferences to open the appropriate development models for discussion.

According to Decleris (2009), the United Nations (UN) in 1972 held a conference in Stockholm, Sweden. The purpose of the conference was to issue new strategy to protect the environment. In 1983 the UN established World Commission on Environment and Development and the commission was to enact strategies that will help achieve long term sustainability to the year 2000 and beyond. The sittings of the commission gave birth to the

renowned Brundtland Report in 1987; the report revealed that the solution to world's environmental problem can only be achieved through sustainable development. With this, the report explains sustainable development as development that meets the needs of the current generations without compromising on the needs of future generations. The report also talked about the core concept as recognition of inextricable linkage between protecting the environment and economic development, indicating that policies for protecting the environment should promote development as well. The contents of the report conceptualizing sustainable development gained global recognition since it had the full endorsement of the UN General Assembly. This endorsement established the basis based on which correlation between protecting the environment and promoting development at the same time could be examined. The establishment also maintain the force for additional international initiatives on sustainable development, even though the Brundtland report definition of sustainable development has been critique as being too generic and fails to satisfy the demands of legal entities (Segger and Khalfan, 2004).

Nonetheless, the shortfalls in sustainable development are being addressed gradually by Supply Chain Management (SCM) practitioners Carter and Rogers, 2008). The size of government expenditure gives evidence on the state of sustainability in public procurement. According to OECD, (2000) UK spends about 18 per cent of its GDP on procurement and that of the USA stands at 14 percent. Game and Wilson, (2006) noted that the public sector provide services at different levels many of which have direct link to sustainability. This gives an indication that the public sector can use its purchasing power to advocate for more sustainable products (Erdmenger, 2003). In 1997 the EU took the initiatives to incorporate sustainable development in the treaty of Amsterdam. The EU revised its sustainable development strategy (EU SDS) in 2006 which was first launched at Gothenburg Summit in 2001. The revised EU SDS covered the following; sustainable consumption and production,

protection and management of the environment, sustainable transport, clean energy production and climate change, demography and migration, public health, world poverty, social inclusion and the challenges of sustainable development. The Lithuanian National Strategy of Sustainable Development (NSSD) was approved by the government in 2003 and it was later revised in 2009 with the main aim of achieving leveled sustainable development by 2020 in all EU countries by applying the indicators.

Doran (2002) stated that the origin of SP can be dated back to 2002 where a summit was held on World Sustainable Development in Johannesburg. During the summit, interested participant countries agreed that sustainable procurement was needed to bridge the gap identify in Agenda 21 which was developed in the first Earth Summit in 1992. The most recent summit on sustainable development was held in Rio and Janeiro in 2012 and the concept of sustainable procurement was once again identified as one of the backbone in achieving sustainable development.

2.4 SUSTAINABLE PROCUREMENT PRACTICES

The idea of Sustainable Procurement (SP) initially surfaced at the UN World Summit on Sustainable Development in Johannesburg in 2002. Sustainable procurement incorporates social, planetary and money related considerations (Borland, 2009). It includes looking beyond past customary financial parameters and settling on choices on life-cycle costs, related ecological and social dangers and advantages. Sustainable Procurement procedures should result in the adjusting of monetary improvement, social advancement and ecological security against business needs. Customary Procurement has concentrated on incentive for money whiles sustainable procurement includes accomplishing an incentive for money on an entire life premise by considering the monetary, natural and social issues related with the products and ventures purchased, with the objective of decreasing adverse impacts on the environment. Sustainable procurement therefore is incorporating social and environmental

impacts into procurement practices by government entities (Preuss, 2009; Walker and Brammer, 2009).

In a bid to reduce the damaging effects on the environment, SP approach should be such that it meets the needs for goods, services, works and utilities of the organizations procuring as well as the society (Berry and McCarthy, 2011). Though, such an approach is difficult to assess since there are no standards set to use for evaluation. There is much difficulty in evaluating the SP process and these can be attributed to the increasing pressure from private and public sectors (Kalubanga, 2012). Yet, Walker and Brammer (2009) identified that the pressure mostly came from public-sector, rather than private-sector procurement, because of the influence of Government, the public sector use their biggest purchasing power to influence the private sector during government projects (Walker and Brammer, 2009). The main concern of SP is the impacts procurement activities have on entire society and the environment. Not much research has been done as far as sustainable procurement is concern. Since the mid-1980s the term “sustainable development” was started being used. There have been many definitions on the concept of sustainability and SP but the definition which is widely known is the one stated in “Our Common Future” which was reported by the Worlds commission on Environmental and Development in 1987. The report defined sustainable development to be a type of development that meets the needs of the present generation whiles creating possibilities for the future generations to meet their needs. From this point onwards, the idea of sustainable development has been captured in different dimensions in subsequent policy documents.

Sustainable Procurement is optional tool within the EU. It is argued that European law gives more room to the Member States to employ horizontal policies (Arrowsmith and Kunzlik, 2009). Sustainable consumption is sometime viewed as sustainable procurement. It is believe that the successful implementation of SP would have a direct impact in the environmental

quality. Fletcher et al. (2009) revealed that one of the main goals sustainable consumption yarn to achieve is that SP will be adopted in all public sector procuring activities especially by the front running members of the EU who are also considered as the “Green 7” they include countries like Sweden, Germany, Denmark, Netherlands, Finland Austria and UK. Similarly, Lithuania’s strategy of 2009 which went through to 2013 recognized the need to commit to sustainable procurement as one of its main goals. Therefore the need to protect the environment as an aspect of sustainability is highly recognized in public procurement and hence it worth analyzing how these aspirations reflect in the laws of Ghana in terms of public procurement.

Simons (2006) highlighted that Government is supposed to be example when it comes to their procurement practices. This assertion was also defended by Milliband and Healey (2007) in the report “Procuring the future” by Simon (2006). Sustainable procurement therefore is as a result of strengthening procurement by achieving international targets and showing procurement close relationship from international to local level (Teal, 2005). Likewise, procurement supports a sustainable future by taking into consideration the environment, economic and social aspects (Berry and McCarthy, 2011). This was also affirmed by Brammer and Walker (2011) that Government procurement in the UK considers local companies instead of foreign companies to help enhance the economy locally and reduce carbon footprints.

According Kalubanga (2012) sustainable concept has been identify as one dimensions in modern procurement aside cost, time and quality. He argue that there is the need to add sustainability to the traditional Barnes procurement triangle, as indicated in Figure 2.1

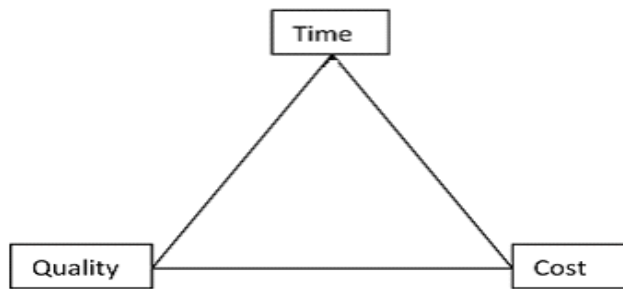


Figure 2.1: Barnes Procurement Triangle

Source: Lock (2007)

The department for Environment Food and Rural Affairs (DEFRA) also has similar view on the need to add sustainability as part of the procurement triangle the department mention this in Sustainable Procurement guides ad research. Yudelson (2009) noted that sustainability has impacts in every area of human society be it design, construction or operation of a retail or shopping center. Again Yudelson (2009) citing Gil friend identify four reasons as part of the reasons to show interest in sustainability and they are as follows:

- Reduction in the cost of energy for ongoing projects;
- Reducing the risk of future carbon emissions;
- To make good use of the opportunities like green issues that is associated with sustainability; and
- having a well-designed sustainable initiatives that have advantage on attractive investment returns.

2.4.1 Dimensions of Sustainable Procurement

There are three dimensions of sustainable procurement which is also recognized as the principles of SP it includes; economic, social and environmental dimensions. These dimensions which have been indicated in figure 2.2 forms what is called the “Triple Bottom Line” (TBL) of sustainability. For effective and successful SP to be achieve, it is important to balance all these three principles of sustainability. John Elkington first initiated the idea of TBL in 1997 and it has since influence the way business organizations do and evaluate

sustainability, the idea of TBL is sometimes referred to as people, planet and profit– the 3P’s (The Economist, 2009).

Organizational and individual are the main factors of TBL and this group also support the idea of sustainable procurement. Cousins et al. (2008) have said that the triple bottom line is the roles and responsibilities business and organizations play in the field of social, environmental and economic impacts. Figure 2.2 shows the dimensions of TBL.

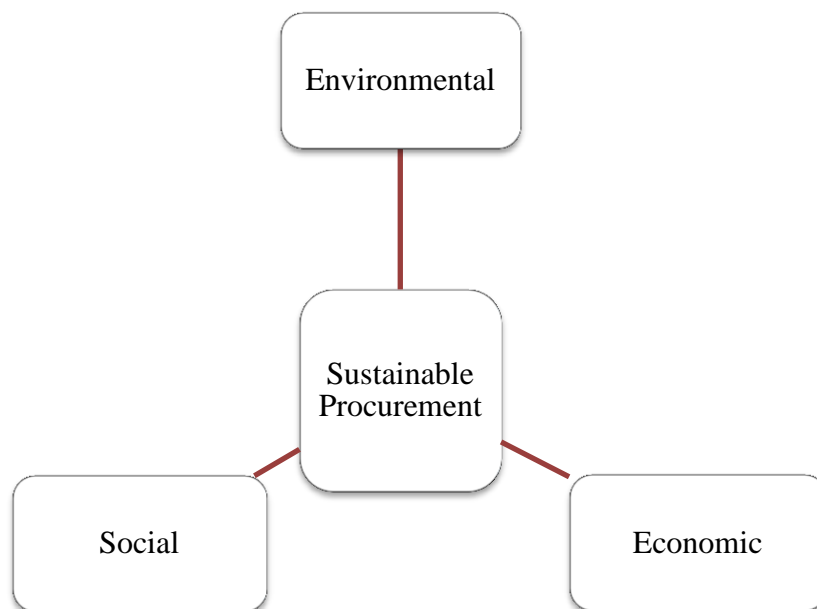


Figure 2.2: Triple bottom line of sustainability

Source: Smith (2010)

To appreciate the value for money in TBL analysis factors such as maintenance, price and cost as well as availability and potentials must be dominant. The United Nations Global Market place in 2013 however suggests that, sustainability must as well evaluate the effect of the product purchased on the environment throughout the products life span. Lysons and Farrington (2012) have outlined three important aspects of environment. These are the efficient use of feedstock, reducing waste as well as pollution and saving energy. Nonetheless, the social aspect of TBL involves how to reduce negative social impact and

rather improve on social benefits through procurement. The social aspect for instance involve issues of labor conditions, human rights and developing local communities (United Nations Global Market Place, 2013)

2.4.1.1 Economic Sustainability

It has been revealed by the Chartered Institute of Purchasing and Supply (CIPS)(2012) that the main concern of economic principle is sustainable procurement is to increase the economic value of the entire procurement process. The purpose of this is to achieve value for money in every product purchased. It is also to manage cost and control budget, to add value to sourcing efficiency, to improve quality and to support ethical trading. This in the long run would increase the financial viability of suppliers as well as the supply market. This means that prices for goods and services will be sustained and suppliers could bargain for ethical tendering and negotiation and promote prompt time payment to guarantee sustainability.

Moreover, sustainable procurement does not only evolve around the effect of the product purchased on the environment throughout the products life span but also concern with creating opportunities where small and medium size businesses and enterprise can flourish (Harold, 2013). There is also the concept of Total Cost of Ownership (TCO) which was introduced by Baily et al., (2008). The writers suggest that the cost incurred by owners should include all the cost incurred from the products specification, acquisition , usage and maintenance till the end of the products life span and safe disposal. Harold, (2013) further argues that Life-Cycle Costing (LCC) should be used for effective evaluation of procurement. The writer explains life-cycle cost as the total cost incurred from the total cost of ownership and the products full life span. The main purpose of this approach is to determine what the future price of the product could be (Harold, 2013).

2.4.1.2 Social Sustainability

Alan et al., (2012) give extensive discussion on the concept of customer service. The writers further revealed that one of the main factors for business to flourish a good customer service which yields satisfaction. The purpose of public organizations is to serve the general public, for that matter there should be able to satisfy their respective stakeholders for them to attain sustainability. Service to the public have four main dimensions and they include communicating to satisfy what customers expect, time of performance, ability to respond to customers changing needs and dependability of the product or service (Alan et al., 2012). These four principles are very critical in achieving sustainability. According to CIPS, (2012) the main concern of social drivers of procurement is to add value to the procurement process. These drivers help in monitoring the supply chain and to ensure that tenders are free of bias and that human rights, ethical considerations and standards are adhered to.

Alan et al., (2012) opine that public organizations must strive to attain a healthy internal environment for its workforce which is under the domain of social sustainability. Human capital is one of the relevant resources in every organization. It is therefore important to handle human resources with care and respect in order to promote the success of the organization. A poor internal environment may affect the health of the workforce within and hence lead to failure of the organization. The key driver to achieve social sustainability is based on Corporate Social Responsibility (CSR). According to Crocker et al., (2012) the idea of CSR helps organizations to operate in a manner that helps to realize legal, ethical, public and commercial expectations that the public have in business. The writer argues that not just the shareholders need to be considered but the entire stakeholders in the organization. He concludes that CSR has an important role to play to ensure sustainability in an organization.

2.4.1.3 Environmental Sustainability

The idea of sustainability within the environment include approaches that has been tried and tested such as giving specifications on the minimum recycling contents for certain goods; for instance there is specification for goods like office paper which must be entirely 100% post-consumer waste, any paper aside this also must use minimum recycling content. Likewise, specifications for recycling could also be extended to building constructions which have major impact in the environment. There have been some initiatives especially in IT and some electrical appliances, where procurement has incorporated the idea of setting criteria for energy consumption, example energy star or EU labels on new appliances. A number of Organizations have begun to address the energy consumption of office buildings, by, for example, using movement sensitive lights that switch off automatically when a room is not in use.

According to Patrick (2001) organizations must take into consideration transportation needs to access a facility before settling on the choice of the location. Moreover the design of the facility should be energy efficient, reduce noise and pollution and enhance the quality of the product which is being produce. The environmental drivers identified are to steer the organizations towards the attainment of sustainable use of resources (CIPS, 2012). Organizations are recommended to put more effort in using renewable energy as an input and to emphasizes the need to use available resources judiciously to guarantee the availability of such resources for the future generation (Farrington and Lyson, 2012). Paul et al., (2008) postulate that taking the environment into consideration during production help to promote specifications for green product through selection, management and development of suppliers who are more committed to protect the environment. He further indicated that effort have been put in place to reduce waste and pollution from the generation of the product throughout

the products entire life span and safe disposal. According to Du Plessis(2002) environmental sustainability is one of the major drivers for the achievement of other pillars.

2.5 SUSTAINABLE PROCUREMENT PRACTICES

The procurement practices differ from country to another (Zhu et al., 2005). The concept of sustainable environment include: the ability to produce eco-friendly product, reduce carbon emissions, promote labor rights, environmental impact assessment of vendors and to reduce waste generation. Sustainable procurement as identify in literature can be grouped into seven categories. Basically, social responsibilities of purchasers have impacts on the entire supply chain including suppliers, customers and employees (Rogers and Carter, 2008). He further identify five major dimensions of sustainable procurement practices which includes; safety, community involvement and philanthropy, working conditions and human rights, diversity and concern for the environment. Brammer and Walker (2009) extended these five principles adding buying from small supplies and buying locally. These principles were subsequently supported by other supply chain and procurement studies (Brammer and Walker 2009; Islam et al 2014; Zailani et al., 2012).

The most economic advantageous according EU public procurement directive is for the procurer to award contract to the tender (EU, 2014). But this often depends on the choice of contracting selection which could be least price, the overall least cost and the most value for money depending on the price-quality criteria. Moreover, Parikka-Alhola (2008) added that non-pecuniary could also be added to the quality criteria which suggest the integration of environmental criteria into the product specification. Integrating social, environmental and economic specification into product promotes sustainable procurement and increase consumers demand for the product (Parikka-Alhola, 2008). Brammer and Walker (2011) opine that integrating sustainable criteria into tendering and hence the procurement process help promote sustainable procurement practice. Furthermore, the biggest purchasing power of

public organizations can be used to promote sustainable product and services (Brammer and Walker, 2012), Day (2015) continue that this can set a trend for other public entities, which in the long run extend the market for sustainable goods and services (Uyarra et al., 2014). Day (2015) cite an example that, if the EU public organizations switch to green electricity they will be able to cut down carbon dioxide emissions of about 60 billion tones, likewise the use of energy saving desktop computer will save the world from emission of 830,000 tones of carbon dioxide emissions.

Several countries have adopted Sustainable public practices using their purchasing power. Thompson and Jackson (2007) reveal Japan as the country leading in SPP. Countries like the Philippines has incorporated SP polices into the laws of the state, similarly Canada has committed to adopt SP in all projects (Day, 2005). The European Union has also been engaging its public sector to adopt sustainable procurement (European Commission, 2011). Sweden has been consider as the top country in SPP followed by Demark, Germany, Austria, UK and (Melissen and Reinders, 2012; Brammer and Walker, 2011).

2.6 LEGAL AND REGULATORY FRAMEWORK

The difficult confronting sustainable procurement implementation in China was documented by Cao (2012). It was found out that there was too much effect under the mandatory procurement activity which is in the Chinese law on procurement. The main problem of the Chinese procurement was that the application of green policy which was only limited to energy conservation. Moreover, the laws were complicated and not clear which makes the interpretations very subjective. Therefore it was difficult for purchasers and suppliers to familiarize themselves with the law which affected compliance (Nasiche and Ngugi 2014). To buttress this, Bouwer et al., (2006) indicated that there is a relationship between familiarity and compliance of sustainable procurement laws. Lisa (2010) also said that culture has role in the compliance process as well as its outcomes. Culture role has gained more

prominence in organizational compliance because of continuous changes taken place in community expectations and in regulatory reforms (Lisa, 2010). Individual conformance and compliance are made possible by enforcing of former rules and procedures (Zammuto and Krakower, 2005) as mentioned by Parker and Bradley (2006).

Earlier studies concerning the benefits of organizational culture have revealed that organizations can exhibit values that are more resistance to change (Cox, et al., 2005). Similarly, Bradley and Parker (2005) explain that the creation of awareness for organizational culture is necessary in understanding the result of current reforms. This is predominant in developing countries where waves on procurement has resulted in the enactment of procurement laws. It is noted that culture if not treated well can have adverse effect on the smooth implementation of environmental sustainable procurement.

2.6.1 Enforcement of Public Procurement Legal Framework

Enforcement is simply defined as taking action to ensure compliance (Zubcic and Sims, 2011). There have been different views on the effects of enforcing compliance. For instance, Sparrow (2000) argue that violators may become more complicated in how to prevent detections from authorities as a result of enforcement. Nonetheless Imperato (2005) reveals that enforcement enhances compliance. Action taking when one fails to adhere to the laws serve as deterrent and therefore increase compliance (Sims and Zubcic, 2011). Raymond (2008) argues that weak enforcement of rules and regulations has contributed to the corrupt nature of procurement officials in developing countries. Countries with effective compliant and review mechanisms allow bidders to determine whether the existing procurement systems conform to the right procedure they ought to follow. Hui et al (2011) added that regular review act as incentive for officials to comply with procurement laws. In instance where procurement rules and regulations are ineffective compliance becomes less effective since public entities have no fear of being punished even if they fail to comply with the laws,

with this Kagan and Gunningham (2005) argue that the threats of legal sanctions alone have the power of rising the consciousness of officials as it reminds them that failure to comply with the laws on SP attract penalty.

2.7 INCORPORATION OF SUSTAINABLE PROCUREMENT INTO PROCUREMENT ACTIVITIES

Faith-E11 (2005) have said that implementation is decentralized to allow contracting authorities have the freedom to set out the criteria to be considered in environmental specifications and to also draw the bid evaluation process although the entire procurement process is regulated by law. According to Kaya (2014), the contracting authorities have the power to determine environmental specifications in the procurement process to ascertain the highest level of sustainability to be achieved by depending on the institutional framework they have to observe. Procurement process according to UNEP (2014), are grouped in four parts. These are Preparatory, Specification, Sourcing and Utilization stages. Preparatory stage is the stage at where a problem is identified and explained so that one can take stock in relation to the demands of both internal and external stakeholders, such that the outcome becomes first set of specifications. The Specification stage is the stage at which the first findings are synthesis and developed in order to obtain the exact specifications of the product or service. Sourcing stage which also referred to as the tender process, is where the exact specifications of products and services are made known to the public or the possible bidders so as to choose the qualified suppliers to append their signature to seal the contract. Utilization stage is where the required product or service is rendered to the appropriate quarters after the signing of the contract. The tender proceedings are considered the central role in public procurement process since the process brings governmental specifications to qualified suppliers.

Nevertheless, it is forbidden to permit any link between suppliers and the procurer before the public announcement of a successful tender (Kiiver and Kodym, 2014). Specification for tenders must be announced before tenders can be published. Kamann (2007) explain that, to meet procurer's specification, the suppliers must come up with the right business model such as customer intimacy and operational excellence. If a product's technical specifications (e.g. size, weight and color), are determined by the procurer, then the essential feedstock for production process is provided by the supplier in order to produce the required product for the procurer per specifications given (Kiiver and Kodym, 2014). Over a period of time, as the product is being used, the product might become waste and a decision is taken by the procurer to either dispose it or not. However, in the product's technical specifications, the efficient use of the feedstock or generated waste is not clearly discussed.

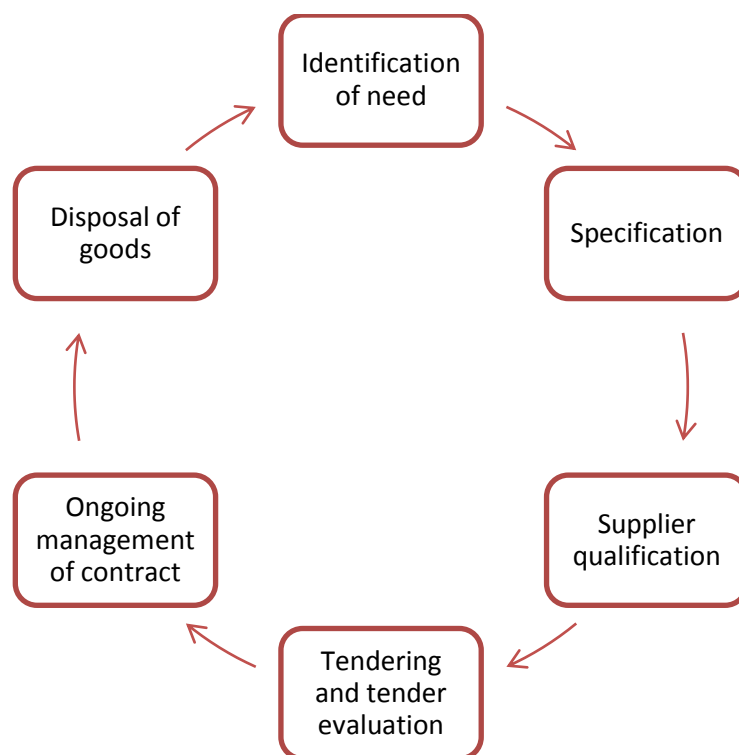


Fig 2.3: Procurement Process Model

Source: Adopted from Emmert and Crocket (2008)

2.7.1. The Identification of the Need

The authority in each contract decides what is required and must be purchased in the setting of its institutional framework. The authorities of a contract in such situations have enough space to take the appropriate measures before any tendering processes start, to meet their actual need. The authorities have a duty to do further search to find out the state of existing purchased items before they decide to either procure to replace the item or maintain it. The type of product to be purchased, the quantity and timing have long term effect on energy consumption and waste production (Arrowsmith, 2009). Thus, for the sake of protecting the environment less amount can be bought after an actual need is properly assessed. The European Commission (2008) also recommends that authorities of a contract must probe extensively in the market proceedings before starting any tender processes. Walker and Brammer (2012) stated that the link the communication link of buyers and suppliers have a great impact in the enhancement of sustainable procurement. They established that effective communication ensures free flow of information to pave the way to work together. Thus, there is an expectation that sustainable procurement policies can properly be implemented through cordial relationships.

2.7.2 Technical Specifications

The communication tool in procurement used to convey the need of an organization to the external users who have interest in the product or service under consideration is referred to as specification (Weele, 2010; Sollish and Semanik, 2007). The public procurement Act of Ghana, Act 663 of 2003 demands that, specification preparation should not involve brands that will avoid competition but instead pave the way to others who are willing to participate in tenders to ensure value for money. Focusing on the specification of environmentally preferred goods and services is one of the efficient means of avoiding environmental impacts through purchasing. The technical specifications should have the tendency to outline the

features of products or services to be purchased. In setting out the basic criteria to be complied in a public contract, the technical specifications must also have some significant impact on competition during procurement. The technical specifications should therefore make room to absorb as much qualified tenderers as possible and to prevent any injustice in the competition. It must also use the procurement processes to solve any environmental issues (Arrowsmith, 2009). There are a number of approaches that be employed to resolve environmental issues in the technical specifications. These approaches include performance-based, environmental technical standards reliance and the use of environmentally friendly labels.

2.7.3 Supplier Qualification

Public Procurement Act in Ghana add the following to the definition of procurement; request for quotation, preparation and issue of tender document, pre-qualification of potential sources, evaluating of response and selection of successful tender (PPA). Similarly, Farrington and Lysons, (2006) affirm to this by indicating that sourcing process include activities such as request for quotation, information that enable potential sources submit to submit quotation and additional document sent to suppliers such as drawings and product specifications. During the procurement process it is essential to distinguish the award stage from the selection stage. The selection stage is where all asserts of potential sources are assessed which include; manpower, experience and managerial skills while the award stage is where submitted bids are evaluated to determine the source who will be eligible for the contract. This is usually considering the source with most economical tender. In other words, selection criteria relate to the characteristics of the tenderers while the award criteria relate to the relative merits of the tenders.

It is noted that contracting authorities can assess the tenders during these stages and query the capacity of tenders to adhere to environmental regulations on sustainability (Preuss). In this

regard contracting authorities can set environmental protection criteria for the selection and awarding of contract. This will facilitate in achieving the environmental demission of Sustainable procurement.

2.7.4 Tendering and Tender Evaluation

The quality of product to be procured mostly depends on the tender evaluation process and hence it is relevant to pay critical attention at this stage. Emmert and Crocker (2008), reported that, during this stage suppliers of goods and service are required to give detail information on their organization, the financial status of the organization, the organizational asserts and the managerial skills, this is to assess the capabilities of the organization before they declare information on the products they offer. This is the stage where technical and financial capabilities of organizations are assessed. The public sector procurement in Ghana explains this stage as analyzing information provided by potential sources.

Negotiation is simple the mechanism use to resolve conflict. Burt et al., (2006) added that negation is where substantive issue that may arise during procurement process are resolved amicably to enhance relationships and improve performance. Certain condition must prevail before negotiations may be allowed in the procurement process and Carter and Kirby, (2006) report these conditions to be the following; where sole sourcing have been approved, when competitive tendering is not feasible, when there is suspected “Cartel” among suppliers and when country’s laws on procurement allows negotiation.

2.7.5 Ongoing Management of Contract

It is a mandate for officials to draw a formal contract document using the agree terms and conditions as stated in the Public Procurement Act 663 (2003) and this formal contract document must be signed by both parties. Simple requirement like placing a call can be used for procurement order under an existing contract. Goods, services or works procured can be delivered early if the progressing works are well done. To ensure timely delivery, Ghana’s

procurement law requires both the supplier and the buyer to manage the procurement contract. The following activities are considered during the contract management; arranging inspection of goods, expediting, creating letters of goods, verifying document and making payments. It is noted that payment is done based on existing agreement in the contract. Payment that indicates pre-payment is an indication that payment was affected at the early stage of the contract and that payment was done before the delivery of goods. Nonetheless, if the terms and conditions regarding payments are strictly abide by then reviewing the entire procurement process can be done.

Payment procedures in Ghana are very cumbersome and complicated in nature because of inadequate funds. Aggrey and Kusi (2014) indicated that procurement officials in Ghana use 90 days to settle payment which ultimately affect the delivery time of goods and services and hence affect the overall performance of the procurement process. It was reported by the European Commission (2004) that a carefully design procurement practice can run smoothly without having any significant structural change in the environment. Such of these careful designs include delivery in rightful quantity, using renewable containers for packaging and using the most convenient method for transportation. These careful designs can have a positive impact in the environment and can decrease the emissions of harmful gases into the environment.

Furthermore, procurement officials can stipulate some environmental obligations they will want suppliers of works and services to follow and this can be stated in the contractual agreement for reference. Regardless of what come may both buyers and suppliers must make an effort to abide by all rules and regulations stated in the contract and existing procurement laws. The European Commission (2004) also recommends that authorities should impose appropriate penalties in cases of non-compliance and should promote bonuses for good performance.

2.7.6 Contract Review

The entire procurement process can be review from any angle. Crocker and Emmett (2008) opine that in most instances the extensiveness of the review may depend on the relevance of the good or service being procured to the organization. Activities to be done as far as reviewing is concern includes; setting warranty claims, recording users' experiences with specific products and recording pre-project compliance (Otterheim, 2006).

2.7.7 Disposal of goods

After the product life-cycle ends, they should be properly disposed; Kaya (2014) indicates landfill as the least preferable option. He proposed that the best option is to recycle the product through the following options;

- Disposing goods to a special recycler
- Disposing goods at a Kerbside Collection point;
- Disposing goods to suppliers who partake in 'Product-back schemes' with assurance of the product being recycled.

2.8 DRIVERS OF EFFECTIVESUSTAINABLE PROCUREMENT IN PUBLIC SECTOR

Walker and Brammer (2009) reveal the three main drivers of sustainable procurement to be social, economic and environmental drivers. The writers further explain that integrating these drivers in public procurement is influence by internal and external factors. Evaluators and facilitators in their international comparison revealed factors that affect SPP, they found out that the main factor for a successful SP lies in the context of national policies available and there is high chance of implementation in instances where SP laws exist(Walker and Brammer, 2009). Nonetheless, where directives are more voluntary in character, competing necessities and priorities often dominate. Hence, integrating the drivers is very essential for a

successful implementation of SP policies. Mont and Leire (2009) identify the following drivers of SPP aside internal influence drivers they include; stakeholder influence, NGO and media attention. To buttress this, Walker et al. (2008) reveal stakeholders and pressure from the public as the most definite influence.

The drivers of procurement must be able to create a favorable condition that allows smooth implementation and acceptance of procurement practices. John et al., (2011) explain that increasing pressure for greater corporate accountability and responsibility has been the driving force of sustainable procurement. Massaaki and Michael (2008) also reveal preventing possible damage to the environment during the production process as one of the drivers of sustainable procurement. According to Michael (2011) all the factors stated in the drivers together with industry –wide sustainability standards are likely to support sustainable procurement. CIPS (2012) reported that all the three dimension of sustainable procurement that is social which includes people who offer services and operate within the organization, economic which target profit maximization and the environment where all procurement activities occur as the places where public organization can drive its sustainability from. Harold (2013) emphasis that it is important to pay critical attention to these three dimensions in all SP decisions.

Aside the internal drivers of sustainable procurement there are also a number of external driver's organisations consider (Otsuki 2011). Sannino and Morgan (2007) reveal preservation and support of local identity and culture as well as political circumstance as external drivers of SP. Similarly, Fremeth and Marcus identify external drivers of SP to be competitiveness and public pressure to adopt sustainable activities. Other external factors include: enhancement of reputation and moral factors, attitude and companies support (Herzig and Schaltegger 2009; Rankin et al., 2011; Walker and Brammer (2009). Drivers of Sustainable procurement come into play when organizations deliberate on whether public

entities are complying with SP regulations set, whether procurement functions is improving economic security, and whether meeting the present needs of the organization will affect the organization to meet its needs in the future (John, 1998).

2.9 BARRIERS TO EFFECTIVE SUSTAINABLE PROCUREMENT IN PUBLIC SECTOR

There are a number of barriers which have been identified in literature which hinder the development, adoption and successful implementation of sustainable procurement practice. These barriers differ from country to country and from one organization to the other. The most significant barrier in UK, USA, Eastern and Western European is perceived cost or financial constrain (Wright and Blair 2012). Again, Islam et al. (2014) indicated the main barrier in Malaysia as lack of awareness in SPP, while lack of sustainable policies and strategies top the barriers of SP in the United Nations and that of Norway is lack of knowledge about sustainability (Dolva, 2008). There are also some other significant barriers to sustainable procurement which includes: lack of managements support, lack of training, lack of effective leadership, inadequate skill and competency of procurement officials. Additional barriers are lack of political support, poor cultural integration, decentralized purchase structure, poor quality of sustainable product, poor contract management, unreliable supplier commitment, lack of transparency and inadequate guidelines for sustainable procurement. (Islam et al., 2014; Mathiyazhagan et al., 2013; Genovese et al., 2013; Blair and Wright, 2012; Hasselbalch et al., 2012; Brammer and Walker 2011; Boomsma 2009).

Crespin and Dontenwill (2012) identify the following as non-business factors which influence sustainability they include: ecological effect, labeling organizations, technical experts, the government, the media as well as regulatory and standardized agencies. The following barriers were identify in profit-driven originations; lack of understanding among leaders, lack of managements support, cost of sustainability, inappropriate regulations and

standard (Gjunipero et al., 2012). Walker et al., (2018) identify these as external barriers; weak supplier commitment and poor regulation and specific barriers in the industry, on the other hand internal barriers include lack of legitimacy and cost. Uyarra and Flannagan (2010) argue that barriers are likely to occur, considering the complexity and variety of public procurement in combination with multiple stakeholders and conflicting goals.

The European Commission identify these six major barriers militating against the successful implementation of SPP policies they are; limited environmental criteria, inadequate information on cost of products life-cycle and the relative cost of environmental friendly products, lack of awareness on the benefits of using environmental friendly products, lack of legal policies on tender documents, lack of political support and the lack of coordinated exchange of best practice and information.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The chapter seeks to provide detailed explanations on the method used for the research. Key issues bothering the philosophical stance of the researchers as well as the strategies adopted for the study is explicitly discussed. Also, how questionnaire for the research was design, the target population, sample size and how questionnaires were administered will be explained in this chapter. The chapter will also present the analytical tool used for data analysis as well as the mode of presentation of findings.

3.2 PHILOSOPHICAL CONSIDERATIONS AND STANCE OF THE RESEARCH

Three key philosophical considerations (ontology, epistemology and axiology) were adopted as a guide in the data collection, analysis and the subsequent interpretation of the findings in order to attain a stout research devoid of the researchers' opinion and influence. Koeting (1996) and Christou et al.(2008) agree that philosophical issues such as existence, knowledge and value have significant impact in the research design. Hence, such philosophical issues of ontology, epistemology and axiology need to be explicitly addressed as they shape the stance and choice of the research assumptions.

Marsh and stoker (2002) explained that the term ontology refers to the questioning of the existence of a 'real' world that is sovereign of our knowledge, thus, the theory of living beings. It can therefore be deduced that; ontology connotes the existence of occurrence where things appear in different ways in different traditions of philosophical thinking. This consideration is therefore relevant for this research because the public sector's level of incorporation of sustainable procurement, drivers and barriers to effective sustainable

procurement has lost generalization and hence contradictory empirical conclusions are arrived at by different authors. The stance adopted by the researchers is that of objectivism.

According to De Vos (1998) epistemology is related to the relationship of the researchers to reality and the road that will be followed in search for the truth, thus, the question of 'how knowledge is created?' To this effect, literature identifies two epistemological stands: positivism and interpretivism. Bryman (1992) noted that whilst for positivist, scientific knowledge is established through the accumulation of facts verified (free from the researcher's effects), interpretivist on the other hand, uphold that social phenomenon do not exist independently of our interpretation or meaning of them, rather it is this interpretation or meaning of social phenomenon which affects social reality (Osei-Hwedie, 2010). The researchers, however, adopt the positivist stance of knowledge in this study, hence, the researchers are of the view that the public sector's level of incorporation of sustainable procurement, drivers and barriers to effective sustainable procurement must be carried out in an objective way which can be faux.

Finally, Bosse (2006) explains axiology as a field of philosophical investigation which considers problems like the difference between a matter of fact and value. Bosse (2006) further added that the axiology position can be realism or social constructivism. Social constructionist is of the view that researchers have value and these values helps to determine what are recognized as facts and interprets which are made; whilst the realists hold the view that the choice of study can be examined by an objective criterion. Accordingly, the stance of the researchers in this regard is that of realism. The researchers are of the view that the choice of how to study the public sector's level of incorporation of sustainable procurement, drivers and barriers to effective sustainable procurement must be determined by objective criteria (see Osei-Hwedie, 2010). The sum of the above considerations is that, the research adopts a scientific and a positive rather than a normative position in determining what were

recognized as facts and their corresponding interpretations which were made in addressing the research concerns.

3.3 RESEARCH STRATEGY

Research design is simply the way by which the research objectives can be questioning (Naoum, 1998). Naoum, (1998) further indicated that there are two dimensions of research strategy which are qualitative research and qualitative research. However the availability of information for the research work determines the particular strategy to adapt (Baiden, 2006; Naoum, 1998). Hence, a quantitative approach consisting of both desktop and field study was adopted. Polit and Hungler (1985) opine that qualitative research collect numerical data to predict of control phenomenon of interest. Predetermine and structured questionnaires are often associated with quantitative research where questionnaire are administered to large number of respondent. Data collected is analyzed using statistical tools. The goal of quantitative research is to promote generalization which help to predict, explain and to be able to understand why things happen the way they do. The researchers remain distant and independent of what is being researched.

Data analysis is mainly statistical; the results of which are numbers presented in graphs, tables and other forms of statistical representation.

3.4 RESEARCH DESIGN

In the quest to access the public sector readiness to adopt sustainable procurement, the study adopted quantitative research. The study used structured questionnaire which is considered as the most widely used tool for data collection (Naoum, 1998). Questionnaires were used for the survey in other to generalize the findings across all the public sectors in the country. Oppenheim, (1996) postulated that the use of quantitative research also improves reliability of observations and helps in replication because of the inherent standard of measurement associated with it.

To design a questionnaire which is reliable is possible because the answers are considered, but it may be inaccurate because it fails to reward the concept it intends to examine and fail to attain the objectives of the research. For this reason the study first conducted an extensive literature appraisal to help in establishing the reliability, validity and practicability of the questionnaires. The questionnaire was constructed using simple and straight forward words and sentences for easy understanding to provide reliable and accurate responses. The questionnaire was structured in two main parts, the first part covered respondents' background and the second part captured specific objectives needed for the research work. Respondents were required to rate their answers on a Liker scale of 1-5 to measure the intensity of their responses.

3.5 POPULATION

The population for the study was management professionals working within the Greater Accra Region of Ghana specifically professionals from the Accra Metropolitan Assembly. The study population included management professionals involved in procurement activities in the Accra Metropolitan Assembly such as procurement officers, engineers and quantity surveyors.

3.6 SAMPLING TECHNIQUE AND SAMPLE SIZE

Sample is a finite part of a statistical population whose properties provide information about the whole population (Webster, 1985). 'Population' on the other hand is defined as a group, individuals or items within which sample can be drawn for measurement (Mugo, 2002). The study adopted purposive sampling technique to select the desired respondents from the sample population. Purposive sampling is a non-probability sampling method which involve the carefully selection of some particular subjects from the sample population (Hunger and Polit, 1999).

3.7 QUESTIONNAIRE ADMINISTRATION

Data gathering is very crucial in getting a clear understanding of theoretical background and providing evidence required to answer the key research objectives. The purpose of data collection is to obtain information that can be used to solve issue of concern or can be keep on records for future use. The questionnaires were distributed and retrieve from management professionals of the Assembly in person. Ahadzie (2007) indicated that administering questionnaires in person ensures that questionnaires get to the right respondent and to also improve respondent rate. Follow ups were made using telephone calls and sometimes personal visit to remind management professionals to complete questionnaires.

3.8 DATA PRESENTATION AND STATISTICAL TOOLS FOR ANALYSIS

The questionnaires once collected from the respondents were aggregated to give a large unit for the analysis. Two statistical software's that were used in the analysis are Statistical Packages for Social Sciences (SPSS version 17) and Microsoft Office Excel 2016. The findings from the analyzed data were presented in a form of numbers or series of numbers, charts and tables.

Descriptive statistics was first used to analyze the background information on the data collected on the management professionals involved in procurement in the Accra Metropolitan Assembly. Aside the descriptive statistics, relative importance index (RII) was also used because the extant literature pertaining to the public sector's level of incorporation of sustainable procurement, drivers and barriers to effective sustainable procurement presents too much surface complexity and thus requires a deeper understanding of the pattern of correlations (co-variances) between measures.

- Relative Importance Index (RII) = $\frac{\sum W}{A \times N}$, where;

W = the cumulative sum of weight, ranging from 1 to 5,

A= the highest weight (i.e. 5 in the study)

N= the total number of respondents.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 INTRODUCTION

This chapter presents the results, analysis, discussions and findings of the data gathered. Analysis of responses was done according to the research objectives. The field study was conducted in the three selected Assemblies in the Greater Accra Region of Ghana specifically Accra Metropolitan Assembly, Tema Metropolitan Assembly and Ashaiman Municipal Assembly to assess the public sector's level of implementation of sustainable procurement in Ghana. Tables and charts were used for the analysis. However, a purposive sample of forty-five (45) questionnaires were designed and administered to procurement professional in the selected Assemblies. Out of the 45 questionnaires distributed to the procurement professionals, 40 questionnaires representing 88.9% were retrieved.

4.2 DESCRIPTIVE ANALYSIS OF DATA (DEMOGRAPHIC)

The first section deals with the respondents' profile and the influence such attributes have on the research. The other part also details out the analysis of the specific objectives of the study in relation to the public entities' level of incorporation, drivers and barriers to effective sustainable procurement in the public sector.

4.2.1 Sex

Melesse (2006) and Adjei Mensah (2010) indicated that males are normally the main actors involved in procurement activities. To buttress this assertion, figure 4.1 reveals that 26 respondents were males whilst the remaining 14 were females. This could be attributed to the nature of the cultural systems in Ghana, where males are expected to work to provide for the family, in terms of provision of shelter and other necessities, whilst females usually stay at

home and take care of the activities of the household. However, the respondents were not gender bias; the sampling technique captured all members of the population being sampled for the study.

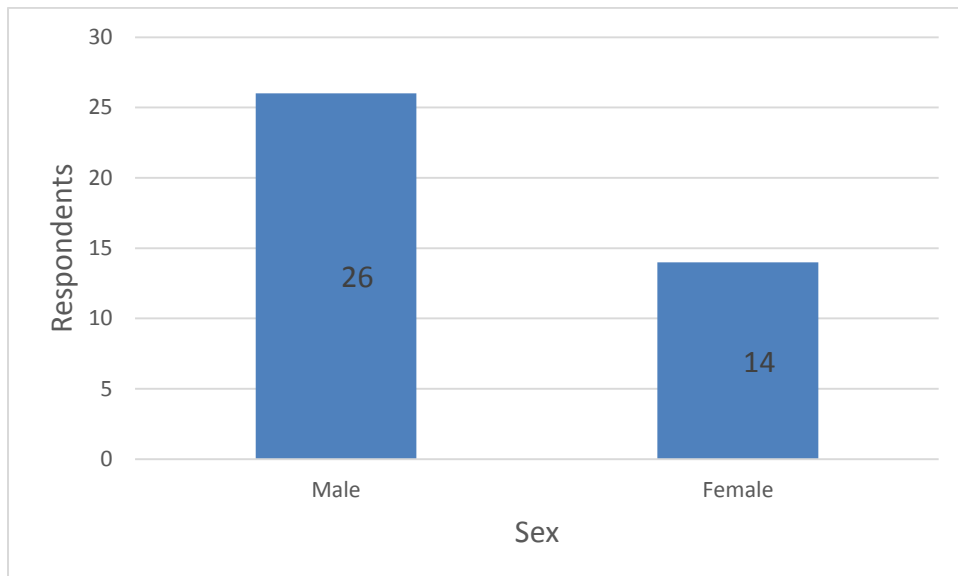


Figure 4.1: Gender of Respondents

Source: Survey data, 2018

4.2.2 Years in Assembly

The intention of this question is to identify the level of experience of the respondents in the Assembly because how long they have been in the Assembly will affect the quality of responses that will be given. Figure 4.2 indicates the number of years of the respondent in the assembly. Respondents were asked to indicate how long they have existed in the assembly. 2 respondents indicated more than 15 years, 3 respondents indicated between 11-15 years, 14 respondents existed between 1-5 years whilst the majority of the respondents constituting 17 respondents indicated they have existed in the assembly between 6-10 years.

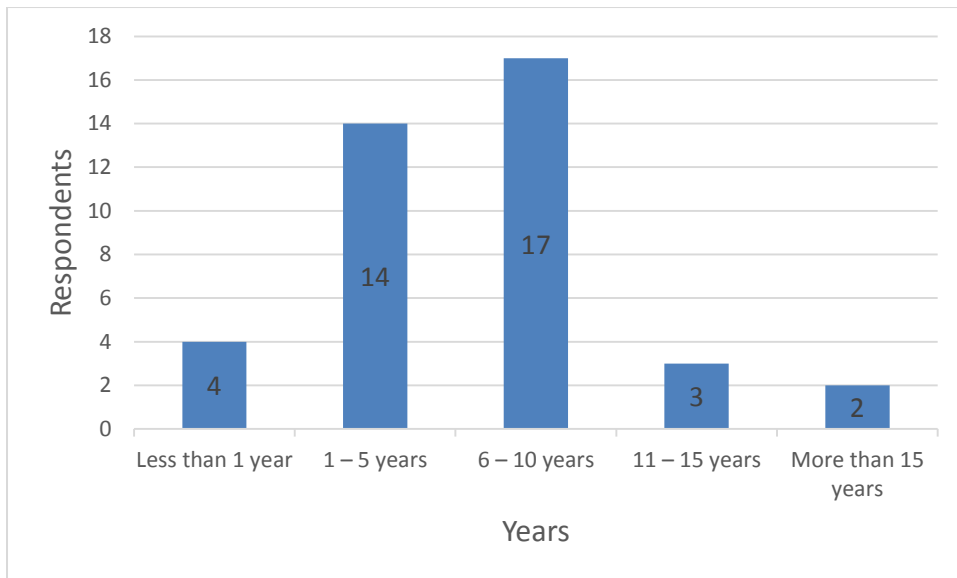


Figure 4.2: Years in Assembly

Source: Survey data, 2018

4.2.3 Highest Qualification

The intention of this question is to identify the highest level of education of respondents because the highest level of education of the respondent will affect the quality of responses that will be given. Figure 4.3 indicates the highest level of education of the respondents. Respondents were asked to indicate their highest level of education. 37% indicated they held MSc. certificates, whilst the majority of the respondents constituting 53% indicated they also held BSc. certificates. However, the remaining 10% of respondents were HND holders.

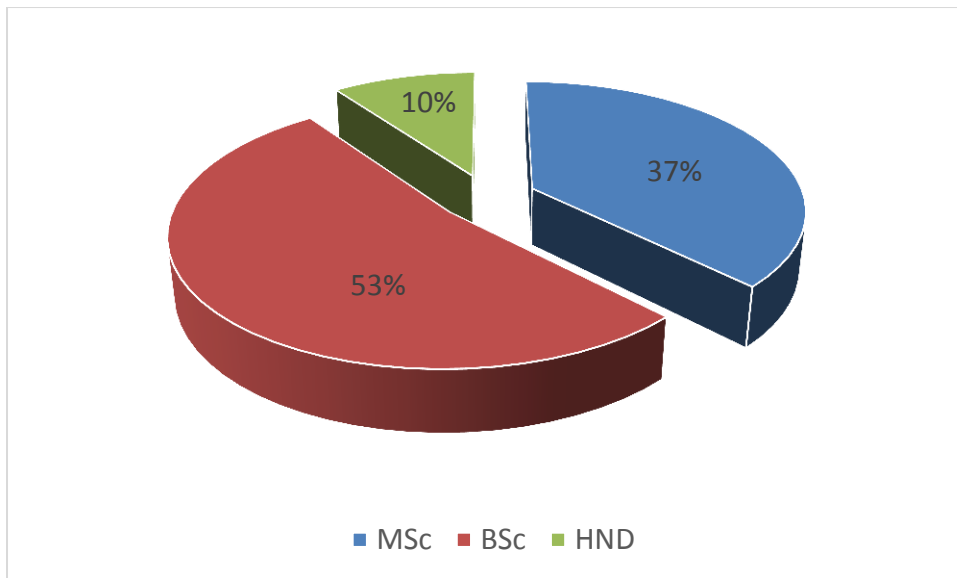


Figure 4.3: Highest level of Education

Source: Survey data, 2018

4.2.4 Position in Assembly

The intent of this question is to identify the various positions respondents occupy within the Assembly. Figure 4.4 established the various positions respondent hold within the assembly and it posits itself to the following interpretation; 33% of the respondents indicated that they were Finance officers, 15% of the respondents were Planning Officers and 10% were Engineers. However, majority of the respondents representing 42% indicated they were Procurement officers.

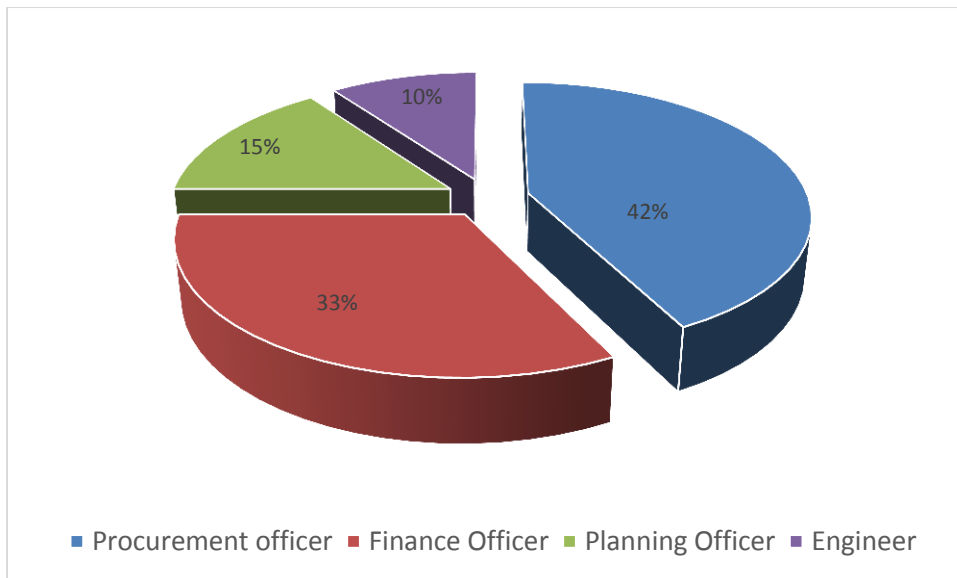


Figure 4.4: Position in Assembly

Source: Survey data, 2018

4.2.5 Departments in the Assembly

Respondents were asked to indicate which departments they belong to in the Assembly. Majority of respondents constituting 21 respondents indicated they belong to Procurement department whilst 5 respondents indicated Planning department. However, 6 respondents also indicated Finance department and the remaining 8 respondents indicated they belong to Works department.

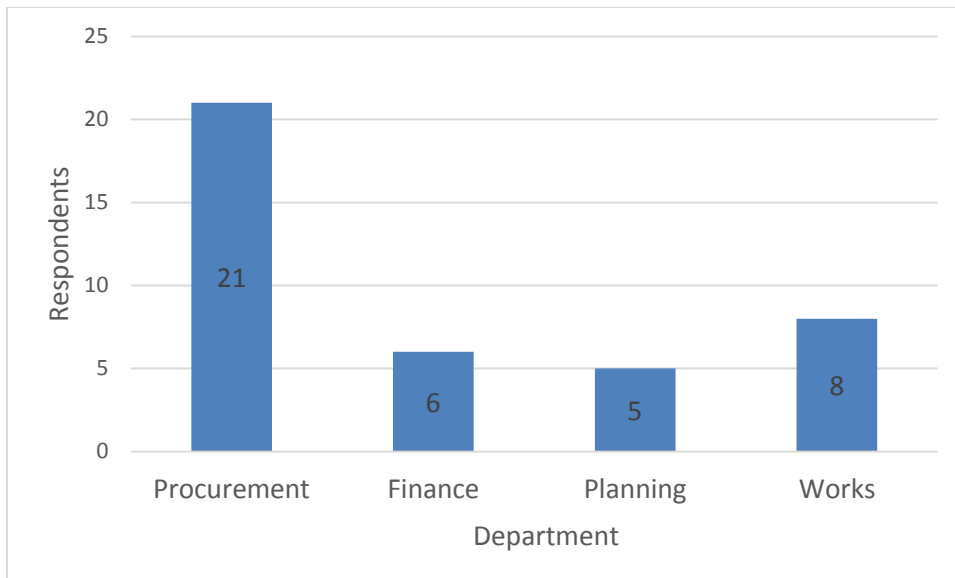


Figure 4.5: Departments in Assembly

Source: Survey data, 2018

4.3 SUSTAINABLE PROCUREMENT PRACTICES

The various sustainable procurement practices have been identified in table 4.1 collected with the mean values of all forty (40) respondents as well as their respective RII scores. The most significant sustainable procurement practices in descending order are as follows: reducing carbon emissions, procurement of eco-friendly products, buying locally, promote labour rights, promote sustainable product and services, environmental impact assessment of vendors, and advocating for value for money. The mean and RII values were calculated for each sustainable procurement practice identified. Respondents were asked to rate in their opinion on their level of incorporation of sustainable procurement practices into your procurement activities. A rank was presented for the level of incorporation of sustainable procurement practices in procurement activities from ‘never’ to ‘always’. From the breakdown in table 4.1, reducing carbon emissions is the most ranked practice on by respondents, evident with an RII of 0.81 and mean value 4.26. This is closely followed by procurement of friendly products and ranked 2nd by respondents with RII of 0.81 and mean

value of 4.05. This affirms Zhu et al. (2005) assertion that sustainable procurement practices differ from country to country but should produce eco-friendly product and reduce carbon emissions. *Buying locally* is ranked 3rd by respondents with an RII and mean value of 0.74, 3.68 respectively. Brammer and Walker (2009) identified five principles of sustainable procurement adding buying from small supplies and buying locally. However, *promote labor rights* is ranked 4th by respondents with an RII and mean values of 0.73, 3.63 respectively. *Promote sustainable product and services* is also ranked fifth by respondents with an RII and mean values of 0.69 and 3.45 respectively. The most significant sustainable procurement as indicated by respondents confirm studies by Uyarra et al. (2014), Islam et al. (2014), Zailani et al. (2012), Brammer and Walker (2011), and Thompson and Jackson (2007).

Table 4.1: Sustainable procurement practices

	RATING									
PRACTICES	1	2	3	4	5	Total	ΣW	Mean	RII	Rank
Reducing carbon emissions	0	7	12	12	7	38	162	4.26	0.81	1st
Procurement of eco-friendly products	0	5	7	9	19	40	162	4.05	0.81	2nd
Buying locally	1	0	16	17	6	40	147	3.68	0.74	3rd
Promote labour rights	0	2	18	13	7	40	145	3.63	0.73	4th
Promote sustainable product and services	0	0	25	12	3	40	138	3.45	0.69	5th
Environmental impact assessment of vendors	0	11	5	13	11	40	144	3.6	0.72	6th
Advocating for value for	0	4	17	13	6	40	141	3.53	0.71	7th

money										
Reduction in waste generation	3	5	17	4	11	40	135	3.38	0.68	8th
Safety, community involvement and philanthropy	0	8	15	12	5	40	134	3.35	0.67	9th
Buying from small supplies	0	6	15	18	1	40	134	3.35	0.67	10th
Diversity and concern for the environment	1	9	16	11	3	40	126	3.15	0.63	11th
Working conditions and human rights	3	7	17	10	3	40	123	3.08	0.62	12th

4.4 DRIVERS OF EFFECTIVE SUSTAINABLE PROCUREMENT IN THE PUBLIC SECTOR

From Table 4.2, which represents the drivers of effective sustainable procurement in the public sector, national policy is the most ranked driver according to respondents with an RII and mean values (0.80, 4.00) respectively whereas Increasing pressure for corporate accountability is also the second ranked driver with an RII and mean values of (0.79, 3.95) respectively. Walker and Brammer (2009) indicated that main factor for a successful SP lies in the context of national policies available and there is high chance of implementation in instances where sustainable procurement laws exist. Furthermore, Walker et al. (2008) reveal stakeholders and pressure from the public as the most definite influence. The other variables were also ranked as follows; competing necessities and priorities (3rd), companies support (4th), pressure from the public (5th), competitiveness (6th), enhancement of reputation and

moral factors (7th), NGO and media attention (8th), preservation and support of local identity and culture (9th), steering regulation (10th stakeholder influence (11th), and Prevention of possible damage to the environment during the procurement process (12th). The most significant drivers of effective sustainable procurement in the public sector as indicated by respondents confirm the studies by Rankin et al. (2011) and Walker and Brammer (2009).

Table 4.2: Drivers of effective sustainable procurement in the public sector

	RATING									
DRIVERS	1	2	3	4	5	Total	ΣW	Mean	RII	Rank
National policies	0	2	8	18	12	40	160	4	0.80	1st
Increasing pressure for corporate accountability	0	0	9	24	7	40	158	3.95	0.79	2nd
Competing necessities and priorities	0	0	16	12	12	40	156	3.9	0.78	3rd
Companies support	0	0	15	17	8	40	153	3.83	0.77	4th
Pressure from the public	0	2	9	24	5	40	152	3.8	0.76	5th
Competitiveness	0	2	11	20	7	40	152	3.8	0.76	6th
Enhancement of reputation and moral factors	0	5	5	23	7	40	152	3.8	0.76	7th
NGO and media attention	0	5	9	20	6	40	147	3.68	0.74	8th
Preservation and support of local identity and culture	0	2	12	21	5	40	149	3.73	0.75	9th
Steering regulation	0	4	19	16	1	40	134	3.35	0.67	10th
Stakeholder influence	0	2	19	15	4	40	134	3.35	0.67	11th
Prevention of possible damage to the environment during the procurement process	0	8	13	18	1	40	132	3.3	0.66	12th

4.5 BARRIERS TO EFFECTIVE SUSTAINABLE PROCUREMENT IN THE PUBLIC SECTOR

The barriers to effective sustainable procurement in the public sector identified were analyzed. Through literature review, a list of barriers to sustainable procurement was identified from literature. These barriers were included in the questionnaire for respondents to rate their level of agreement to the identified barriers. These barriers were then analyzed using the Relative Importance Index (RII). The barriers were ranked based on the RII values obtained by the variables. Where two or more variables obtained the same RII, the variable with the higher mean value was ranked higher. The results from the analysis are presented in Table 4.3.

Table 4.3: Barriers to effective sustainable procurement in the public sector

BARRIERS	RATING					Total	ΣW	Mean	RII	Rank
	1	2	3	4	5					
Lack of knowledge about sustainability	0	2	5	18	15	40	166	4.15	0.83	1st
Lack of political support	0	3	8	13	16	40	162	4.05	0.81	2nd
Poor cultural integration	0	2	7	19	12	40	161	4.03	0.81	3rd
Unreliable supplier commitment	2	0	7	18	13	40	160	4	0.80	4th
Poor quality of sustainable products	0	2	5	25	8	40	159	3.98	0.80	5th
Inappropriate regulations and standard	0	6	6	11	17	40	159	3.98	0.80	6th
Perceived cost	0	5	8	11	16	40	158	3.95	0.79	7th
Lack of awareness	0	2	13	10	15	40	158	3.95	0.79	8th

Lack of sustainable policies and strategies	0	2	10	16	12	40	158	3.95	0.79	9th
Lack of managements support	0	6	5	16	13	40	156	3.9	0.78	10th
Inadequate skill and competency of procurement officials	0	5	8	13	14	40	156	3.9	0.78	11th
Ineffective leadership	1	6	10	12	11	40	146	3.65	0.73	12th

From Table 4.3, it can be seen that lack of knowledge about sustainability was ranked first by the respondents with the RII figure of 0.83. Lack of political support was also ranked second with RII of 0.81. The other variables were also ranked as follows; poor cultural integration (3rd), unreliable supplier commitment (4th), poor quality of sustainable products (5th), inappropriate regulations and standard (6th), Perceived cost(7th), Lack of awareness (8th), Lack of sustainable policies and strategies (9th), Lack of managements support (10th), inadequate skill and competency of procurement officials (11th), and ineffective leadership (12th). The other variables ranked can be seen in Table 4.3. Islam et al. (2014) indicated the main barrier in Malaysia as lack of awareness in SPP, while lack of sustainable policies and strategies top the barriers of SP in the United Nations and that of Norway is lack of knowledge about sustainability (Dolva, 2008). This study in Ghana confirms lack of knowledge as the most significant barrier to sustainable procurement as indicated by Dolva (2008) in Norway. Mathiyazhagan et al. (2013) highlighted poor cultural integration is a significant barrier to sustainable procurement in the public sector. The most significant barriers as indicated by respondents are in line with Islam et al., (2014), Dolva (2008), and Crespin and Dantenwill (2012).

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This study is aimed at assessing the public sector's implementation of sustainable procurement in Ghana. To achieve this aim, three objectives were set. To achieve the objectives, a critical literature review was conducted where the theoretical underpinning of sustainable procurement was employed leading to the development of a questionnaire to collect empirical data from respondents in the public sector. The analysis conducted with each of the objectives is presented in the following sub sections.

5.2 ACHIEVING THE RESEARCH OBJECTIVES

5.2.1 The First Objective; To identify sustainable procurement practices

With the background knowledge on sustainable procurement practices gained from literature, a questionnaire was designed to address the first objective, of which 12 variables were identified which was then tested on a number of procurement professionals in three Assemblies in the Greater Accra region of Ghana. The literature sources from which these practices were identified included; Zhu et al. (2005), Rogers and Carter (2008), Brammer and Walker (2009), Islam et al. (2014), Uyarra et al. (2014) and Thompson and Jackson (2007) among others. The questions highlighted on practices such as procurement of eco-friendly products, reducing carbon emissions, promote labor rights, environmental impact assessment of vendors, reduction in waste generation, Safety, community involvement and philanthropy, working conditions and human rights, diversity and concern for the environment and lifelines, buying from small supplies, buying locally, advocating for value for money, and

promoting sustainable product. Relative Importance Index (RII) was used to rank the practices and then discussed.

5.2.2 The Second Objective; To identify drivers of effective sustainable procurement in the public sector

To achieve this objective, literature study was conducted to identify drivers of sustainable procurement in the public sector as revealed by other researchers. The literature sources from which these drivers were identified included; Walker and Brammer (2009), Mont and Leire (2009), Walker et al. (2008), John et al., (2011) and Massaaki and Michael (2008) among others. In all, a total of 12 drivers were identified from the literature. The identified drivers were then included in the research questionnaire which was used to gather empirical data. The collected data was then analyzed using the Relative importance index and then discussed.

5.2.3 The Third Objective; To identify barriers to effective sustainable procurement in the public sector

A similar approach of literature review was conducted to identify barriers to effective sustainable procurement in the public sector. The literature review led to the identification of twelve variables that were stated by other researchers as barriers to effective sustainable procurement in the public sector. The literature sources from which these barriers were identified included; Wright and Blair (2012), Islam et al. (2014), Dolva (2008), and Mathiyazhagan et al. (2013) among others. The identified barriers were then analyzed with the Relative Importance Index, principally ranking the variables based on the level of agreement of the respondents. Through the analysis it emerged the following top five were ranked as the most significant barriers to effective sustainable procurement in the public sector:

- Lack of knowledge about sustainability

- Lack of political support
- Poor cultural integration
- Unreliable supplier commitment
- Poor quality of sustainable products.

5.3 CONCLUSION

Sustainable procurement in the public sector is essential for the success of every nation. However, research has shown that there are barriers to the implementation of sustainable public procurement. Notwithstanding these barriers, certain drivers could push for the practice of sustainable procurement in the public sector. Additionally, the implantation of sustainable procurement would aid in the achievement of global concern on sustainable development.

5.4 RECOMMENDATIONS

- Government should provide a national policy that tackles the implementation of sustainable procurement.
- Staff of government entities involved in procurement should be educated and sensitized on the benefits of sustainable procurement.
- Successive governments should be made to encourage the practice of sustainable procurement in the public sector.

5.5 LIMITATIONS OF THE RESEARCH

- The limitation of the three government entities in the Greater Accra region may affect the generalizations of the findings.
- The study utilized non-probability sampling techniques in the data collection process due to the lack of adequate information on the respondents in the area of the research.

The use of the non-probability sampling technique meant that the representativeness of the sample size used could not be determined. This therefore limits the extent to which the findings can be generalized.

5.6 DIRECTIONS FOR FUTURE RESEARCH

The study focused in the Greater Accra region. A similar study could be conducted in other jurisdictions where data could be gathered to aid the extent of generalization of the findings.

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APPENDIX

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

COLLEGE OF ART AND BUILT ENVIRONMENT

Department of Construction Technology and Management

(MSc. Procurement Management)

Survey Questionnaire

ASSESSING PUBLIC SECTOR'S IMPLEMENTATION OF SUSTAINABLE PROCUREMENT IN GHANA

Dear Sir/Madam

This questionnaire forms part of an MSc. Research project which aims **to assess the public sector's implementation of sustainable procurement in Ghana**. Sustainable procurement has become very relevant in the procurement activities in the public sector. The results of this study will determine sustainable procurement practices and the drivers of effective sustainable procurement in the public sector. The results will also identify barriers to effective sustainable procurement in the public sector.

I would like to invite you to participate in the above project. Completion of the questionnaire is completely voluntary and returning the completed questionnaire will be considered as your consent to participate in the survey. The questionnaire will take you about 10 minutes to complete.

The data collected will be used purposely for this research and any solutions obtained will be shared for the entire construction industry.

I appreciate that you are already busy and that participating in this survey will be another task to add to your busy schedule, but by contributing you will be providing important information. **All data held are purely for academic purposes and would be treated as strictly confidential.**

In the event of questions or queries, please do not hesitate to contact me. Thank you for your time and valid contribution in advance.

Yours faithfully,

REBECCA SENAM AHATOR

MSc. Researcher

Email: rebeccaahator@yahoo.com

Tel: 0242634135

SECTION A: RESPONDENT'S PROFILE

Please, kindly respond to the questions by ticking (✓) in the appropriate box(s) for each item.

- Sex
 - Male
 - Female
- Please state the number of years you have been in the Assembly
 - Less than 1 year
 - 1 – 5 years
 - 6 – 10 years
 - 11 – 15 years
 - More than 15 years
- Please indicate highest qualifications (please do not tick (✓) **more than two boxes**)

- PhD
 - MSc
 - BSc
 - HND
 - Professional qualification.....(please indicate)
 - Other.....(please indicate)
- Please indicate your position in the Assembly.
 - Management Staff
 - Finance Officer
 - Planning Officer
 - Engineer
 - Other(please explain further)
- Please indicate your Department in the Assembly.
 - Administration
 - Finance
 - Planning
 - Works
 - Other(please explain further)

SECTION B: SUSTAINABLE PROCUREMENT PRACTICES

1. Please read the following and tick the box that best represents your level of incorporation of sustainable procurement practices into your procurement activities.

Use the scale: 1 = Never 2 = Rarely 3 = Sometimes 4 = Very often 5 = Always

ITEM	PRACTICES	1	2	3	4	5
1	Procurement of eco-friendly products					
2	Reducing carbon emissions					
3	Promote labour rights					
4	Environmental impact assessment of vendors					
5	Reduction in waste generation					
6	Safety, community involvement and philanthropy					
7	Working conditions and human rights					
8	Diversity and concern for the environment					
9	Buying from small supplies					
10	Buying locally					
11	Advocating for value for money					
12	Promote sustainable product and services					

Please state below any relevant information which you deem necessary

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SECTION C: DRIVERS OF EFFECTIVE SUSTAINABLE PROCUREMENT IN THE PUBLIC SECTOR

1. Below are the drivers of effective sustainable procurement in the public sector. From your experience, express your opinion on the level of agreement to the following drivers. **Use the scale: 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree**

ITEM	DRIVERS	1	2	3	4	5
1	Steering regulation					
2	Stakeholder influence					
3	NGO and media attention					
4	Pressure from the public					
5	Prevention of possible damage to the environment during the procurement process					
6	Preservation and support of local identity and culture					
7	Competitiveness					
8	Enhancement of reputation and moral factors					
9	Companies support					
10	National policies					
11	Competing necessities and priorities					
12	Increasing pressure for corporate accountability					

Please state below any relevant information which you deem necessary

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SECTION D: BARRIERS TO EFFECTIVE SUSTAINABLE PROCUREMENT IN THE PUBLIC SECTOR

1. Below are barriers to effective sustainable procurement in the public sector. From your experience, express your opinion on your level of agreement to the following barriers. Use the scale: **1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree**

ITEM	BARRIERS	1	2	3	4	5
1	Perceived cost					
2	Lack of awareness					
3	Lack of sustainable policies and strategies					
4	Lack of knowledge about sustainability					
5	Lack of managements support					
6	Inappropriate regulations and standard					
7	Ineffective leadership					
8	Inadequate skill and competency of procurement officials					
9	Lack of political support					
10	Poor cultural integration					
11	Poor quality of sustainable products					
12	Unreliable supplier commitment					

Please state below any relevant information which you deem necessary

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Thank you.